

BIM Object List

IFC-SG Information Manual

For Final Deliverable Release

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SPATIAL CONTAINERS

IfcBuilding

Building

| Ifc4 Entity | IfcBuilding | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Ifc Project Manager</td> <td>Floor Manager</td> <td>Project Information</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Ifc Project Manager | Floor Manager | Project Information | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ifc Project Manager | Floor Manager | Project Information | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Attributes | Sample Attribute Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N.A | Agricultural Open Space and Others | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BuildingAddress | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| GrossPlannedArea (m2) | Area | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SprinklerProtectionAutomatic | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ConstructionPhase | Label | A and A Partial Reconstruction Conservation Temporary Development New Development Existing Extension Redevelopment Alteration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ShadingCoefficient_West | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ShadingCoefficient_NorthWest | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ShadingCoefficient_SouthEast | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ShadingCoefficient_SouthWest | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ETTV | Real | Sample Value(s): 50 W/m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RETV (W/m2) | Label | Sample Value(s): 25 W/m2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LightningProtectionClass | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| WindowToWallRatio_East | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WindowToWallRatio_South | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| WindowToWallRatio_NorthWest | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WindowToWallRatio_SouthEast | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WindowToWallRatio_SouthWest | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OwnerBuiltOwnerStay | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ExtendedCapacityShortStay | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DrainageBoundary | Label | Northern Southern | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PurposeGroup | Label | I II III IV V VI VII VIII | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ConservationProgramme | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OrdinaryHazardGroup | Integer | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>WorkDayDuration (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | WorkDayDuration (hr) | Label | N.A |
|--------------------------------|--|--------------------------------|-----------|------------------------|----------------------|-------|-----|
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | |
| WorkDayDuration (hr) | Label | N.A | | | | | |
| IFC-SG Classification System | 01 IFC-SG Site and Building Classification | | | | | | |

IfcBuildingStorey

Building Storey

| Ifc4 Entity | IfcBuildingStorey | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|---|-------------------------|------------------------|--------------------------|---------|--------------|------------------------------|---------|---|---------------|---------|--------------|-------------|---------|--------------|---------------|-------|--------|--------------|---------|--------------|--------------------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Storey</td> <td>Floor</td> <td>Levels</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Storey | Floor | Levels | N.A | | | | | | | | | | | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | | | | | | | |
| Storey | Floor | Levels | N.A | | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | N.A | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | | | | | | | |
| Attributes | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Road 1st Storey</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Road 1st Storey | | | | | | | | | | | | | | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | | | | | | | | | | | | | | | |
| Name | Road 1st Storey | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_BuildingStoreyCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AboveGround</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>SprinklerProtectionAutomatic</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>EntranceLevel</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | AboveGround | Boolean | TRUE FALSE | SprinklerProtectionAutomatic | Boolean | TRUE FALSE | EntranceLevel | Boolean | TRUE FALSE | | | | | | | | | | | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| AboveGround | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| SprinklerProtectionAutomatic | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| EntranceLevel | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_BuildingStorey</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>HasActivityGeneratingUse</td> <td>Boolean</td> <td>N.A</td> </tr> <tr> <td>PurposeGroup</td> <td>Label</td> <td>I II III IV V VI VII VIII</td> </tr> <tr> <td>RefugeFloor</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>GroundLevel</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>OccupancyType</td> <td>Label</td> <td>Market</td> </tr> <tr> <td>TypicalFloor</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>AlternateLiftHomingFloor</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | HasActivityGeneratingUse | Boolean | N.A | PurposeGroup | Label | I II III IV V VI VII VIII | RefugeFloor | Boolean | TRUE FALSE | GroundLevel | Boolean | TRUE FALSE | OccupancyType | Label | Market | TypicalFloor | Boolean | TRUE FALSE | AlternateLiftHomingFloor | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| HasActivityGeneratingUse | Boolean | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| PurposeGroup | Label | I II III IV V VI VII VIII | | | | | | | | | | | | | | | | | | | | | | | |
| RefugeFloor | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| GroundLevel | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| OccupancyType | Label | Market | | | | | | | | | | | | | | | | | | | | | | | |
| TypicalFloor | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| AlternateLiftHomingFloor | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |

IfcSite

Site

| Ifc4 Entity | IfcSite | | | | | | | | | |
|-------------------------------|--|-------------------------------|-------------------------|------------------------|--------------------------------------|---------------------|---------------|---------------------|------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Ifc Project Manager</td> <td>Floor Manager</td> <td>Project Information</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Ifc Project Manager | Floor Manager | Project Information | N.A | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Ifc Project Manager | Floor Manager | Project Information | N.A | | | | | | | |
| PredefinedType | N.A | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| Attributes | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>N.A</td> <td>Agricultural Open Space and Others</td> </tr> <tr> <td>RefElevation</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | N.A | Agricultural Open Space and Others | RefElevation | N.A | | | |
| Attributes | Sample Attribute Values | | | | | | | | | |
| N.A | Agricultural Open Space and Others | | | | | | | | | |
| RefElevation | N.A | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_SiteCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FloorAreaRatio</td> <td>Real</td> <td>N.A</td> </tr> <tr> <td>TotalArea (m2)</td> <td>Area</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | FloorAreaRatio | Real | N.A | TotalArea (m2) | Area | N.A |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| FloorAreaRatio | Real | N.A | | | | | | | | |
| TotalArea (m2) | Area | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Site | | | | | | | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|--|
| ProjectDevelopmentType | Label | Agricultural Open Space and Others Factory Special Facility Underground facility Civic & Community Institution 1 Other residential Office Student Hostel Maisonette Nursing Home Welfare Home Home For The Spastic Workers Dormitory Shop Petrol Station High Containment Facility Auditorium Theatre Place of Worship |
| ConstructionPhase | Label | Redevelopment |
| Extg_GrossPlotRatio | Label | N.A |
| GIS_LandUse | Label | N.A |
| Condition | Label | Soft Ground Firm Ground |
| RainfallIntensity | Real | N.A |
| RunoffCoefficient | Label | N.A |
| WithNightLighting | Boolean | TRUE |

IfcSpace

Room

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Rooms | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Space | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SpaceName | Label | AC Ledge Hotel Guest Room | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

ACCESSORYLOT

| | | | | |
|------------------------------|---------------------------------------|-----------------------------------|--------------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Massing | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ACCESSORYLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_AccessoryLot | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AccessoryLotArea (m2) | Area | 16 | |
| | AccessoryLotNumber | Label | MK03-A0055K | |
| | GeocodeID | Label | 254XCJFLKJSNEJK | |
| | AppurtenantTo | Label | MK03-U017049L | |
| | IsVoid | Boolean | TRUE FALSE | |
| | VoidArea (m2) | Area | 0 | |
| | ParcelType | Label | Accessory | |
| | SVYFileNumber | Label | 0226-1985 | |
| | LotStatus | Label | Live Sample Value(s): Provisional | |
| | OldFormatLotNumber | Label | MK03-1A1847/U59 | |
| | HouseNumber | Label | 38D | |
| | StreetName_StreetCode | Label | JALAN MAT JAMBOL(MAJ01M) | |
| | LevelNumber | Label | 01 | |
| | UnitNumber | Label | 05 | |
| | BuildingName_Source | Label | ISLAND VIEW (URA) | |
| | PostalCode | Label | 119522 | |
| PlanNumber | Label | CPST6626 | | |
| AreaDescription | Label | INCLUDES ACCESSORY VOID OF 0 SQ M | | |
| TypicalFloor | Boolean | TRUE FALSE | | |

AREA_GFA

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Areas | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AREA_GFA | | | |
| IFC4 UserDefined PropertySet | SGPset_SpaceArea_GFA | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | DetailedUse | Label | Cafe | |

Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Areas | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SpaceDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Area (m2) | Area | N.A | |

AREA_CONNECTIVITY

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Areas | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AREA_CONNECTIVITY | | | |
| IFC4 UserDefined PropertySet | SGPset_SpaceArea_Connectivity | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConnectivityType | Label | To input with values for submission | |

AREA_LANDSCAPE

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Areas | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AREA_LANDSCAPE | | | |
| IFC4 UserDefined PropertySet | SGPset_SpaceArea_Landscape | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SoftscapeType | Label | To input with values for submission | |
| IFC-SG Classification System | 03 IFC-SG Area Classification | | | |

AREA_UNIT

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Areas | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AREA_UNIT | | | |
| IFC4 UserDefined PropertySet | SGPset_SpaceArea_Unit | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | UnitNumber | Label | To input with values for submission | |

COMMONPROPERTY

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Massing | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | COMMONPROPERTY | | | |
| IFC4 UserDefined PropertySet | SGPset_CommonProperty | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CommonArea (m2) | Area | 320 | |
| | GeocodeID | Label | 254XCJFLKJSNEJK | |
| TypicalFloor | Boolean | TRUE FALSE | | |

STRATALOT

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|--------------------------------------|--------------|
| Ifc4 Entity | IfcSpace | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Zone | Space | Massing | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | STRATALOT | | | |
| IFC4 UserDefined PropertySet | SGPset_StrataLot | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrataLotArea (m2) | Area | 318 | |
| | StrataLotNumber | Label | MK03-U017049L | |
| | GeocodeID | Label | 254XCJFLKJSNEJK | |
| | IsVoid | Boolean | TRUE FALSE | |
| | VoidArea (m2) | Area | 1 | |
| | ParcelType | Label | Strata | |
| | SVYFileNumber | Label | 0226-1985 | |
| | LotStatus | Label | Live Sample Value(s): Provisional | |
| | OldFormatLotNumber | Label | MK03-1847/U59 | |
| | HouseNumber | Label | 38D | |
| | StreetName_StreetCode | Label | JALAN MAT JAMBOL(MAJ01M) | |
| | LevelNumber | Label | 01 | |
| | UnitNumber | Label | 05 | |
| | BuildingName_Source | Label | ISLAND VIEW (URA) | |
| | PostalCode | Label | 119522 | |
| PlanNumber | Label | CPST6626 | | |
| ResidingOnLandLot | Label | MK03-01847M | | |
| AreaDescription | Label | INCLUDES STRATA VOID OF 1 SQ M | | |
| TypicalFloor | Boolean | TRUE FALSE | | |

IfcActuator

Electric Actuator

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcActuator | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Equipment | Mechanical Equipment | N.A |
| PredefinedType | ELECTRICACTIONATOR | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ActuatorTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Application | Label | FIRESMOKEDAMPERACTUATOR | |

IfcAirTerminal

Air Diffuser

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | DIFFUSER | | | |
| ObjectType | N.A | | | |

Air Intake Louvre

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | LOUVRE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_AirTerminalOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | AirflowType | Label | SUPPLYAIR | |

Air Terminal

| | | | | |
|------------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_AirTerminalOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | AirflowType | Label | EXHAUSTAIR | |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| ReplacementAir | Boolean | TRUE FALSE |

Air Vent

| Ifc4 Entity | IfcAirTerminal | | | | | | | | |
|-----------------------------|--|---------------|---------------|-------|-------|----------|--------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Terminal | Air Terminal | Air Terminals | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Terminal | Air Terminal | Air Terminals | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Diffuser

| Ifc4 Entity | IfcAirTerminal | | | | | | | | |
|------------------------------|--|--------------------------------|------------------------|------------------------|-------------|----------|--------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Terminal | Air Terminal | Air Terminals | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Terminal | Air Terminal | Air Terminals | N.A | | | | | | |
| PredefinedType | DIFFUSER | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Combustible | Boolean | FALSE | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | |
| Combustible | Boolean | FALSE | | | | | | | |
| | | | | | | | | | |

Exhaust Air Grille

| Ifc4 Entity | IfcAirTerminal | | | | | | | | |
|-----------------------------|--|-------------------------------|------------------------|------------------------|-------------|----------|--------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Terminal | Air Terminal | Air Terminals | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Terminal | Air Terminal | Air Terminals | N.A | | | | | | |
| PredefinedType | GRILLE | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_AirTerminalOccurrence | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirflowType</td> <td>Label</td> <td>EXHAUSTAIR</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | AirflowType | Label | EXHAUSTAIR | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | |
| AirflowType | Label | EXHAUSTAIR | | | | | | | |
| | | | | | | | | | |

Exhaust Air Louvre

| Ifc4 Entity | IfcAirTerminal | | | | | | | | |
|-----------------------------|--|-------------------------------|------------------------|------------------------|-------------|----------|--------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Terminal</td> <td>Air Terminal</td> <td>Air Terminals</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Terminal | Air Terminal | Air Terminals | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Terminal | Air Terminal | Air Terminals | N.A | | | | | | |
| PredefinedType | LOUVRE | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_AirTerminalOccurrence | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirflowType</td> <td>Label</td> <td>EXHAUSTAIR</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | AirflowType | Label | EXHAUSTAIR | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | |
| AirflowType | Label | EXHAUSTAIR | | | | | | | |
| | | | | | | | | | |

Fresh Air Inlet

| | |
|-------------|----------------|
| Ifc4 Entity | IfcAirTerminal |
|-------------|----------------|

| | | | | |
|-----------------------------|------------------|----------------------|---------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Grille

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | GRILLE | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE | |

Louvre

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | LOUVRE | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE | |

Mechanical Ventilation

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 532 Code of practice for the storage of flammable liquids NFPA 55 Compressed Gases and Cryogenic Fluids Code | |

Register

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| PredefinedType | REGISTER | | |
| ObjectType | N.A | | |
| IFC4 Predefined PropertySet | Pset_AirTerminalOccurrence | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | AirflowType | Label | SUPPLYAIR |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | SmokeVentilationActivated | Boolean | TRUE FALSE |

Return Air Grille

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | GRILLE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_AirTerminalOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | AirflowType | Label | RETURNAIR | |

Secondary Air Intake

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AirTreatmentDevice | Boolean | TRUE FALSE | |
| | OneDirectionFlap | Boolean | TRUE FALSE | |

Smoke Vent

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | DIFFUSER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AutomaticallyActivated | Boolean | TRUE FALSE | |
| | AirTerminalOperationType | Label | OPENABLE | |

Supply Air Diffuser

| | | | | |
|-------------|----------------|--|--|--|
| Ifc4 Entity | IfcAirTerminal | | | |
|-------------|----------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | DIFFUSER | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_AirTerminalOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | AirflowType | Label | SUPPLYAIR | |
| IFC4 UserDefined PropertySet | SGPset_AirTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SmokeVentilationActivated | Boolean | TRUE FALSE | |

Supply Air Louvre

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | LOUVRE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_AirTerminalOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | AirflowType | Label | SUPPLYAIR | |

Ventilation Opening

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Ventilation Terminal

| | | | | |
|-----------------------------|------------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcCableCarrierSegment

Cable Carrier Segment

| | |
|-----------------------------|------------------------|
| Ifc4 Entity | IfcCableCarrierSegment |
| Proposed BIM Representation | |

| | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Duct</td> <td>Duct</td> <td>Ducts</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Duct | Duct | Ducts | N.A |
|--------------------------------|---|--------------------------------|-------------------------|------------------------|-----------------|-------|------|-------|-----|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Duct | Duct | Ducts | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_CableCarrierSegment <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | FireRating (hr) | Label | N.A | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| FireRating (hr) | Label | N.A | | | | | | | |

IfcChiller

Chiller Unit

| Ifc4 Entity | IfcChiller | | | | | | | | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|-----------|----------------|--------------|--------------------------|-------|-----|-----------------------|-------|-----|----------------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | |
| Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Chiller <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ModelName</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>SoundPressureLevel (dBA)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>SoundPowerLevel (dBA)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>FlammableRefrigerant</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ModelName | Boolean | TRUE FALSE | SoundPressureLevel (dBA) | Label | N.A | SoundPowerLevel (dBA) | Label | N.A | FlammableRefrigerant | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | |
| ModelName | Boolean | TRUE FALSE | | | | | | | | | | | | | | |
| SoundPressureLevel (dBA) | Label | N.A | | | | | | | | | | | | | | |
| SoundPowerLevel (dBA) | Label | N.A | | | | | | | | | | | | | | |
| FlammableRefrigerant | Boolean | TRUE FALSE | | | | | | | | | | | | | | |

Mechanical Equipment - Chiller

| Ifc4 Entity | IfcChiller | | | | | | | | |
|-----------------------------|---|----------------------|---------------|-------|-------|--------|----------------------|----------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Mechanical Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Mechanical Equipment | Mechanical Equipment | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Object | Mechanical Equipment | Mechanical Equipment | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

IfcCompressor

Air Compressor

| Ifc4 Entity | IfcCompressor | | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|----------|---------|----------------------|----------------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Mechanical Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Mechanical Equipment | Mechanical Equipment | N.A | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Object | Mechanical Equipment | Mechanical Equipment | N.A | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Compressor <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AirDryer</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>AirCooler</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | AirDryer | Boolean | TRUE FALSE | AirCooler | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| AirDryer | Boolean | TRUE FALSE | | | | | | | | |
| AirCooler | Boolean | TRUE FALSE | | | | | | | | |

IfcCondenser

Air Condensing Unit

| Ifc4 Entity | IfcCondenser | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|-----------|----------------|-----------|----------------------|-----|
| Proposed BIM Representation | <table border="1"><thead><tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr></thead><tbody><tr><td>Flow Equipment</td><td>Equipment</td><td>Mechanical Equipment</td><td>N.A</td></tr></tbody></table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Condenser <table border="1"><thead><tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr></thead><tbody><tr><td>UnitCount</td><td>Integer</td><td>N.A</td></tr></tbody></table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | UnitCount | Integer | N.A | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| UnitCount | Integer | N.A | | | | | | | |

VRV Unit

| Ifc4 Entity | IfcCondenser | | | | | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|-----------|----------------|--------------|--------------------------|-------|-----|-----------------------|-------|-----|
| Proposed BIM Representation | <table border="1"><thead><tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr></thead><tbody><tr><td>Flow Equipment</td><td>Equipment</td><td>Mechanical Equipment</td><td>N.A</td></tr></tbody></table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | |
| Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Condenser <table border="1"><thead><tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr></thead><tbody><tr><td>ModelName</td><td>Boolean</td><td>TRUE FALSE</td></tr><tr><td>SoundPressureLevel (dBA)</td><td>Label</td><td>N.A</td></tr><tr><td>SoundPowerLevel (dBA)</td><td>Label</td><td>N.A</td></tr></tbody></table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ModelName | Boolean | TRUE FALSE | SoundPressureLevel (dBA) | Label | N.A | SoundPowerLevel (dBA) | Label | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| ModelName | Boolean | TRUE FALSE | | | | | | | | | | | |
| SoundPressureLevel (dBA) | Label | N.A | | | | | | | | | | | |
| SoundPowerLevel (dBA) | Label | N.A | | | | | | | | | | | |

IfcCoolingTower

Cooling Tower

| Ifc4 Entity | IfcCoolingTower | | | | | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|-----------|----------------|--------------|--------------------------|-------|-----|-----------------------|-------|-----|
| Proposed BIM Representation | <table border="1"><thead><tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr></thead><tbody><tr><td>Flow Equipment</td><td>Equipment</td><td>Mechanical Equipment</td><td>N.A</td></tr></tbody></table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | |
| Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_CoolingTower <table border="1"><thead><tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr></thead><tbody><tr><td>ModelName</td><td>Boolean</td><td>TRUE FALSE</td></tr><tr><td>SoundPressureLevel (dBA)</td><td>Label</td><td>N.A</td></tr><tr><td>SoundPowerLevel (dBA)</td><td>Label</td><td>N.A</td></tr></tbody></table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ModelName | Boolean | TRUE FALSE | SoundPressureLevel (dBA) | Label | N.A | SoundPowerLevel (dBA) | Label | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| ModelName | Boolean | TRUE FALSE | | | | | | | | | | | |
| SoundPressureLevel (dBA) | Label | N.A | | | | | | | | | | | |
| SoundPowerLevel (dBA) | Label | N.A | | | | | | | | | | | |

IfcCovering

Inspection Opening

| | | | | |
|-----------------------------|-------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Slab | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | INSPECTIONOPENING | | | |

PWCS Inspection Chamber Cover

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Slab | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PWCSINSPECTIONCHAMBERCOVER | | | |
| IFC4 UserDefined PropertySet | SGPset Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Watertight | Boolean | TRUE FALSE | |
| | ExternalReference | Label | SS 30 Manhole tops and surface-box tops | |

IfcDamper

Fire Damper

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Duct Accessories | N.A |
| PredefinedType | FIRE DAMPER | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_DamperTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Operation | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Damper | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| | ExternalReference | Label | NFPA 55 Compressed Gases and Cryogenic Fluids Code SS 333 Specification for fire dampers | |
| AirChangePerHour | Label | Sample Value(s): 4 | | |

Fire Damper Insulation

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Duct Accessories | N.A |
| PredefinedType | FIRE DAMPER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Damper | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Insulation_FireResistanceRating (hr) | Label | N.A | |

Fire Smoke Damper

| | | | | |
|------------------------------|---------------------------------------|----------------------|---------------------------------------|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Duct Accessories | N.A |
| PredefinedType | FIRESMOKEDAMPER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Damper | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 333 Specification for fire dampers | |
| FireRating (hr) | Label | N.A | | |

Fume Hood Exhaust

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | FUMEHOODEXHAUST | | | |
| ObjectType | N.A | | | |

Motorized Fire Damper

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Duct Accessories | N.A |
| PredefinedType | FIREMOTOR | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_DamperTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Operation | Label | AUTOMATIC | |

Pollution Control Equipment Exhaust

| | | | | |
|-----------------------------|------------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Smoke Damper

| | | | | |
|-----------------------------|-----------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Duct Accessories | N.A |
| PredefinedType | SMOKEDAMPER | | | |
| ObjectType | N.A | | | |

PWCS Inspection Chamber

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PWCSINSPECTIONCHAMBER | | | |

PWCS Manhole

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PWCSMANHOLE | | | |

Pipe Trench

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | TRENCH | | | |
| ObjectType | N.A | | | |

Sump

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | SUMP | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_DistributionChamberElementDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Diameter (mm) | Length | N.A | |

Duct Fitting

| | | | | |
|-----------------------------|-------------------|--------------------------------|---------------|--------------|
| Ifc4 Entity | IfcDuctFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct Fitting | Duct Accessory | Duct Fittings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Metal | | |

| | | | |
|------------------------------|---------------------------------------|------------------|---|
| IFC4 UserDefined PropertySet | SGPset_DuctFitting | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | FireRating (hr) | Label | N.A |
| | Combustible | Boolean | FALSE |
| | ExternalReference | Label | BS 476 Part 5 Method of Test for Ignitability |

Duct Fitting

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcDuctFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct Fitting | Duct Accessory | Duct Fittings | N.A |
| PredefinedType | ENTRY | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_DuctFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SamplingPort | Boolean | TRUE FALSE | |
| | | | | |

Prefabricated Duct Fitting

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcDuctFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct Fitting | Duct Accessory | Duct Fittings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_DuctFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |
| | Pre-insulated | Boolean | TRUE FALSE | |

IfcDuctSegment

Duct Covering

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcDuctSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Ducts | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_DuctSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Insulation_FlameSpreadClass | Label | Sample Value(s): Class 0 | |
| | Insulation_Combustible | Boolean | FALSE | |

Duct Segment

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| IFC4 Entity | IfcDuctSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Ducts | N.A |

| | | | |
|------------------------------|---------------------------------------|---|--------------------------------|
| PredefinedType | Need not specify | | |
| ObjectType | N.A | | |
| Material | Attributes | | Sample Attribute Values |
| | Name | Steel | |
| IFC4 Predefined PropertySet | Pset_DuctSegmentOccurrence | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | HasLiner | Boolean | TRUE FALSE |
| IFC4 UserDefined PropertySet | SGPset_DuctSegment | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Combustible | Boolean | FALSE TRUE FALSE |
| | FireRating (hr) | Label | N.A |
| | FlameSpreadClass | Label | Sample Value(s): Class 0 |
| ExternalReference | Label | BS 476 Part 24 Method for determination of the fire resistance of ventilation ducts | |

Exhaust Air Duct

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDuctSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Ducts | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Flexible Duct

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcDuctSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flexible Duct | Flexible Duct | Flex Ducts | N.A |
| PredefinedType | FLEXIBLESEGMENT | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_DuctSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | BS 476 Part 5 Method of Test for Ignitability | |

Prefabricated Duct Segment

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDuctSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Ducts | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_DuctSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |
| | Pre-insulated | Boolean | TRUE FALSE | |

Ventilation Duct

| | | | | |
|------------------------------|---------------------------------------|--------------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDuctSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Ducts | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Heavy Gauge Steel Galvanised Steel | | |
| IFC4 Predefined PropertySet | Pset_DuctSegmentOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | HasLiner | Boolean | TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_DuctSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EngineeredSmokeControlSystem | Boolean | TRUE FALSE | |
| | FireRating (hr) | Label | N.A | |

IfcFan

Exhaust Air Fan

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFan | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Equipment | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_FanOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ApplicationOfFan | Label | EXHAUSTAIR | |
| | Pset_FanTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | OperationalCriteria (hr) | Real | N.A | |
| | OperationTemperatureRange (C) | Real | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Fan | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ModelName | Boolean | TRUE FALSE | |
| | SoundPressureLevel (dBA) | Label | N.A | |
| | SoundPowerLevel (dBA) | Label | N.A | |
| | AirChangePerHour | Label | Sample Value(s): 20 | |
| | FireAlarmActivated | Boolean | TRUE FALSE | |
| | MassFlowRate (kg/s) | Label | Sample Value(s): 175 kg/s | |
| Standby | Boolean | TRUE FALSE | | |

Exhaust Air Outlet

| | |
|-------------|--------|
| Ifc4 Entity | IfcFan |
|-------------|--------|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Equipment | Air Terminals | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Fan | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AirChangePerHour | Label | N.A | |

Fan

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFan | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Equipment | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Fan | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AirChangePerHour | Label | N.A | |
| | Standby | Boolean | TRUE FALSE | |
| Duty | Boolean | TRUE FALSE | | |

Fresh Air Fan

| | | | | |
|-------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFan | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Equipment | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_FanOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ApplicationOfFan | Label | SUPPLYAIR | |
| | Pset_FanTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | OperationalCriteria (hr) | Real | N.A | |
| OperationTemperatureRange (C) | Real | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_Fan | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AirChangePerHour | Label | Sample Value(s): 4 | |
| | FireAlarmActivated | Boolean | TRUE FALSE | |
| Standby | Boolean | TRUE FALSE | | |

Jet Fan

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcFan | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Equipment | Mechanical Equipment | N.A |

| | | | |
|-------------------------------|---------------------------------------|------------------|-------------------------------|
| PredefinedType | Need not specify | | |
| ObjectType | N.A | | |
| IFC4 Predefined PropertySet | Pset_FanOccurrence | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | ApplicationOfFan | Label | EXHAUSTAIR |
| | FanMountingType | Label | SUSPENDED |
| | Pset_FanTypeCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| OperationalCriteria (hr) | Real | N.A | |
| OperationTemperatureRange (C) | Real | N.A | |
| IFC4 UserDefined PropertySet | SGPset_FanPHistory | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | DischargeVelocity | Real | Sample Value(s): 0.2m/s |
| | SGPset_Fan | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | AirChangePerHour | Label | Sample Value(s): 12 |

Supply Air Fan

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFan | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Equipment | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_FanOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ApplicationOfFan | Label | SUPPLYAIR | |
| IFC4 UserDefined PropertySet | SGPset_Fan | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AirChangePerHour | Label | Sample Value(s): 10 | |
| | SGPset_FanPHistory | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | DischargeVelocity | Real | Sample Value(s): 5 m/s | |

IfcFilter

Dust Filtration System

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFilter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | AIRPARTICLEFILTER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Filter | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AirFlowRate (m3/h) | Label | Sample Value(s): 2000 m3/h | |
| | TwoStageDustFilterSystem | Boolean | TRUE FALSE | |
| | WaterScrubberSystem | Boolean | TRUE FALSE | |

| | | |
|---------------------------------|---------|--|
| ExternalReference | Label | ASHRAE 52.2 Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size ISO 16890-1 Air filters for general ventilation |
| MinimumEfficiencyReportingValue | Integer | Sample Value(s): 11 |
| RelativeHumidity | Real | Sample Value(s): 60 |

Odour Filtration System

| Ifc4 Entity | IfcFilter | | | | | | | | |
|-----------------------------|--|----------------------|---------------|-------|-------|----------------|-----------|----------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | |
| PredefinedType | ODORFILTER | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Waste-air Separator

| Ifc4 Entity | IfcFilter | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|------------------|----------------|--------------|----------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | WASTEAIRSEPARATOR | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_Filter</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ErosionResistant</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ErosionResistant | Boolean | TRUE FALSE | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ErosionResistant | Boolean | TRUE FALSE | | | | | | | |

IfcFlowMeter

Mass Flow Meter

| Ifc4 Entity | IfcFlowMeter | | | | | | | | |
|-----------------------------|---|------------------|---------------|-------|-------|--------------------------|----------------|------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Pipe Accessory</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | MASSFLOWMETER | | | | | | | | |

IfcPipeFitting

Bend

| Ifc4 Entity | IfcPipeFitting | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|----------------------|--------------|-------------------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | | | |
| PredefinedType | BEND | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_PipeFitting</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>NominalDiameter (mm)</td> <td>Length</td> <td>Sample Value(s): 500 mm</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | NominalDiameter (mm) | Length | Sample Value(s): 500 mm | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| NominalDiameter (mm) | Length | Sample Value(s): 500 mm | | | | | | | |

Flange Adaptor

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLANGEADAPTOR | | | |

Pipe Branch

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | JUNCTION | | | |
| ObjectType | N.A | | | |

Pipe Fitting

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 UserDefined PropertySet | SGPset_PipeFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Thickness (mm) | Length | Sample Value(s): 8 mm | |
| | PWCS_VolumeOfWastePerDay (L) | Label | Sample Value(s): 15000 L | |
| | NominalDiameter (mm) | Length | Sample Value(s): 500 mm | |

Pipe Silencer

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PIPESILENCER | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Pitot Tube

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |

| | |
|----------------|-------------|
| PredefinedType | USERDEFINED |
| ObjectType | PITOT |

Venturi Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VENTURI | | | |

IfcPipeSegment

Air Pipe

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalDiameter (mm) | Length | N.A | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Thickness (mm) | Length | Sample Value(s): 8 mm | |

Compressed Air Tubes

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Conveyance Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

| | | | | |
|------------------------------|---------------------------------------|------------------|--------------------------------|--|
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalDiameter (mm) | Length | N.A | |
| | OuterDiameter (mm) | Length | N.A | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Thickness (mm) | Length | Sample Value(s): 8 mm | |
| | PWCS_VolumeOfWastePerDay (L) | Label | Sample Value(s): 15000 L | |
| | CorrosionResistant | Boolean | TRUE FALSE | |

Exhaust Air Pipe

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalDiameter (mm) | Length | N.A | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Thickness (mm) | Length | Sample Value(s): 8 mm | |

Pipe Segment

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

Temporary Storage Section

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Thickness (mm) | Length | Sample Value(s): 8 mm |

Waste Conveyance Pipe

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | OuterDiameter (mm) | Length | N.A | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Thickness (mm) | Length | Sample Value(s): 8 mm | |

IfcProtectiveDevice

Fused Switch

| | | | | |
|-----------------------------|---------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcProtectiveDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | N.A | N.A | Electrical Fixtures | N.A |
| PredefinedType | FUSEDISCONNECTOR | | | |
| ObjectType | N.A | | | |

IfcPump

Aerator Pump

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AERATOR | | | |

Ejector Pump

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|-----|
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | ENDSUCTION | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Pump | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StartStopPerHour | Integer | Sample Value(s): 10 | |
| | Standby | Boolean | TRUE FALSE | |

Fuel Transfer Pump

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Jet Pump

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | JET | | | |

Mechanical Equipment - Pump

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Pump

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Pump | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | InflowRate (m3/s) | Volumetric FlowRate | N.A | |
| | Duty | Boolean | TRUE FALSE | |
| | Standby | Boolean | TRUE FALSE | |
| | DischargeRate (m3/s) | Volumetric FlowRate | N.A | |
| | InternalPassageDiameter (mm) | Length | N.A | |
| SinglePhase | Boolean | TRUE FALSE | | |

| | | |
|----------------------|---------|--------------|
| EarthFaultProtection | Boolean | TRUE FALSE |
| OverloadProtection | Boolean | TRUE FALSE |
| StandbyGenerator | Boolean | TRUE FALSE |
| BackupPowerSource | Boolean | TRUE FALSE |
| Capacity (L) | Label | N.A |

Submersible Drainage Pump

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | SUBMERSIBLEPUMP | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Pump | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StartStopPerHour | Integer | Sample Value(s): 10 | |
| | Standby | Boolean | TRUE FALSE | |

Vacuum Exhauster

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VACUUMEXHAUSTER | | | |
| IFC4 UserDefined PropertySet | SGPset_Pump | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | IE2 IEC Standards and Classification | |

IfcSensor

Air Impurities

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Sensor | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRIMPURITIESSENSOR | | | |
| IFC4 UserDefined PropertySet | SGPset_Sensor | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AI_AmmoniaAndAmmonium (mg/Nm3) | Label | N.A | |
| | AI_Antimony (mg/Nm3) | Label | N.A | |
| | AI_Arsenic (mg/Nm3) | Label | N.A | |
| | AI_Benzene (mg/Nm3) | Label | N.A | |
| | AI_Cadmium (mg/Nm3) | Label | N.A | |
| | AI_CarbonMonoxide (mg/Nm3) | Label | N.A | |
| | AI_Chlorine (mg/Nm3) | Label | N.A | |
| | AI_Copper (mg/Nm3) | Label | N.A | |
| | AI_DioxinsAndFurans (TEQ/Nm3) | Label | N.A | |
| AI_EthyleneOxide (mg/Nm3) | Label | N.A | | |

| | | |
|--|-------|-----|
| Al_FluorineAndHydrofluoricAcid (mg/Nm3) | Label | N.A |
| Al_Formaldehyde (mg/Nm3) | Label | N.A |
| Al_HydrogenChloride (mg/Nm3) | Label | N.A |
| Al_HydrogenSulphide (mg/Nm3) | Label | N.A |
| Al_Lead (mg/Nm3) | Label | N.A |
| Al_Mercury (mg/Nm3) | Label | N.A |
| Al_OxidesOfNitrogen (mg/Nm3) | Label | N.A |
| Al_ParticiulateSubstances (mg/Nm3) | Label | N.A |
| Al_StyreneMonomer (mg/Nm3) | Label | N.A |
| Al_SulphurDioxide (mg/Nm3) | Label | N.A |
| Al_SulphurTrioxideAndAcidGases (mg/Nm3) | Label | N.A |
| Al_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3) | Label | N.A |
| Al_VinylChlorideMonomer (mg/Nm3) | Label | N.A |

IfcSolarDevice

Solar Panel

| Ifc4 Entity | IfcSolarDevice | | | | | | | | |
|-----------------------------|---|----------------------|---------------|-------|-------|---------------|-----------|----------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Model Element</td><td>Equipment</td><td>Electrical Equipment</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Equipment | Electrical Equipment | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Equipment | Electrical Equipment | N.A | | | | | | |
| PredefinedType | SOLARPANEL | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

IfcStackTerminal

Discharge Stack Terminal

| Ifc4 Entity | IfcStackTerminal | | | | | | | | |
|-----------------------------|--|---------------|---------------|-------|-------|--------------|----------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Pipe Fitting</td><td>Pipe Accessory</td><td>Pipe Fittings</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Mosquito-proof Net

| Ifc4 Entity | IfcStackTerminal | | | | | | | | | | | | |
|--------------------------------|---|--------------------------------|-------------------------|------------------------|-----------------------|--------------|-------------------|-------------------|--------|-----|--------------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Pipe Fitting</td><td>Pipe Accessory</td><td>Pipe Fittings</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | |
| Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | | | | |
| ObjectType | MOSQUITONET | | | | | | | | | | | | |
| Material | <table border="1"> <thead> <tr><th>Attributes</th><th>Sample Attribute Values</th></tr> </thead> <tbody> <tr><td>Name</td><td>N.A</td></tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | | | |
| Name | N.A | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_StackTerminal</p> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>AirParticleFilterType</td><td>Label</td><td>COARSEMETALSCREEN</td></tr> <tr><td>ApertureSize (mm)</td><td>Length</td><td>N.A</td></tr> <tr><td>CorrosionResistant</td><td>Boolean</td><td>TRUE FALSE</td></tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | AirParticleFilterType | Label | COARSEMETALSCREEN | ApertureSize (mm) | Length | N.A | CorrosionResistant | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| AirParticleFilterType | Label | COARSEMETALSCREEN | | | | | | | | | | | |
| ApertureSize (mm) | Length | N.A | | | | | | | | | | | |
| CorrosionResistant | Boolean | TRUE FALSE | | | | | | | | | | | |

Air Receiver Tank

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRRECEIVER | | | |

Refuse Handling Equipment

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | REFUSEHANDLINGEQUIPMENT | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalCapacity | Real | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EquipmentType | Label | RORO Compactor | |
| | CompactionRatio | Label | N.A | |

Bin Lifter

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BINLIFTER | | | |

Escalator

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | ESCALATOR | | | |
| ObjectType | N.A | | | |

Goods Lift

| | | | | |
|-------------|---------------------|--|--|--|
| Ifc4 Entity | IfcTransportElement | | | |
|-------------|---------------------|--|--|--|

| | | | | |
|-----------------------------|-------------------|----------------------|----------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GOODSLIFT | | | |

Platform Lift

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PLATFORMLIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Wheelchair Stair Lift

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WHEELCHAIRSTAIRLIFT | | | |

IfcUnitaryEquipment

Air Conditioning Unit

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnitaryEquipment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | AIRCONDITIONINGUNIT | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnitaryEquipment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ModelName | Boolean | TRUE FALSE | |
| | SoundPressureLevel (dBA) | Label | N.A | |
| | SoundPowerLevel (dBA) | Label | N.A | |
| | FlammableRefrigerant | Boolean | TRUE FALSE | |
| AirChangePerHour | Label | N.A | | |

Air Handling Unit

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnitaryEquipment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |

| | | | |
|------------------------------|---------------------------------------|------------------------|-------------------------------|
| PredefinedType | AIRHANDLER | | |
| ObjectType | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_UnitaryEquipment | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | ModelName | Boolean | TRUE FALSE |
| | SoundPressureLevel (dBA) | Label | N.A |
| | SoundPowerLevel (dBA) | Label | N.A |
| AirFlowRate (m3/h) | Label | Sample Value(s): 15000 | |

Fan Coil Unit

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnitaryEquipment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FANCOILUNIT | | | |

Mechanical Equipment - Unitary Equipment

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnitaryEquipment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Rooftop Unit

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnitaryEquipment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | ROOFTOPUNIT | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnitaryEquipment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ModelName | Boolean | TRUE FALSE | |
| | SoundPressureLevel (dBA) | Label | N.A | |
| | SoundPowerLevel (dBA) | Label | N.A | |

Split System

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnitaryEquipment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | SPLITSYSTEM | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnitaryEquipment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | | | | |

| | | | |
|--|----------------------|---------|--------------|
| | FlammableRefrigerant | Boolean | TRUE FALSE |
| | R32Refrigerant | Boolean | TRUE FALSE |

IfcValve

Air Intake Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRINTAKEVALVE | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PneumaticActuated | Boolean | TRUE FALSE | |
| | ElectricallyActuated | Boolean | TRUE FALSE | |
| | WithAirFilterSilencer | Boolean | TRUE FALSE | |
| | AirTight | Boolean | TRUE FALSE | |
| | WithCompressedAirFilter | Boolean | TRUE FALSE | |

Discharge Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DISCHARGE | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PneumaticActuated | Boolean | TRUE FALSE | |
| | ElectricallyActuated | Boolean | TRUE FALSE | |
| | AirTight | Boolean | TRUE FALSE | |
| | NormallyClosed | Boolean | TRUE FALSE | |
| | OpeningDiameter (mm) | Length | Sample Value(s): 450 mm | |
| | WithCompressedAirFilter | Boolean | TRUE FALSE | |

Isolating Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | ISOLATING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WithPositionSensor | Boolean | TRUE FALSE | |

Main Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | ISOLATING | | | |
| ObjectType | N.A | | | |

Non-return Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | CHECK | | | |
| ObjectType | N.A | | | |

Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcWasteTerminal

Waste Flow Diverter

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WASTEDIVERTER | | | |
| IFC4 UserDefined PropertySet | SGPset_WasteTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Material_WasteFlowDiverterValve | Label | N.A | |

ARCHITECTURAL ELEMENTS

IfcActuator

Hydraulic Jack

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcActuator | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |

| | | | |
|------------------------------|---------------------------------------|------------------|---------------------------------|
| PredefinedType | HYDRAULICACTUATOR | | |
| ObjectType | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_Actuator | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | RamLength (mm) | Length | N.A |
| | BearingLength (mm) | Length | N.A |
| | HydraulicType | Label | Indirect Acting Direct Acting |
| | RamLength | Length | N.A |
| | BearingLength | Length | N.A |

Ram

| | | | | |
|-----------------------------|-------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcActuator | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | HYDRAULICACTUATOR | | | |
| ObjectType | N.A | | | |

IfcBeam

Beam

| | | | | |
|------------------------------|---------------------------------------|--|-------------------------------|--------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Beam | Beam | Structural Framing | Beam |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Wood Timber Concrete Engineered Timber Brick Reinforced Concrete | | |
| IFC4 Predefined PropertySet | Pset_BeamCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New Existing | |
| | FireRating (hr) | Label | N.A | |
| | FireRating | Label | N.A | |
| | IsExternal | Boolean | TRUE TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_Beam | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE TRUE FALSE | |

Cast-in-situ Beam

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|---------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Beam | Beam | Structural Framing | Concrete Beam |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Beam | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |

| | | | |
|--|---------------------------------------|------------------|-------------------------------|
| | ConstructionMethod | Label | Cast-in-situ |
| | SGPset_BeamReinforcement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | PrefabricatedReinforcementCage | Boolean | TRUE FALSE |

Floor Beam

| | | | |
|-----------------------------|--------------------------------------|------------------------------|------------------------------------|
| Ifc4 Entity | IfcBeam | | |
| Proposed BIM Representation | ArchiCad Beam | OpenBuildings Beam | Revit Structural Framing |
| | Tekla Beam | | |
| PredefinedType | Need not specify | | |
| ObjectType | N.A | | |
| IFC4 Predefined PropertySet | Pset_BeamCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | LoadBearing | Boolean | TRUE FALSE |

Joist

| | | | |
|-----------------------------|--------------------------------------|--|------------------------------------|
| Ifc4 Entity | IfcBeam | | |
| Proposed BIM Representation | ArchiCad Beam | OpenBuildings Beam | Revit Structural Framing |
| | Tekla Beam | | |
| PredefinedType | JOIST | | |
| ObjectType | N.A | | |
| Material | Attributes Name | Sample Attribute Values Timber | |
| IFC4 Predefined PropertySet | Pset_BeamCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | Status | Label | Existing |

Precast Beam

| | | | |
|------------------------------|---------------------------------------|------------------------------|---|
| Ifc4 Entity | IfcBeam | | |
| Proposed BIM Representation | ArchiCad Beam | OpenBuildings Beam | Revit Structural Framing |
| | Tekla Concrete Beam | | |
| PredefinedType | Need not specify | | |
| ObjectType | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_Beam | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | ConstructionMethod | Label | Precast |
| | MechanicalConnectionType | Label | Telescopic beam connector Column shoes Sample Value(s): Delta beam Lotus-root connection system Slim floor system Grouted sleeves Spiral Connector |

Prefabricated Beam

| | | | |
|-------------|---------|--|--|
| Ifc4 Entity | IfcBeam | | |
|-------------|---------|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|---------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Beam | Beam | Structural Framing | Concrete Beam |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Beam | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |
| | MechanicalConnectionType | Label | Telescopic beam connector Sample Value(s): Grouted Sleeves Spiral Connector Column shoes | |
| | Accreditation_PAS | Boolean | TRUE FALSE | |

Steel Beam

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Beam | Beam | Structural Framing | Beam |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Intumescent Paint Steel | |
| IFC4 Predefined PropertySet | Pset_BeamCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Beam | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | BS 476 Part 20/21 British Standard 476 Fire Tests BS 8202 Part 2 Coatings for fire protection of building elements | |
| | | | | |

Transom (Beam)

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Beam | Beam | Structural Framing | Beam |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TRANSOM | | | |
| IFC4 Predefined PropertySet | Pset_BeamCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | N.A | |

IfcBuildingElementProxy

Accessible Route

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|------------------------------|---|------------------|-------------------------------|-----|
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ACCESSIBLEROUTE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |
| | SGPset_BuildingElementProxyDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Width (mm) | Length | N.A | |

Adjacent Building

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Forms | Mass | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SURROUNDINGBUILDING | | | |

Advertisement Signage

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SignageType | Label | Advertisement Signage | |

Air Conditioning Tray

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Cable Tray | Place Raceray | Cable Trays | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRCONDITIONINGTRAY | | | |

Autosampler

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AUTOSAMPLER | | | |

Backfill

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|-----------------------------|-------------------|---|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BACKFILL | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Sand Sample Value(s): Crusher run Granite dust Gravel Recycled aggregates Corey dust | | |

Balancing Weight

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_BALANCINGWEIGHT | | | |

Bicycle Parking Lot

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BICYCLELOT | | | |

Bicycle Parking Rack

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BICYCLERACK | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BicycleParkingRack_Type | Label | Single tier Double tier | |
| | BicycleLotCount | Integer | N.A | |

Bicycle Route

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BICYCLEROUTE | | | |

Breathing Apparatus

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|-----------------------------|--------------------|----------------------|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BREATHINGAPPARATUS | | | |

Breeching Inlet Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_BREECHINGINLET | | | |

Buffer

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_BUFFER | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CounterWeightBuffer_RatedSpeed (m/s) | Label | N.A | |
| | CounterWeightBuffer_Stroke (mm) | Length | N.A | |
| | CounterWeightBuffer_Type | Label | Energy Dissipating | |
| | LiftBuffer_Stroke | Label | N.A | |
| LiftBuffer_FixedToCar | Boolean | TRUE FALSE | | |

Buggy

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BUGGY | | | |

Buggy Parking

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LORRYLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ParkingUse | Label | Buggy | |

Building Date Signage

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SignageType | Label | Building Date Signage | |

Building Mass

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CONCEPT_BUILDINGMASS | | | |

Bus Bay

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_BUSBAY | | | |

Bus Parking Lot

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BUSLOT | | | |

Business Signage

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SignageType | Label | Business Signage | |

Car Parking Deck

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CARPARKINGDECK | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Steel | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE | |

Car Parking Lot

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CARLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |
| | FamilyParkingLot | Boolean | TRUE FALSE | |
| | CarParking_ServedByCarLift | Boolean | TRUE FALSE | |
| | SGPset_BuildingElementProxyDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| Width (mm) | Length | N.A | | |
| Length (mm) | Length | N.A | | |

Car Parking Platform

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CARPARKINGPLATFORM | | | |

Caution label

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_BIOHAZARDCAUTION | | | |

Chemical Feeder

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |

| | |
|----------------|----------------|
| PredefinedType | USERDEFINED |
| ObjectType | CHEMICALFEEDER |

Circuit Diagram

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_CIRCUITDIAGRAM | | | |

Coach Lot

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | COACHLOT | | | |

Communication Instruction Signage

| | | | | |
|-----------------------------|----------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_COMMUNICATIONINSTRUCTION | | | |

Concrete Marker

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CONCRETEMARKER | | | |

Conveyor Belt

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CONVEYORBELT | | | |

Cooling Tower Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |

| | |
|------------|----------------------|
| ObjectType | SIGNAGE_COOLINGTOWER |
|------------|----------------------|

Counter Weight

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_COUNTERWEIGHT | | | |
| IFC4 UserDefined PropertySet | SGPset BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CounterWeight_RopeDiameter (mm) | Length | N.A | |
| | CounterWeight_RopeCount | Integer | N.A | |

Directional Exit Sign

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Specialty Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_DIRECTIONALEXIT | | | |
| IFC4 UserDefined PropertySet | SGPset BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SelfLuminous | Boolean | TRUE FALSE | |

Dispensing Unit

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FUELDISPENSINGUNIT | | | |
| IFC4 UserDefined PropertySet | SGPset BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Hose_Length (mm) | Length | Sample Value(s): 5m | |
| | FUELDISPENSINGUNIT_SafetyCutoff | Boolean | TRUE FALSE | |

Dos and Donts Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_DOSANDDONTS | | | |

Drop Barrier

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DROPBARRIER | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireAlarmActivated | Boolean | TRUE FALSE | |
| ManualOverrideLockingDevice | Boolean | TRUE FALSE | | |

EV Parking Lot

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LORRYLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ParkingUse | Label | Electric Vehicle | |

EV Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_ELECTRICVEHICLE | | | |

Electric Vehicle Charging Point

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EVCHARGINGPOINT | | | |

Emergency Cut-off Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EMERGENCYCUTOFF | | | |

Emergency Door Release Signage

| | | | | |
|-----------------------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | | | | |

| | | | | |
|----------------|------------------------------|----------------------|----------------|--------------|
| | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EMERGENCYDOORRELEASE | | | |

Emergency Information

| | | | | |
|-----------------------------|------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EMERGENCYINFORMATION | | | |

Emergency Release Signage

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EMERGENCYRELEASE | | | |

Envelope Limit

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CONCEPT_ENVELOPELIMIT | | | |

Envelope Required

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CONCEPT_ENVELOPEREQUIRED | | | |

Escape Plan Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_ESCAPEPLAN | | | |

Evacuation Lift Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |

| | | | | |
|----------------|------------------------|--------|----------------|-----|
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EVACUATIONLIFT | | | |

Evacuee Holding Area Equipment

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EVACUEEHOLDINGAREAEQUIPMENT | | | |

Evacuee Holding Area Signage

| | | | | |
|-----------------------------|----------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EVACUEEHOLDINGAREA | | | |

Exit Access Door Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EXITACCESSDOOR | | | |

Exit Sign

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Specialty Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EXIT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SelfLuminous | Boolean | TRUE FALSE | |

Exit Staircase Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_EXITSTAIRCASE | | | |

False Bottom

| | | | | |
|-----------------------------|-------------------------|--------------------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FALSEBOTTOM | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Fire Access Opening Signage

| | | | | |
|-----------------------------|---------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_FIREACCESSOPENING | | | |

Fire Engine Accessway

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Floors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREENGINEACCESSWAY | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | LoadingCapacity (tonnes) | Real | Sample Value(s): 30 tonnes | |

Fire Engine Accessway Sign Post

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNPOST_DRIVEWAY | | | |

Fire Escape Bed Lift Signage

| | | | | |
|-----------------------------|---------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_FIREESCAPEBEDLIFT | | | |

Fire Escape Plan

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|----------------|-------------|--------|----------------|-----|
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ESCAPEPLAN | | | |

Fire Extinguisher

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PORTABLEFIREEXTINGUISHER | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireExtinguisherRating | Label | Sample Value(s): 70B | |
| | ExternalReference | Label | SS 578 Code of practice for the use and maintenance of portable fire extinguishers | |
| | CapacityWeight (kg) | Real | Sample Value(s): 50kg | |
| Hose_Length (mm) | Length | Sample Value(s): 6m | | |

Fire Safety Equipment Signage

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_FIRESAFETYEQUIPMENT | | | |

Fire Shutter Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_FRESHUTTER | | | |

Flag Pole

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLAGPOLE | | | |

Flood Barrier

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLOODBARRIER | | | |

Floor Level Exit Signage

| | | | | |
|-----------------------------|----------------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Specialty Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_FLOORLEVELEXITSIGN | | | |

Floor Marking

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_FLOORMARKING | | | |

Floor Plan

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLOORPLAN | | | |

Forklift

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FORKLIFT | | | |

Fuel Dispensing Unit

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FUELDISPENSINGUNIT | | | |

Fuel Truck Parking

| | | | | |
|------------------------------|------------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LORRYLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| ParkingUse | Label | Mobile Tanker |

Gas Leak Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_GASLEAK | | | |

General Waste Signage

| | | | | |
|-----------------------------|-------------------------|--------------------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_GENERALWASTES | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Guide Rail

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_GUIDERAIL | | | |

Hazard Warning Signage

| | | | | |
|-----------------------------|---------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_HAZARDWARNINGSIGN | | | |

Hearing Protection Signage

| | | | | |
|-----------------------------|---------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_HEARINGPROTECTION | | | |

Heavy Vehicle Parking (Articulated Vehicle)

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ARTICULATEDVEHICLELOT | | | |

Heavy Vehicle Parking (Rigid-framed Vehicle)

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LORRYLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | VehicleType | Label | Rigid-framed vehicle | |

Holding Bay

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_HOLDINGBAY | | | |

Hump

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HUMP | | | |

Information Plaque

| | | | | |
|-----------------------------|-------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_POPSINFORMATIONPLAQUE | | | |

LPG Warning Sign

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_LPG | | | |

LPS Warning Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_LPSWARNING | | | |

Letter Signage

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SignageType | Label | Letter Signage | |

Lift Well Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_LIFTWELL | | | |

Line Marking

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Component | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LINEMARKING | | | |

MRT 1st Reserve Line

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_MRT1STRESERVELINE | | | |

MRT Track

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |

| | |
|----------------|---------------|
| PredefinedType | USERDEFINED |
| ObjectType | RAIL_MRTTRACK |

Marking

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_DRIVEWAYMARKING | | | |

Mobile Tanker Parking

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LORRYLOT | | | |
| IFC4 UserDefined PropertySet | SGPset BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ParkingUse | Label | Mobile Tanker | |

Motorcycle Parking Lot

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MOTOR-CYCLELOT | | | |
| IFC4 UserDefined PropertySet | SGPset BuildingElementProxyDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Width (mm) | Length | N.A | |
| | Length (mm) | Length | N.A | |

Neighbouring Building

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Forms | Mass | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SURROUNDINGBUILDING | | | |
| IFC4 UserDefined PropertySet | SGPset BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_ApprovedMasterplanUse | Label | N.A | |

No Obstruction Signage

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_NOOBSTRUCTION | | | |

Obstacle

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OBSTACLE | | | |

Oil Tanker Parking

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LORRYLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ParkingUse | Label | Oil Tanker | |

On-Site Food Waste Treatment System

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FOODWASTETREATMENTSYSTEM | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EquipmentType | Label | N.A | |

Operating Instruction Signage

| | | | | |
|-----------------------------|------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_OPERATINGINSTRUCTION | | | |

PWCS Vacuum Truck Parking Lot

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|-----|
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LORRYLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ParkingUse | Label | Vacuum Truck | |

PWD Holding Point

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_PWDHOLDINGPOINT | | | |

PWD Holding Point Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_PWDHOLDINGPOINT | | | |

Passing Space

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_PASSINGSPACE | | | |

Pedestrian Crossing

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PEDESTRIANCROSSING | | | |

Photoluminescent Marking

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PHOTOLUMINESCENTMARKING | | | |

Pipe Arrow

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_PIPEARROW | | | |

Pipe Rack

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PIPERACK | | | |

Planting Trough

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LANDSCAPE_PLANTINGTROUGH | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Waterproofing | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Vegetation_HasCreepers | Boolean | TRUE FALSE | |

Pollution Control Equipment

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | POLLUTIONCONTROLEQUIPMENT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TED_TemperatureOfDischarge (mg/l) | Label | N.A | |
| | TED_Colour (mg/l) | Label | N.A | |
| | TED_PHValue (mg/l) | Label | N.A | |
| | TED_BiochemicalOxygenDemand (mg/l) | Label | N.A | |
| | TED_ChemicalOxygenDemand (mg/l) | Label | N.A | |
| | TED_TotalSuspendedSolid (mg/l) | Label | N.A | |
| | TED_TotalDissolvedSolid (mg/l) | Label | N.A | |
| | TED_Chloride (mg/l) | Label | N.A | |
| | TED_Sulphate (mg/l) | Label | N.A | |
| | TED_Sulphide (mg/l) | Label | N.A | |
| | TED_Cyanide (mg/l) | Label | N.A | |
| | TED_Detergent (mg/l) | Label | N.A | |
| | TED_GreaseAndOil (mg/l) | Label | N.A | |
| | TED_Arsenic (mg/l) | Label | N.A | |
| | TED_Barium (mg/l) | Label | N.A | |
| TED_Tin (mg/l) | Label | N.A | | |

| | | |
|--|-------|-----|
| TED_Iron (mg/l) | Label | N.A |
| TED_Beryllium (mg/l) | Label | N.A |
| TED_Boron (mg/l) | Label | N.A |
| TED_Manganese (mg/l) | Label | N.A |
| TED_PhenolicCompound (mg/l) | Label | N.A |
| TED_Cadmium (mg/l) | Label | N.A |
| TED_Chromium (mg/l) | Label | N.A |
| TED_Copper (mg/l) | Label | N.A |
| TED_Lead (mg/l) | Label | N.A |
| TED_Mercury (mg/l) | Label | N.A |
| TED_Nickel (mg/l) | Label | N.A |
| TED_Selenium (mg/l) | Label | N.A |
| TED_Silver (mg/l) | Label | N.A |
| TED_Zinc (mg/l) | Label | N.A |
| TED_MetalsInTotal (mg/l) | Label | N.A |
| TED_Chlorine (mg/l) | Label | N.A |
| TED_Phosphate (mg/l) | Label | N.A |
| TED_Calcium (mg/l) | Label | N.A |
| TED_Magnesium (mg/l) | Label | N.A |
| TED_Nitrate (mg/l) | Label | N.A |
| AI_AmmoniaAndAmmonium (mg/Nm3) | Label | N.A |
| AI_Antimony (mg/Nm3) | Label | N.A |
| AI_Arsenic (mg/Nm3) | Label | N.A |
| AI_Benzene (mg/Nm3) | Label | N.A |
| AI_Cadmium (mg/Nm3) | Label | N.A |
| AI_CarbonMonoxide (mg/Nm3) | Label | N.A |
| AI_Chlorine (mg/Nm3) | Label | N.A |
| AI_Copper (mg/Nm3) | Label | N.A |
| AI_DioxinsAndFurans (TEQ/Nm3) | Label | N.A |
| AI_EthyleneOxide (mg/Nm3) | Label | N.A |
| AI_FluorineAndHydrofluoricAcid (mg/Nm3) | Label | N.A |
| AI_Formaldehyde (mg/Nm3) | Label | N.A |
| AI_HydrogenChloride (mg/Nm3) | Label | N.A |
| AI_HydrogenSulphide (mg/Nm3) | Label | N.A |
| AI_Lead (mg/Nm3) | Label | N.A |
| AI_Mercury (mg/Nm3) | Label | N.A |
| AI_OxidesOfNitrogen (mg/Nm3) | Label | N.A |
| AI_ParticulateSubstances (mg/Nm3) | Label | N.A |
| AI_StyreneMonomer (mg/Nm3) | Label | N.A |
| AI_SulphurDioxide (mg/Nm3) | Label | N.A |
| AI_SulphurTrioxideAndAcidGases (mg/Nm3) | Label | N.A |
| AI_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3) | Label | N.A |
| AI_VinylChlorideMonomer (mg/Nm3) | Label | N.A |

Private Use Signage

| Ifc4 Entity | IfcBuildingElementProxy | | | | | | | | |
|-----------------------------|---|----------------|---------------|-------|-------|--------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Object</td><td>Object</td><td>Generic Models</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Object | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Object | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | SIGNAGE_PRIVATEUSE | | | | | | | | |

Queuing Space

| Ifc4 Entity | IfcBuildingElementProxy | | | | | | | | |
|-----------------------------|--|----------------|---------------|-------|-------|---------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Model Element</td><td>Object</td><td>Generic Models</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | 2D_QUEUINGSPACE | | | | | | | | |

Recyclables Refuse Chute Signage

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_RECYCLABLESCHUTE | | | |

Recyclables Signage

| | | | | |
|-----------------------------|-------------------------|--------------------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_RECYCLABLES | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Refuge Space

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_LIFTRIFUGESPACE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RefugeSpace_Type | Integer | 1 | |

Religious Symbol

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RELIGIOUSYMBOL | | | |

Rescue Equipment

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RESCUEEQUIPMENT | | | |

Rescue Hook Signage

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|-----------------------------|--------------------|----------------------|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_RESCUEHOOK | | | |

Rinse Shower Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_RINSESHOWER | | | |

SCBA Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_SCBA | | | |

Sign Post

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNPOST | | | |

Signage

| | | | | |
|-----------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE | | | |
| IFC4 Predefined PropertySet | Pset_BuildingElementProxyCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New | |

Signage Water Tap Point

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_WATERTAPPOINT | | | |

Site Plan

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_SITEPLAN | | | |

Smoke Curtain Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_SMOKECURTAIN | | | |

Smoke Vent Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_SMOKEVENT | | | |

Stationary Vacuum System

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | STATIONARYVACUUMSYSTEM | | | |

Storage Height Signage

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Component | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_STORAGEHEIGHT | | | |

Taxi Bay

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_TAXIBAY | | | |

Temporary Refuse Truck Parking

| | | | | |
|-----------------------------|--------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_REFUSETRUCKTEMPORARYPARKING | | | |

Temporary Refuse Truck Parking Sign Post

| | | | | |
|-----------------------------|---------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNPOST_REFUSETEMPORARYPARKING | | | |

Through Block Link Signage

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_THROUGHBLOCKLINK | | | |

Thrust Block

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | THRUSTBLOCK | | | |

Traditional Signage

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE | | | |
| IFC4 Predefined PropertySet | Pset_BuildingElementProxyCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Existing | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SignageType | Label | Traditional Signage | |

Traffic Flow

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_TRAFFICFLOW | | | |

Tree Protection Zone

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_TREEPROTECTIONZONE | | | |

Tunnel

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TUNNEL | | | |

Turnstile

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TURNSTILE | | | |

Vehicular Barrier

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VEHICULARBARRIER | | | |
| IFC4 UserDefined PropertySet | SGPset BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | HorizontalForce (kN) | Real | N.A | |
| | HeightOfVehicularImpact (mm) | Length | N.A | |
| DesignedVehicleMass (kg) | Real | N.A | | |

Warning Sign

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_WARNING | | | |

Warning Sign for Access Hatch

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_ACCESSHATCH | | | |

Water Level

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_WATERLINELEVEL | | | |

Water Playground

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERPLAYGROUND | | | |

Wheelchair Space

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_WHEELCHAIRSPACE | | | |
| IFC4 UserDefined PropertySet | SGPset BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Wheelchair Symbol Signage

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SIGNAGE_WHEELCHAIRSYMBOL | | | |

IfcChimney

Chimney

| | |
|-------------|------------|
| Ifc4 Entity | IfcChimney |
|-------------|------------|

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Flue

| | | | | |
|-----------------------------|--------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcChimney | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLUE | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Metal | | |
| IFC4 Predefined PropertySet | Pset_ChimneyCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | N.A | |

IfcCivilElement

Access Point

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ACCESSPOINT | | | |
| IFC4 UserDefined PropertySet | SGPset_CivilElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Ingress | Boolean | TRUE FALSE | |
| Egress | Boolean | TRUE FALSE | | |

Back Lane

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BACKLANE | | | |
| IFC4 UserDefined PropertySet | SGPset_CivilElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | OwnershipType | Label | N.A | |

Carriageway

| | | | | |
|-------------|-----------------|--|--|--|
| Ifc4 Entity | IfcCivilElement | | | |
|-------------|-----------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_CARRIAGEWAY | | | |
| IFC4 UserDefined PropertySet | SGPset_CivilElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadCategory | Label | 1/2/3/4/5 | |

Driveway

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRIVEWAY | | | |
| IFC4 UserDefined PropertySet | SGPset_CivilElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | DesignedVehicleMass (kg) | Real | N.A | |
| | Accessway | Boolean | TRUE FALSE | |
| | VehicularServiceRoad | Boolean | TRUE FALSE | |
| | VisitorLaneEntry | Boolean | TRUE FALSE | |
| | Ingress | Boolean | TRUE FALSE | |
| | Egress | Boolean | TRUE FALSE | |
| AccessRoad | Boolean | TRUE FALSE | | |

Drop Barrier Divider

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ISLAND | | | |

Fire Engine Access Road

| | | | | |
|------------------------------|---------------------------------------|--|--------------------------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRIVEWAY | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Grass | |
| IFC4 UserDefined PropertySet | SGPset_CivilElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireEngineAccessRoad | Boolean | TRUE FALSE | |
| LoadingCapacity (tonnes) | Real | Sample Value(s): 24 tonnes 30 tonnes | | |

Footpath

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FOOTPATH | | | |

Lay-by

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LAYBY | | | |

Paved Shoulder

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PAVEMENT | | | |

Road Kerb (within development/premises)

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ROADKERB | | | |

IfcColumn

Cast-in-situ Column

| | | | | |
|---------------------------------------|---------------------------------------|-------------------------------|-------------------------------|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Structural Columns | Concrete Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Column | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Cast-in-situ | |
| | SGPset_ColumnReinforcement | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| PrefabricatedReinforcementCage | Boolean | TRUE FALSE | | |

Column

| Ifc4 Entity | IfcColumn | | | | | | | | | | | | | | | | | |
|--------------------------------|--|----------------------------|-------------------------|--------------------------------|--|------------------------|-------------|---------|----------------------|-----------------|-------|-----|------------|-------|-----|--------|-------|----------------------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Concrete Column</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Column | Column | Columns | Concrete Column | | | | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | |
| Column | Column | Columns | Concrete Column | | | | | | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Concrete Engineered Timber Brick Reinforced Concrete</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Concrete Engineered Timber Brick Reinforced Concrete | | | | | | | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | | | | | | | | |
| Name | Concrete Engineered Timber Brick Reinforced Concrete | | | | | | | | | | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_ColumnCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>FireRating</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Status</td> <td>Label</td> <td>Temporary New Existing</td> </tr> </tbody> </table> | | | IFC4 Predefined Property Name | Data Type | Sample Property Values | IsExternal | Boolean | TRUE FALSE | FireRating (hr) | Label | N.A | FireRating | Label | N.A | Status | Label | Temporary New Existing |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | |
| IsExternal | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | |
| FireRating (hr) | Label | N.A | | | | | | | | | | | | | | | | |
| FireRating | Label | N.A | | | | | | | | | | | | | | | | |
| Status | Label | Temporary New Existing | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Column <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE TRUE FALSE</td> </tr> </tbody> </table> | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Combustible | Boolean | FALSE TRUE FALSE | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | |
| Combustible | Boolean | FALSE TRUE FALSE | | | | | | | | | | | | | | | | |

Entrance Post

| Ifc4 Entity | IfcColumn | | | | | | | | | | |
|-----------------------------|--|----------|-----------------|-------|-------|--------|--------|---------|-----------------|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Concrete Column</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Column | Column | Columns | Concrete Column | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | |
| Column | Column | Columns | Concrete Column | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | |

Gate Post

| Ifc4 Entity | IfcColumn | | | | | | | | | | |
|-----------------------------|--|----------|-----------------|-------|-------|--------|--------|---------|-----------------|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Concrete Column</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Column | Column | Columns | Concrete Column | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | |
| Column | Column | Columns | Concrete Column | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | |

Inclined Column

| Ifc4 Entity | IfcColumn | | | | | | | | | | |
|-----------------------------|--|----------|-----------------|-------|-------|--------|--------|---------|-----------------|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Concrete Column</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Column | Column | Columns | Concrete Column | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | |
| Column | Column | Columns | Concrete Column | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | |

Pilaster

| Ifc4 Entity | IfcColumn | | | | | | | | | | |
|-----------------------------|---|----------|---------------|-------|-------|--------|--------|---------|--------|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Column</td> <td>Column</td> <td>Columns</td> <td>Column</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Column | Column | Columns | Column | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | |
| Column | Column | Columns | Column | | | | | | | | |

| | |
|----------------|----------|
| PredefinedType | PILASTER |
| ObjectType | N.A |

Precast Column

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Columns | Concrete Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Column | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Precast | |
| | MechanicalConnectionType | Label | Column shoes Sample Value(s): Spiral Connector Grouted Sleeves | |

Prefabricated Column

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Columns | Concrete Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Column | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |
| | MechanicalConnectionType | Label | Grouted Sleeves Sample Value(s): Spiral Connector Column shoes | |
| | Accreditation_PAS | Boolean | TRUE FALSE | |

Steel Column

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Columns | Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Steel Intumescent Paint | |
| IFC4 Predefined PropertySet | Pset_ColumnCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Column | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | BS 476 Part 20/21 British Standard 476 Fire Tests BS 8202 Part 2 Coatings for fire protection of building elements | |

Carpet

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Carpet | | |

Catch Screen

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CorrosionResistant | Boolean | N.A | |

Ceiling

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|--|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ceiling | Slab | Ceilings | N.A |
| PredefinedType | CEILING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Plastic Nylon Brick | | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| | Combustible | Boolean | FALSE TRUE FALSE | |
| | FireRating | Label | N.A | |
| | Status | Label | N.A | |
| IsExternal | Boolean | TRUE FALSE | | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlameSpreadClass | Label | Sample Value(s): Class 0 Class 2 Class 1 Class 3 Class 4 | |
| | ExternalReference | Label | BS 476 Part 7 British Standard 476 Fire Tests | |
| Perforated | Boolean | TRUE FALSE | | |

Cladding

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | CLADDING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Timber | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | TRUE FALSE | |

Coldroom Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | CLADDING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | EN 13501-1 Fire classification of construction products and building elements | |
| | FlameSpreadClass | Label | N.A | |
| | ToxicityEmissionRating | Real | N.A | |
| SmokeDensityRating | Real | N.A | | |

Composite Panel

| | | | | |
|------------------------------|---------------------------------------|---|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | CLADDING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Plastic | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | OuterLayer_Combustible | Boolean | TRUE FALSE | |
| ExternalReference | Label | NFPA 285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components | | |

Contrasting Colour Band

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Contrasting colour band | |

Counter Weight Screen

| | | | | |
|------------------------------|---------------------------------------|----------------------|---------------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_COUNTERWEIGHTSCREEN | | | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Perforated | Boolean | N.A | |
| | ExternalReference | Label | EN ISO 13857:2008 Safety of machinery | |

Covering

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Reinforced Concrete Glass Plasterboard | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| | Status | Label | Temporary | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Perforated | Boolean | TRUE FALSE | |
| | AntiMosquitoDevice | Boolean | TRUE FALSE | |
| | ExternalReference | Label | SS 213 Unplasticised PVC pipes and fittings for soil waste and vent applications | |
| Fixed | Boolean | TRUE FALSE | | |

Fire Curtain

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |

| | | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|-----|
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIRECURTAIN | | | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FusibleLink | Boolean | TRUE FALSE | |

Fire Rated Fire Insulation Glass

| | | | | |
|-----------------------------|--------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | INSULATION | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Glass | | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Fire-rated Board

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| | Combustible | Boolean | FALSE TRUE FALSE | |

Floor Finish

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |

Floor Tile

| | | | | |
|-------------|-------------|--|--|--|
| Ifc4 Entity | IfcCovering | | | |
|-------------|-------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Tiles | |
| IFC4 UserDefined PropertySet | SGPset_CoveringTile | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Length (mm) | Length | Sample Value(s): 2400mm | |
| | Width (mm) | Length | Sample Value(s): 2400mm | |

Flooring

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Wood Timber Non-skid Tiles | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | Timber | |
| | Combustible | Boolean | FALSE | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PressureImpregnated | Boolean | TRUE FALSE | |

Frieze

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FRIEZE | | | |

Grass Pavers

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LANDSCAPE_GRASSPAVER | | | |

Grating

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GRATING | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | GALVANIZED MILD STEEL HEAVY DUTY | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Airtight | Boolean | TRUE FALSE | |
| | Watertight | Boolean | TRUE FALSE | |
| | ChequeredPlate | Boolean | TRUE FALSE | |
| | ExternalReference | Label | LTA/SDRE14/4/GRA1/GRA6 STANDARD DETAILS OF ROAD ELEMENTS | |
| HingedOpen | Boolean | TRUE FALSE | | |

Haunch

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HAUNCH | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Thickness (mm) | Length | Sample Value(s): 500 mm | |
| | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReinforcementStrengthClass | Label | Sample Value(s): 500 | |

Hinged Cover

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HINGEDCOVER | | | |

Homogenous Cladding

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | CLADDING | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|--------------------------------|
| ObjectType | N.A | | |
| Material | Attributes | | Sample Attribute Values |
| | Name | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | CladdingType | Label | Homogenous |

Insulation

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Slab | Generic Models | N.A |
| PredefinedType | INSULATION | | | |
| ObjectType | N.A | | | |

Insulation Panel

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | INSULATION | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE | |
| FireRating (hr) | Label | N.A | | |

Insulation of Lightning Tape

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | INSULATION | | | |
| ObjectType | N.A | | | |

Lift Shaft Partition

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_COUNTERWEIGHTSCREEN | | | |

M&E Screen

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SCREEN | | | |

Non-slip Floor

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_CoveringFlooring | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | HasNonSkidSurface | Boolean | TRUE FALSE | |

Outer Shell Covering

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OUTERSHELL | | | |

Pipe Sleeve

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PIPESLEEVE | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Prefabricated And Prefinished Ceiling

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ceiling | Slab | Ceilings | Slab |
| PredefinedType | CEILING | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated and Prefinished | |

Raised Floor

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | TRUE FALSE | |

Raised Platform

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |

Roof Covering

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Roofs | N.A |
| PredefinedType | ROOFING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Plastic Nylon | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | TRUE FALSE | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | ASTM E108 Standard Test Methods for Fire Tests | |
| | FlameSpreadClass | Label | N.A | |
| | Perforated | Boolean | TRUE FALSE | |

Roof Eave

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Roofs | N.A |
| PredefinedType | USERDEFINED | | | |

| | | | |
|-----------------------------|--------------------------------------|------------------|-------------------------------|
| ObjectType | SOFFIT | | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | Status | Label | Existing |

Roof Ridge

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ROOFING_RIDGE | | | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | N.A | |

Roofing

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Roofs | N.A |
| PredefinedType | ROOFING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | N.A | |

Security Bar

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SECURITYBAR | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New | |

Service Platform

| | | | | |
|-------------|-------------|--|--|--|
| Ifc4 Entity | IfcCovering | | | |
|-------------|-------------|--|--|--|

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |

Smoke Curtain

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SMOKECURTAIN | | | |
| IFC4 Predefined PropertySet | Pset_CoveringCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EngineeredSmokeControlSystem | Boolean | TRUE FALSE | |

Sump Cover

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS30 Manhole tops and surface-box tops | |

Suspended Ceiling

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ceiling | Slab | Ceilings | Slab |
| PredefinedType | CEILING | | | |
| ObjectType | N.A | | | |

Tactile Detectable Warning Surface

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |

| | |
|----------------|-------------|
| PredefinedType | USERDEFINED |
| ObjectType | TACTILE |

Trench Cover

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Removable | Boolean | TRUE FALSE | |
| | WithLiftingFeature | Boolean | TRUE FALSE | |

Vertical Greenery

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Object | Generic Models | N.A |
| PredefinedType | CLADDING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Stainless Steel | | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Vegetation_HasClimbers | Boolean | TRUE FALSE | |
| | Vegetation_PlantName | Label | N.A | |
| | Vegetation_PlantedArea (m2) | Area | N.A | |
| Vegetation_HasCreeper | Boolean | TRUE FALSE | | |

Vinyl Flooring

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOORING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Vinyl | | |

IfcCurtainWall

Curtain Wall

| | | | | |
|-----------------------------|-----------------|----------------------|-----------------|--------------|
| Ifc4 Entity | IfcCurtainWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Curtain Wall | Curtain Wall | Curtain Systems | N.A |

| | | | |
|-------------------------------|---------------------------------------|---------------------------|--------------------------------|
| PredefinedType | Need not specify | | |
| ObjectType | N.A | | |
| Material | Attributes | | Sample Attribute Values |
| | Name | Spandrel Panel | |
| IFC4 Predefined PropertySet | Pset_CurtainWallCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | IsExternal | Boolean | TRUE FALSE |
| | ThermalTransmittance | Thermal Transmittance | Sample Value(s): 1 W/m2 K |
| | FireRating (hr) | Label | N.A |
| ThermalTransmittance (W/m2 K) | Thermal Transmittance | Sample Value(s): 1 W/m2 K | |
| IFC4 UserDefined PropertySet | SGPset_CurtainWall | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Material_DaylightReflectance | Label | N.A |
| | Material_SpecularReflectance | Label | N.A |
| | Material_DiffuseReflectance | Label | N.A |
| | ShadingCoefficient_Glass | Real | N.A |
| | ConstructionMethod | Label | N.A |
| FireStop | Boolean | TRUE FALSE | |

Curtain Wall Panel

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCurtainWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Curtain Wall | Curtain Wall | Curtain Systems | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | Glass | | |

Full Height Glass Partition Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCurtainWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Curtain Wall | Curtain Wall | Curtain Systems | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_CurtainWall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated and Prefinished | |

Prefabricated And Prefinished Curtain Wall

| | | | | |
|-----------------------------|-----------------|----------------------|-----------------|--------------|
| Ifc4 Entity | IfcCurtainWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Curtain Wall | Curtain Wall | Curtain Systems | N.A |

| PredefinedType | Need not specify | | | | | | |
|------------------------------|--|--------------------------------|------------------------|------------------------|--------------------|-------|-------------------------------|
| ObjectType | N.A | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_CurtainWall | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated and Prefinished</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Prefabricated and Prefinished |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | |
| ConstructionMethod | Label | Prefabricated and Prefinished | | | | | |
| | | | | | | | |

IfcDiscreteAccessory

Barrier Device

| Ifc4 Entity | IfcDiscreteAccessory | | | | | | | | |
|-----------------------------|--|----------------|---------------|-------|-------|---------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | ANTICLIMBINGDEVICE | | | | | | | | |

Bracket

| Ifc4 Entity | IfcDiscreteAccessory | | | | | | | | |
|-----------------------------|---|-------------------------|-------------------------|-------|-------|---------------|-------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Solid | Generic Models | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Model Element | Solid | Generic Models | N.A | | | | | | |
| PredefinedType | BRACKET | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Metal</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Metal | | | | |
| | Attributes | Sample Attribute Values | | | | | | | |
| Name | Metal | | | | | | | | |
| | | | | | | | | | |

Bridging Plate

| Ifc4 Entity | IfcDiscreteAccessory | | | | | | | | |
|------------------------------|--|--------------------------------|------------------------|------------------------|--------------|---------------|------------------------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | LIFT_BRIDGINGPLATE | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_DiscreteAccessory | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>MinimumForce</td> <td>Real</td> <td>Sample Value(s): 2500N</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | MinimumForce | Real | Sample Value(s): 2500N | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | |
| MinimumForce | Real | Sample Value(s): 2500N | | | | | | | |
| | | | | | | | | | |

Ceiling Hanger

| Ifc4 Entity | IfcDiscreteAccessory | | | | | | | | |
|-----------------------------|---|-------------------------|-------------------------|-------|-------|--------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Object | Generic Models | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Object | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | CEILINGHANGER | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | |
| | Attributes | Sample Attribute Values | | | | | | | |
| Name | N.A | | | | | | | | |
| | | | | | | | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| Ifc4 UserDefined PropertySet | SGPset_DiscreteAccessory | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Combustible | Boolean | TRUE FALSE |
| | FlameSpreadClass | Label | N.A |

Deflector

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_DEFLECTOR | | | |

Detachable Bridging Plate

| | | | | |
|------------------------------|---------------------------------------|-------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_BRIDGINGPLATE | | | |
| Ifc4 UserDefined PropertySet | SGPset_DiscreteAccessory | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AntiSlipSurface | Boolean | TRUE FALSE | |
| | LoadingCapacity (tonnes) | Real | Sample Value(s): 30 tonnes | |
| Weight (kg) | Real | Sample Value(s): 100 kg | | |

Fire Hose Cradle

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREHOSECRADLE | | | |

Guide Roller

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_GUIDEROLLER | | | |

Guide Shoe

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_GUIDESHOE | | | |

Lift Car Apron

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_APRON | | | |

Lift Guiding Yoke

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_GUIDINGYOKE | | | |

Lift Landing Door Lock

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_DOORLOCK | | | |

M&E Bracket

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PIPESUPPORT | | | |

Pawl Device

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_PAWLDEVICE | | | |

Pipe Support

| | | | | |
|------------------------------|---------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PIPESUPPORT | | | |
| IFC4 UserDefined PropertySet | SGPset_DiscreteAccessory | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| TensileStress (N/mm2) | Label | N.A |
| Temperature (C) | Label | N.A |
| TensileStress | Label | N.A |

Rescue Hook

| Ifc4 Entity | IfcDiscreteAccessory | | | |
|------------------------------|---------------------------------|----------------------|------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_RESCUEHOOK | | | |
| IFC4 UserDefined PropertySet | SGPset DiscreteAccessory | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PullOutStrength (kN) | Real | Sample Value(s): 50 kN | |
| | Diameter (mm) | Length | Sample Value(s): 10 mm | |

Safety Gear

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_SAFETYGEAR | | | |

Sheave

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_SHEAVE | | | |

Tensioning Device

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_TENSIONINGDEVICE | | | |

Toe Board

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_TOEBOARD | | | |

Vertical Deflector

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VERTICALDEFLECTOR | | | |

IfcDoor

Access Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

Access Hatch

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ACCESSHATCH | | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Accessible Gate

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | GATE | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Accessible Gate Panel

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|-----------------------------|--------------------------------------|------------------|--------------------------------|-----|
| | Door | Door | Doors | N.A |
| PredefinedType | GATE | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | PanelDepth | N.A | | |
| IFC4 Predefined PropertySet | IfcDoorPanelProperties | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | N.A | N.A | N.A | |

Accessible Panel

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | TRAPDOOR | | | |
| ObjectType | N.A | | | |

Blast Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BLASTDOOR | | | |

CD Door

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CDDoor_Type | Label | Sample Value(s): PT2 | |

Cabinet Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | | | | |

| | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>OperationType</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | OperationType | N.A |
|---------------|--|------------|-------------------------|---------------|-----|
| Attributes | Sample Attribute Values | | | | |
| OperationType | N.A | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A |
| Attributes | Sample Attribute Values | | | | |
| Name | N.A | | | | |

Car Emergency Door

| Ifc4 Entity | IfcDoor | | | | | | | | | | | | |
|--------------------------------|---|------------------------|---------------|-------|--------------------------------|-----------|------------------------|-------------------|---------|--------------|------------------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Door</td> <td>Door</td> <td>Doors</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Door | Door | Doors | N.A | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | |
| Door | Door | Doors | N.A | | | | | | | | | | |
| PredefinedType | DOOR | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset Door <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>WithSafetyFeature</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>WithElectricalContract</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | WithSafetyFeature | Boolean | TRUE FALSE | WithElectricalContract | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| WithSafetyFeature | Boolean | TRUE FALSE | | | | | | | | | | | |
| WithElectricalContract | Boolean | TRUE FALSE | | | | | | | | | | | |

Car Lobby Entrance

| Ifc4 Entity | IfcDoor | | | | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|------|------|-------|-----|--|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Door</td> <td>Door</td> <td>Doors</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Door | Door | Doors | N.A | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | |
| Door | Door | Doors | N.A | | | | | | | | | |
| PredefinedType | DOOR | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | |

Car Parking Lift Entrance

| Ifc4 Entity | IfcDoor | | | | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|------|------|-------|-----|--|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Door</td> <td>Door</td> <td>Doors</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Door | Door | Doors | N.A | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | |
| Door | Door | Doors | N.A | | | | | | | | | |
| PredefinedType | DOOR | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | |

Door

| Ifc4 Entity | IfcDoor | | | | | | | | | | | | | |
|-----------------------------|---|----------|---------------|-------|------------|-------------------------|--------------|-------|---------------|---|---------------|-----|------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Door</td> <td>Door</td> <td>Doors</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Door | Door | Doors | N.A | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | |
| Door | Door | Doors | N.A | | | | | | | | | | | |
| PredefinedType | DOOR | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | |
| Attributes | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>OverallWidth</td> <td>N.A</td> </tr> <tr> <td>OperationType</td> <td>SINGLE_SWING_LEFT ROLLINGUP SLIDING_TO_LEFT</td> </tr> <tr> <td>OverallHeight</td> <td>N.A</td> </tr> <tr> <td>TransomThickness</td> <td>N.A</td> </tr> </tbody> </table> | | | | Attributes | Sample Attribute Values | OverallWidth | N.A | OperationType | SINGLE_SWING_LEFT ROLLINGUP SLIDING_TO_LEFT | OverallHeight | N.A | TransomThickness | N.A |
| Attributes | Sample Attribute Values | | | | | | | | | | | | | |
| OverallWidth | N.A | | | | | | | | | | | | | |
| OperationType | SINGLE_SWING_LEFT ROLLINGUP SLIDING_TO_LEFT | | | | | | | | | | | | | |
| OverallHeight | N.A | | | | | | | | | | | | | |
| TransomThickness | N.A | | | | | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> </tbody> </table> | | | | Attributes | Sample Attribute Values | | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | | | | |

| | | | |
|---------------------------------------|--------------------------------------|--------------------|-------------------------------|
| | Name | Louvre | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | AcousticRating | Label | N.A |
| | FireExit | Boolean | TRUE FALSE |
| | FireRating (hr) | Label | N.A |
| | SelfClosing | Boolean | TRUE FALSE |
| | HasDrive | Boolean | TRUE FALSE |
| | MechanicalLoadRating | Label | N.A |
| | Status | Label | Existing New |
| | IfcDoorLiningProperties | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | N.A | N.A | N.A |
| | IFC4 UserDefined PropertySet | SGPset_Door | |
| IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| BarrierFreeAccessibility | | Boolean | TRUE FALSE |
| Lockable | | Boolean | TRUE FALSE |
| OneWayLockingDevice | | Boolean | TRUE FALSE |
| NonDuplicableKeyLock | | Boolean | TRUE FALSE |
| FlameSpreadClass | | Label | N.A |
| FireShutterElectricallyOperated | | Boolean | TRUE FALSE |
| Orientation | | Label | N.A |
| TransomFireRating (hr) | | Label | N.A |
| FusibleLinkForSelfClosingDevice | | Boolean | TRUE FALSE |
| ElectromagneticForSelfClosingDevice | | Boolean | TRUE FALSE |
| ElectromechanicalForSelfClosingDevice | | Boolean | TRUE FALSE |
| FireAccessOpening | | Boolean | TRUE FALSE |
| BypassDoor | | Boolean | TRUE FALSE |
| MagneticBarLockingDevice | | Boolean | TRUE FALSE |
| HandsFree | | Boolean | TRUE FALSE |
| WithFanlight | | Boolean | N.A |
| SGPset_DoorDimension | | | |
| IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| Width (mm) | Length | N.A | |

Door

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Door Jamb

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | LiningThickness | N.A | | |
| | LiningDepth | N.A | | |
| | LiningOffset | N.A | | |

| | | | |
|-----------------------------|--------------------------------------|------------------|-------------------------------|
| Ifc4 Predefined PropertySet | IfcDoorLiningProperties | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | N.A | N.A | N.A |

Door Panel

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | PanelDepth | | N.A | |
| | PanelWidth | | N.A | |
| Ifc4 Predefined PropertySet | IfcDoorPanelProperties | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | N.A | N.A | N.A | |

Double Leaf Door

| | | | | |
|-----------------------------|-------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | | DOUBLE_DOOR_SINGLE_SWING DOUBLE_DOOR_SINGLE_SWING_OPPO SITE_LEFT DOUBLE_DOOR_SINGLE_SWING_OPPO SITE_RIGHT DOUBLE_DOOR_DOUBLE_SWING | |
| | | | | |

Entrance Door

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Ifc4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | MainEntrance | Boolean | TRUE FALSE | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Entrance Gate

| | | | | |
|-------------|---------|--|--|--|
| Ifc4 Entity | IfcDoor | | | |
|-------------|---------|--|--|--|

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | GATE | | | |
| ObjectType | N.A | | | |

Exit Access Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

| | | |
|------------|-------------------|--|
| Attributes | Attributes | Sample Attribute Values |
| | OperationType | SLIDING_TO_LEFT SLIDING_TO_RIGHT ROLLINGUP REVOLVING SINGLE_SWING_LEFT |
| | PanelWidth | N.A |
| | PanelDepth | N.A |

| | | | |
|-----------------------------|--------------------------------------|------------------|-------------------------------|
| IFC4 Predefined PropertySet | Pset_DoorCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | FireRating (hr) | Label | N.A |
| | SelfClosing | Boolean | TRUE FALSE |
| | FireExit | Boolean | TRUE FALSE |
| | MechanicalLoadRating | Label | N.A |
| | IfcDoorPanelProperties | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | N.A | N.A | N.A |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_Door | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | OneWayLockingDevice | Boolean | TRUE FALSE |
| | ElectromechanicalLockingDevice | Boolean | TRUE FALSE |
| | SwingOut | Boolean | TRUE FALSE |
| | MagneticBarLockingDevice | Boolean | TRUE FALSE |
| | SmartCardLockingDevice | Boolean | TRUE FALSE |
| | ManualOverrideLockingDevice | Boolean | TRUE FALSE |
| | ElectromechanicalForSelfClosingDevice | Boolean | TRUE FALSE |

Exit Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

| | | |
|------------|-------------------|--|
| Attributes | Attributes | Sample Attribute Values |
| | N.A | TRUE FALSE |
| | OperationType | DOUBLE_DOOR_SINGLE_SWING SLIDING_TO_LEFT SLIDING_TO_RIGHT ROLLINGUP REVOLVING SINGLE_SWING_LEFT DOUBLE_SWING |
| | PanelWidth | N.A |
| | PanelDepth | N.A |

| | | | | |
|---------------------------------------|--------------------------------------|--------------------|---|-------------------------------|
| Material | Attributes | | Sample Attribute Values | |
| | Name | Glass | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | | Data Type | Sample Property Values |
| | FireExit | Boolean | TRUE FALSE SLIDING_TO_LEFT SLIDING_TO_RIGHT ROLLINGUP | |
| | FireRating (hr) | Label | N.A | |
| | SelfClosing | Boolean | TRUE FALSE | |
| | MechanicalLoadRating | Label | N.A | |
| | IfcDoorPanelProperties | | | |
| | IFC4 Predefined Property Name | | Data Type | Sample Property Values |
| | N.A | N.A | N.A | |
| | IFC4 UserDefined PropertySet | SGPset_Door | | |
| IFC4 UserDefined Property Name | | Data Type | Sample Property Values | |
| SingleLeaf | | Boolean | TRUE FALSE | |
| OneWayLockingDevice | | Boolean | TRUE FALSE | |
| ElectromechanicalLockingDevice | | Boolean | TRUE FALSE | |
| SwingOut | | Boolean | TRUE FALSE | |
| MagneticBarLockingDevice | | Boolean | TRUE FALSE | |
| SmartCardLockingDevice | | Boolean | TRUE FALSE | |
| ManualOverrideLockingDevice | | Boolean | TRUE FALSE | |

Fire Shutter

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|-------------------------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | ROLLINGUP | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | | Data Type | Sample Property Values |
| | FireRating (hr) | Label | N.A | |
| | FireExit | Boolean | TRUE FALSE | |
| | FireRating | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| | FusibleLinkForSelfClosingDevice | Boolean | TRUE FALSE | |
| | Orientation | Label | N.A | |
| | FullClosureMaxTime (s) | Label | N.A | |
| | DescendingSpeed (m/s) | Label | N.A | |
| | ThermalInsulated | Boolean | TRUE FALSE | |
| | ExternalReference | Label | SS 489 Specification for fire shutters | |
| | FullClosureMaxTime | Label | N.A | |

Flap Door

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|-------------------------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLAPDOOR | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | N.A | | TRUE FALSE | |
| | PanelDepth | | N.A | |
| | PanelWidth | | N.A | |
| | LiningThickness | | N.A | |
| | ThresholdThickness | | N.A | |
| IFC4 Predefined PropertySet | IfcDoorPanelProperties | | | |
| | IFC4 Predefined Property Name | | Data Type | Sample Property Values |
| | N.A | | N.A | N.A |
| | IfcDoorLiningProperties | | | |
| | IFC4 Predefined Property Name | | Data Type | Sample Property Values |
| | N.A | | N.A | N.A |
| IFC4 UserDefined PropertySet | SGPset Door | | | |
| | IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| | CorrosionResistant | | Boolean | TRUE FALSE |

Folding Door

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | | FOLDING_TO_LEFT | |

Gate

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|-------------------------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | GATE | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | | N.A | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset DoorCommon | | | |
| | IFC4 Predefined Property Name | | Data Type | Sample Property Values |
| | SelfClosing | | Boolean | TRUE FALSE |
| | Status | | Label | New |

Glass Door

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Glass | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlameSpreadClass | Label | N.A | |

Inspection Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

Intermediate Landing Emergency Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

Key Hole

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

Landing Emergency Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |

| | | | |
|------------------------------|---------------------------------------|-------------------|--------------------------------|
| PredefinedType | DOOR | | |
| ObjectType | N.A | | |
| Attributes | Attributes | | Sample Attribute Values |
| | OperationType | SINGLE_SWING_LEFT | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | SelfClosing | Boolean | TRUE FALSE |
| IFC4 UserDefined PropertySet | SGPset_Door | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | SelfLocking | Boolean | TRUE FALSE |
| | LandingDoorLock | Boolean | TRUE FALSE |
| | WithElectricalContract | Boolean | TRUE FALSE |

Lift Car Door

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | N.A | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | Intumescent Glass | | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | MechanicalLock | Boolean | TRUE FALSE | |

Lift Door

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Lift Landing Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |

| | | | |
|------------------------------|---------------------------------------|-------------------|--------------------------------|
| PredefinedType | DOOR | | |
| ObjectType | N.A | | |
| Attributes | Attributes | | Sample Attribute Values |
| | OperationType | SINGLE_SWING_LEFT | |
| Material | Attributes | | Sample Attribute Values |
| | Name | Intumescent Glass | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | FireExit | Boolean | TRUE FALSE |
| IFC4 UserDefined PropertySet | SGPset_Door | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | ElectricalSafetySwitch | Boolean | TRUE FALSE |
| | ElectromechanicalLockingDevice | Boolean | TRUE FALSE |
| | DrivenByLiftCarDoor | Boolean | TRUE FALSE |
| | SpringClosingDevice | Boolean | TRUE FALSE |
| | WeightClosingDevice | Boolean | TRUE FALSE |
| | EmergencyUnlockingDevice | Boolean | TRUE FALSE |

Lift Landing Door Frame

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Maintenance Door

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ElectricalSafetySwitch | Boolean | TRUE FALSE | |

One-way Swing Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

| | | | | |
|------------------------------|---------------------------------------|-------------------|--------------------------------|-------------------------------|
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | SINGLE_SWING_LEFT | | |
| IFC4 UserDefined PropertySet | SGPset Door | | | |
| | IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| | PowerOperated | Boolean | TRUE FALSE | |

Phenolic Door

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | Phenolic | | |

Pintu Pagar

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|-------------------------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | GATE | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | | Data Type | Sample Property Values |
| | Status | Label | New | |

Platform Lift Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

Recyclables Refuse Chute Access Panel

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RECYCLABLESCHUTEACCESSPANEL | | | |

Recyclables Refuse Chute Hopper

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RECYCLABLESCHUTEHOPPER | | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | SelfClosing | Boolean | TRUE FALSE | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Airtight | Boolean | TRUE FALSE | |
| | SoftClosing | Boolean | TRUE FALSE | |
| | VolumeControlled | Boolean | TRUE FALSE | |

Refuse Chute Access Panel

| | | | | |
|-----------------------------|------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | REFUSECHUTEACCESSPANEL | | | |

Refuse Chute Hopper

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | REFUSECHUTEHOPPER | | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | SelfClosing | Boolean | TRUE FALSE | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Airtight | Boolean | TRUE FALSE | |
| | SoftClosing | Boolean | TRUE FALSE | |
| | VolumeControlled | Boolean | TRUE FALSE | |

Revolving Door

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|--------------------------------|
| ObjectType | N.A | | |
| Attributes | Attributes | | Sample Attribute Values |
| | OperationType | REVOLVING | |
| IFC4 UserDefined PropertySet | SGPset_Door | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE |

Roller Shutter Door

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | ROLLINGUP | | |
| | LiningThickness | N.A | | |
| | PanelWidth | N.A | | |
| | PanelDepth | N.A | | |
| | ThresholdThickness | N.A | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | ROLLINGUP | |
| | IfcDoorLiningProperties | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | N.A | N.A | N.A | |
| | IfcDoorPanelProperties | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | N.A | N.A | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SmokeDetection | Boolean | TRUE FALSE | |
| | FireShutterElectricallyOperated | Boolean | TRUE FALSE | |
| | Perforated | Boolean | TRUE FALSE | |

Security Gate

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | GATE | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | N.A | |

Self-closing Door

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | SelfClosing | Boolean | TRUE FALSE | |

Shutter

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | Sample Attribute Values | | |
| | OperationType | ROLLINGUP | | |

Single Leaf Door

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | Sample Attribute Values | | |
| | OperationType | SINGLE_SWING_LEFT | | |

Sliding Door

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | Sample Attribute Values | | |
| | OperationType | SLIDING_TO_LEFT | | |

Sliding Gate

| | | | | |
|-------------|---------|--|--|--|
| Ifc4 Entity | IfcDoor | | | |
|-------------|---------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|-------------------------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | GATE | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | | SLIDING_TO_LEFT | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| | FireAlarmActivated | | Boolean | TRUE FALSE |
| | ManualOverrideLockingDevice | | Boolean | TRUE FALSE |

Smoke Check Door

| | | | | |
|-----------------------------|--------------------------------------|----------------------|------------------|-------------------------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | | Data Type | Sample Property Values |
| | FireRating (hr) | | Label | N.A |
| | | | | |

Swing Gate

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|-------------------------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | GATE | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | | SINGLE_SWING_LEFT | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| | FireAlarmActivated | | Boolean | TRUE FALSE |
| | ManualOverrideLockingDevice | | Boolean | TRUE FALSE |

Trap Door

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | TRAPDOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | OperationType | | SINGLE_SWING_LEFT | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_Door | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Counterbalanced | Boolean | TRUE FALSE |
| | OpeningSize (m) | Length | N.A |

Trash Chute Door

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| IFC4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TRASHCHUTEDOOR | | | |
| Attributes | Attributes | Sample Attribute Values | | |
| | PanelDepth | N.A | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | IfcDoorPanelProperties | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | N.A | N.A | N.A | |
| | Pset_DoorCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | SelfClosing | Boolean | TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_Door | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WithRubberGasket | Boolean | TRUE FALSE | |

Two-way Swing Door

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| IFC4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | Sample Attribute Values | | |
| | OperationType | DOUBLE_SWING | | |

Vision Panel

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| IFC4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | DOOR | | | |
| ObjectType | N.A | | | |

Wicket Door

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcDoor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Door | Door | Doors | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WICKET | | | |
| Attributes | Attributes | Sample Attribute Values | | |
| | OperationType | SINGLE_SWING_LEFT | | |

IfcElectricMotor

Electric Motor

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricMotor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Element | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcFooting

Footing

| | | | | |
|-----------------------------|-------------------|--------------------------------|------------------------|------------------|
| Ifc4 Entity | IfcFooting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Footing | Footing | Structural Foundations | Concrete Footing |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Brick | | |

Footing Beam

| | | | | |
|-----------------------------|-----------------|----------------------|------------------------|--------------|
| Ifc4 Entity | IfcFooting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Footing | Corbel/Haunch | Structural Foundations | N.A |
| PredefinedType | FOOTING_BEAM | | | |
| ObjectType | N.A | | | |

IfcFurniture

Accessible Water Closet Compartment

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |

| | | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|-----|
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CUBICLE | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Ambulant Disabled Water Closet Compartment

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CUBICLE | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AmbulantDisabled | Boolean | TRUE FALSE | |

Bed

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | BED | | | |
| ObjectType | N.A | | | |

Bench

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BENCH | | | |
| IFC4 Predefined PropertySet | Pset_FurnitureTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsBuiltIn | Boolean | TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Capacity (L) | Label | N.A | |

Breathing Apparatus Cabinet

| | | | | |
|-----------------------------|---------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BREATHINGAPPARATUSCABINET | | | |

Bus Shelter

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BUSHELTER | | | |

Cabinet

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CABINET | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Steel | | |
| IFC4 Predefined PropertySet | Pset_FurnitureTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Style | Label | Modular | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE | |

Chair

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | CHAIR | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_FurnitureTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsBuiltIn | Boolean | TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | BS 5852 Methods of Test for the Ignitability by Smokers Materials of Upholstered Composites for Seating | |

Child Protection Seat

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |

| | |
|----------------|---------------------|
| PredefinedType | USERDEFINED |
| ObjectType | CHILDPROTECTIONSEAT |

Convex Mirror

| Ifc4 Entity | IfcFurniture | | | | | | | | |
|-----------------------------|---|---------------|---------------|-------|-------|--------|-----------|-----------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Furniture | Furniture | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Object | Furniture | Furniture | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | CONVEXMIRROR | | | | | | | | |

Cubicle

| Ifc4 Entity | IfcFurniture | | | | | | | | |
|-----------------------------|---|---------------|---------------|-------|-------|--------|-----------|-----------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Furniture | Furniture | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Object | Furniture | Furniture | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | CUBICLE | | | | | | | | |

Desk

| Ifc4 Entity | IfcFurniture | | | | | | | | |
|-----------------------------|---|---------------|---------------|-------|-------|--------|-----------|-----------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Furniture | Furniture | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Object | Furniture | Furniture | N.A | | | | | | |
| PredefinedType | DESK | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Diaper Changing Station

| Ifc4 Entity | IfcFurniture | | | | | | | | |
|-----------------------------|---|---------------|---------------|-------|-------|--------|-----------|-----------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Furniture | Furniture | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Object | Furniture | Furniture | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | DIAPERCHANGINGTABLE | | | | | | | | |

Display Case

| Ifc4 Entity | IfcFurniture | | | | | | | | |
|-----------------------------|---|---------------|---------------|-------|-------|--------|-----------|-----------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Furniture | Furniture | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Object | Furniture | Furniture | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | DISPLAYCASE | | | | | | | | |

Emergency Voice Communication Cabinet

| Ifc4 Entity | IfcFurniture | | | | | | | | |
|-----------------------------|--|----------------|---------------|-------|-------|--------|-----------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Furniture | Generic Models | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Object | Furniture | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | EMERGENCYVOICECOMMUNICATIONCABINET | | | | | | | | |

Fire Extinguisher Cabinet

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREEXTINGUISHERCABINET | | | |

Fire Hose Cabinet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREHOSECABINET | | | |
| IFC4 Predefined PropertySet | Pset_FurnitureTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalDepth (mm) | Length | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE | |

Fitness Equipment

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FITNESSEQUIPMENT | | | |

Furniture

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Letter Box

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LETTERBOX | | | |

Litter Bin

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LITTERBIN | | | |

Mirror

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MIRROR | | | |

Paper Towel Dispenser

| | | | | |
|-----------------------------|---------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PAPERTOWELDISPENSER | | | |

Planter Box

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PLANTERBOX | | | |

Playground Equipment

| | | | | |
|-----------------------------|---------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PLAYGROUNDEQUIPMENT | | | |

Prefabricated Kitchen Cabinet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CABINET | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |

Rack

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RACK | | | |

Recyclables Compactor

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RECYCLABLECOMPACTOR | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CompactionRatio | Label | Sample Value(s): 2:1 | |
| | Litre (L) | Label | Sample Value(s): 240 L | |
| | ExternalReference | Label | DIN 30722 Roller contact tipper vehicles roller containers | |
| | ColourCode | Label | N.A | |
| | Material_BasePlate | Label | N.A | |
| | BasePlate_Thickness (mm) | Length | Sample Value(s): 6 mm | |
| | TailGateOrientation | Label | Inward Facing | |
| | HookUpPoint | Label | Outward Facing | |

Recyclables Container

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RECYCLABLECONTAINER | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CompactionRatio | Label | Sample Value(s): 2:1 | |
| | Litre (L) | Label | Sample Value(s): 240 L | |
| | ExternalReference | Label | DIN 30722 Roller contact tipper vehicles roller containers | |
| | ColourCode | Label | N.A | |
| | Material_BasePlate | Label | N.A | |
| | BasePlate_Thickness (mm) | Length | Sample Value(s): 6 mm | |
| | TailGateOrientation | Label | Inward Facing | |
| | HookUpPoint | Label | Outward Facing | |

Recycling Bin

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |

| PredefinedType | USERDEFINED | | | | | | | | | | | | |
|------------------------------|--|--|------------------------|------------------------|-----------|-------|------------------------|---------|---------|--------------|-------------------|-------|--|
| ObjectType | RECYCLINGBIN | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Litre (L)</td> <td>Label</td> <td>Sample Value(s): 240 L</td> </tr> <tr> <td>Wheeled</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>ExternalReference</td> <td>Label</td> <td>SS EN 840 Singapore Standard for mobile waste and recycling containers</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Litre (L) | Label | Sample Value(s): 240 L | Wheeled | Boolean | TRUE FALSE | ExternalReference | Label | SS EN 840 Singapore Standard for mobile waste and recycling containers |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | |
| | Litre (L) | Label | Sample Value(s): 240 L | | | | | | | | | | |
| Wheeled | Boolean | TRUE FALSE | | | | | | | | | | | |
| ExternalReference | Label | SS EN 840 Singapore Standard for mobile waste and recycling containers | | | | | | | | | | | |

Refuse Bin

| Ifc4 Entity | IfcFurniture | | | | | | | | | | | | |
|------------------------------|--|--|------------------------|------------------------|-----------|--------|------------------------|-----------|---------|--------------|-------------------|-------|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Furniture | Furniture | N.A | | | | |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | |
| Object | Furniture | Furniture | N.A | | | | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | | | | |
| ObjectType | REFUSEBIN | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Litre (L)</td> <td>Label</td> <td>Sample Value(s): 240 L</td> </tr> <tr> <td>Wheeled</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>ExternalReference</td> <td>Label</td> <td>SS EN 840 Singapore Standard for mobile waste and recycling containers</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Litre (L) | Label | Sample Value(s): 240 L | Wheeled | Boolean | TRUE FALSE | ExternalReference | Label | SS EN 840 Singapore Standard for mobile waste and recycling containers |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | |
| | Litre (L) | Label | Sample Value(s): 240 L | | | | | | | | | | |
| Wheeled | Boolean | TRUE FALSE | | | | | | | | | | | |
| ExternalReference | Label | SS EN 840 Singapore Standard for mobile waste and recycling containers | | | | | | | | | | | |

Refuse Compactor

| Ifc4 Entity | IfcFurniture | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--------------------------------|--|------------------------|-----------------|--------|----------------------|-----------|-------|------------------------|-------------------|-------|--|------------|-------|-----|--------------------|-------|-----|--------------------------|--------|-----------------------|---------------------|-------|---------------|-------------|-------|----------------|
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| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | Furniture | Furniture | N.A | | | | | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | REFUSECOMPACTOR | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>CompactionRatio</td> <td>Label</td> <td>Sample Value(s): 2:1</td> </tr> <tr> <td>Litre (L)</td> <td>Label</td> <td>Sample Value(s): 240 L</td> </tr> <tr> <td>ExternalReference</td> <td>Label</td> <td>DIN 30722 Roller contact tipper vehicles roller containers</td> </tr> <tr> <td>ColourCode</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Material_BasePlate</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BasePlate_Thickness (mm)</td> <td>Length</td> <td>Sample Value(s): 6 mm</td> </tr> <tr> <td>TailGateOrientation</td> <td>Label</td> <td>Inward Facing</td> </tr> <tr> <td>HookUpPoint</td> <td>Label</td> <td>Outward Facing</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | CompactionRatio | Label | Sample Value(s): 2:1 | Litre (L) | Label | Sample Value(s): 240 L | ExternalReference | Label | DIN 30722 Roller contact tipper vehicles roller containers | ColourCode | Label | N.A | Material_BasePlate | Label | N.A | BasePlate_Thickness (mm) | Length | Sample Value(s): 6 mm | TailGateOrientation | Label | Inward Facing | HookUpPoint | Label | Outward Facing |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | |
| | CompactionRatio | Label | Sample Value(s): 2:1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Litre (L) | Label | Sample Value(s): 240 L | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ExternalReference | Label | DIN 30722 Roller contact tipper vehicles roller containers | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ColourCode | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Material_BasePlate | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | |
| | BasePlate_Thickness (mm) | Length | Sample Value(s): 6 mm | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TailGateOrientation | Label | Inward Facing | | | | | | | | | | | | | | | | | | | | | | | | | |
| HookUpPoint | Label | Outward Facing | | | | | | | | | | | | | | | | | | | | | | | | | | |

Refuse Container

| Ifc4 Entity | IfcFurniture | | | | | | | | | |
|------------------------------|---|--------------------------------|------------------------|------------------------|-----------------|--------|----------------------|-----------|-------|------------------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Furniture</td> <td>Furniture</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Furniture | Furniture | N.A | |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Object | Furniture | Furniture | N.A | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | |
| ObjectType | REFUSECONTAINER | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>CompactionRatio</td> <td>Label</td> <td>Sample Value(s): 2:1</td> </tr> <tr> <td>Litre (L)</td> <td>Label</td> <td>Sample Value(s): 240 L</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | CompactionRatio | Label | Sample Value(s): 2:1 | Litre (L) | Label | Sample Value(s): 240 L |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| CompactionRatio | Label | Sample Value(s): 2:1 | | | | | | | | |
| Litre (L) | Label | Sample Value(s): 240 L | | | | | | | | |

| | | |
|--------------------------|--------|--|
| ExternalReference | Label | DIN 30722 Roller contact tipper vehicles roller containers |
| ColourCode | Label | N.A |
| Material_BasePlate | Label | N.A |
| BasePlate_Thickness (mm) | Length | Sample Value(s): 6 mm |
| TailGateOrientation | Label | Inward Facing |
| HookUpPoint | Label | Outward Facing |

Sanitary Bin

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SANITARYBIN | | | |

Seating

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BENCH | | | |

Shelf

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | SHELF | | | |
| ObjectType | N.A | | | |

Shower Cubicle

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CUBICLE | | | |

Shut-off Valve Pull Box

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SHUTOFFVALVEBOX | | | |

Soap Dispenser

| | | | | |
|-------------|--------------|--|--|--|
| Ifc4 Entity | IfcFurniture | | | |
|-------------|--------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SOAPDISPENSER | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | IsTransparent | Boolean | TRUE FALSE | |

Table

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | TABLE | | | |
| ObjectType | N.A | | | |

Taxi Shelter

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TAXISHELTER | | | |

Toilet Paper Holder

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TOILETPAPERHOLDER | | | |

Umbrella

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | UMBRELLA | | | |

Utility Box

| | | | | |
|------------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | UTILITYCABINET | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| Combustible | Boolean | FALSE |

Wardrobe

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CABINET | | | |
| IFC4 Predefined PropertySet | Pset_FurnitureTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Style | Label | Pole System | |

Water Closet Compartment

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CUBICLE | | | |

Workstation

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFurniture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Furniture | Furniture | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Furniture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SecurityCardAccess | Boolean | TRUE FALSE | |
| | CarParkAccess | Boolean | TRUE FALSE | |
| | FireAlarmGraphicSystem | Boolean | TRUE FALSE | |
| | WalkieTalkieChargingStation | Boolean | TRUE FALSE | |
| ACMVSsystem | Boolean | TRUE FALSE | | |

IfcGeographicElement

2D Land Lot

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_LANDLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | LandLotNumber | Label | MK05-04512W | |

Air Space Lot

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRSPACELOT | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | LandLotNumber | Label | MK05-04512W <i>Sample Value(s):</i> MK01-80018T MK01-70001W | |
| | LandLotArea (m2) | Area | 58867.4 | |
| | GeocodeID | Label | 254XCJFLKJSNEJK | |
| | ParcelType | Label | Airspace | |
| | SVYFileNumber | Label | 0536-1985 <i>Sample Value(s):</i> 3557-2019 | |
| | LotStatus | Label | Live <i>Sample Value(s):</i> Provisional | |
| | OldFormatLotNumber | Label | MK01-229-1 | |
| | BalanceLotIndicator | Boolean | TRUE FALSE | |
| | HouseNumber | Label | 38D | |
| | StreetName_StreetCode | Label | JALAN MAT JAMBOL(MAJ01M) | |
| | LevelNumber | Label | 01 | |
| | UnitNumber | Label | 05 | |
| | BuildingName_Source | Label | ISLAND VIEW (URA) | |
| PostalCode | Label | 119522 | | |
| PlanNumber | Label | CP20628 | | |

Artwork

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ARTWORK | | | |

Beach

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BEACH | | | |

Bedding

| | | | | |
|------------------------------|---------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FOUNDATION | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|--|
| BeddingType | Label | Type 1 Sample Value(s): Type 3 Type 2 |

Controlled Watercourse

| Ifc4 Entity | IfcGeographicElement | | | |
|------------------------------|---------------------------------|----------------------|------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERBODY | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PUBControlled | Boolean | TRUE FALSE | |

Electrical Post

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | UTILITYPOLE | | | |

Existing Earthworks

| Ifc4 Entity | IfcGeographicElement | | | |
|------------------------------|--|----------------------|------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EXISTINGEARTHWORKS | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElementDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Area (m2) | Area | N.A | |

External Planting

| Ifc4 Entity | IfcGeographicElement | | | |
|------------------------------|---------------------------------|----------------------|------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Planting | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LANDSCAPE_EXTERNALPLANTING | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ApprovedSoilMixture | Boolean | TRUE FALSE | |

Foreshore Line

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_FORESHORELINE | | | |

Garden Floor Plate

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PLANTINGAREA | | | |

Green Verge

| | | | | |
|------------------------------|--|----------------------|--|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GREENVERGE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Sample Value(s): Proposed/New To be Removed Existing | |
| | ApprovedSoilMixture | Boolean | TRUE FALSE | |
| | SGPset_GeographicElementDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| Area (m2) | Area | N.A | | |

Mega Underground Development

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SUBTERRANEANLOT | | | |

Neighbouring Lot

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | NEIGHBOURINGLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_LandUse | Label | N.A | |
| | GIS_TreeConservationArea | Boolean | TRUE FALSE | |
| | VacantLand | Boolean | TRUE FALSE | |

| | | | |
|--|---------------------------|-------|-----|
| | GIS_ApprovedMasterplanUse | Label | N.A |
|--|---------------------------|-------|-----|

Palm

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Planting | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LANDSCAPE_PALM | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Sample Value(s): To be felled/removed To be planted/proposed/new To be transplanted To be retained | |
| | Girth (m) | Length | N.A | |
| | Species | Label | N.A | |
| | TreeSize | Label | N.A | |
| | PalmType | Label | Sample Value(s): Cluster Single stem | |
| SingleStem | Boolean | TRUE FALSE | | |

Planting Area

| | | | | |
|------------------------------|--|----------------------|--|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PLANTINGAREA | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Sample Value(s): Proposed/New To be Removed Existing | |
| | SGPset_GeographicElementDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Area (m2) | Area | N.A | |

Proposed Earthworks

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PROPOSEDEARTHWORKS | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElementDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Area (m2) | Area | N.A | |

Proposed Site (Land Lot)

| | | | | |
|-----------------------------|----------------------|--|--|--|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | | | | |

| | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Mesh | Mesh | Topography | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|--|--------------------------------|--|------------------------|------------|-------|------|---------------|-------|--|------------------|------|---------|-----------|-------|-----------------|---------------|-------|--|-----------|-------|---|--------------------|-------|------------|---------------------|---------|--------------|-------------|-------|-----|-----------------------|-------|--------------------------|-------------|-------|----|------------|-------|----|---------------------|-------|-------------------|------------|-------|--------|------------|-------|---------|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesh | Mesh | Topography | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | LANDLOT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ParcelType</td> <td>Label</td> <td>Land</td> </tr> <tr> <td>LandLotNumber</td> <td>Label</td> <td>MK05-04512W <i>Sample Value(s):</i> MK01-80018T MK01-70001W</td> </tr> <tr> <td>LandLotArea (m2)</td> <td>Area</td> <td>58867.4</td> </tr> <tr> <td>GeocodeID</td> <td>Label</td> <td>254XCJFLKJSNEJK</td> </tr> <tr> <td>SVYFileNumber</td> <td>Label</td> <td>0536-1985 <i>Sample Value(s):</i> 3557-2019</td> </tr> <tr> <td>LotStatus</td> <td>Label</td> <td>Live <i>Sample Value(s):</i> Provisional</td> </tr> <tr> <td>OldFormatLotNumber</td> <td>Label</td> <td>MK01-229-1</td> </tr> <tr> <td>BalanceLotIndicator</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>HouseNumber</td> <td>Label</td> <td>38D</td> </tr> <tr> <td>StreetName_StreetCode</td> <td>Label</td> <td>JALAN MAT JAMBOL(MAJ01M)</td> </tr> <tr> <td>LevelNumber</td> <td>Label</td> <td>01</td> </tr> <tr> <td>UnitNumber</td> <td>Label</td> <td>05</td> </tr> <tr> <td>BuildingName_Source</td> <td>Label</td> <td>ISLAND VIEW (URA)</td> </tr> <tr> <td>PostalCode</td> <td>Label</td> <td>119522</td> </tr> <tr> <td>PlanNumber</td> <td>Label</td> <td>CP20628</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ParcelType | Label | Land | LandLotNumber | Label | MK05-04512W <i>Sample Value(s):</i> MK01-80018T MK01-70001W | LandLotArea (m2) | Area | 58867.4 | GeocodeID | Label | 254XCJFLKJSNEJK | SVYFileNumber | Label | 0536-1985 <i>Sample Value(s):</i> 3557-2019 | LotStatus | Label | Live <i>Sample Value(s):</i> Provisional | OldFormatLotNumber | Label | MK01-229-1 | BalanceLotIndicator | Boolean | TRUE FALSE | HouseNumber | Label | 38D | StreetName_StreetCode | Label | JALAN MAT JAMBOL(MAJ01M) | LevelNumber | Label | 01 | UnitNumber | Label | 05 | BuildingName_Source | Label | ISLAND VIEW (URA) | PostalCode | Label | 119522 | PlanNumber | Label | CP20628 |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ParcelType | Label | Land | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LandLotNumber | Label | MK05-04512W <i>Sample Value(s):</i> MK01-80018T MK01-70001W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LandLotArea (m2) | Area | 58867.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | GeocodeID | Label | 254XCJFLKJSNEJK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SVYFileNumber | Label | 0536-1985 <i>Sample Value(s):</i> 3557-2019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LotStatus | Label | Live <i>Sample Value(s):</i> Provisional | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | OldFormatLotNumber | Label | MK01-229-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | BalanceLotIndicator | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HouseNumber | Label | 38D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | StreetName_StreetCode | Label | JALAN MAT JAMBOL(MAJ01M) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LevelNumber | Label | 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | UnitNumber | Label | 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BuildingName_Source | Label | ISLAND VIEW (URA) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PostalCode | Label | 119522 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PlanNumber | Label | CP20628 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Public Land

| Ifc4 Entity | IfcGeographicElement | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|-------------------|-------|-------|------------|-----|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Mesh | Mesh | Topography | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Mesh | Mesh | Topography | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>GIS_LandOwnership</td> <td>Label</td> <td>STATE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | GIS_LandOwnership | Label | STATE | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| GIS_LandOwnership | Label | STATE | | | | | | | |

Retention Basin

| Ifc4 Entity | IfcGeographicElement | | | | | | | | |
|-----------------------------|---|------------|---------------|-------|-------|------|------|------------|-----|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Mesh | Mesh | Topography | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Mesh | Mesh | Topography | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | RETENTIONBASIN | | | | | | | | |

Road

| Ifc4 Entity | IfcGeographicElement | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|----------|-------|------|------------|-----|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Mesh | Mesh | Topography | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Mesh | Mesh | Topography | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | GIS_ROAD | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RoadName</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | RoadName | Label | N.A | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| RoadName | Label | N.A | | | | | | | |

Roadside Verge

| | | | | |
|---------------------------------------|--|-------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GREENVERGE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElementDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Area (m2) | Area | N.A | |
| | SGPset_GeographicElement | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| ApprovedSoilMixture | Boolean | TRUE FALSE | | |

Service Verge

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PLANTINGAREA | | | |

Shrub

| | | | | |
|------------------------------|---------------------------------------|--|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LANDSCAPE_SHRUBS | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Turf | Boolean | TRUE FALSE | |
| | Species | Label | N.A | |
| Status | Label | Sample Value(s): To be felled/removed To be planted/proposed/new To be transplanted To be retained | | |

Site Boundary (Cadastral Lot)

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CADASTRALLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | VacantLand | Boolean | TRUE FALSE | |
| | ApprovedSoilMixture | Boolean | TRUE FALSE | |
| GIS_TreeConservationArea | Boolean | TRUE FALSE | | |

| | | | |
|--|--|------------------|-------------------------------|
| | SGPset_GeographicElementDimension | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Area (m2) | Area | N.A |

Soil

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PLANTINGAREA | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Turf | Boolean | TRUE FALSE | |
| | ApprovedSoilMixture | Boolean | TRUE FALSE | |
| | Status | Label | Sample Value(s): To be felled/removed To be planted/proposed/new To be transplanted To be retained | |
| | TurfSpecies | Label | N.A | |
| | Species | Label | Axonopus compressus | |

Subterranean Lot

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SUBTERRANEANLOT | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | LandLotNumber | Label | MK05-04512W Sample Value(s): MK01-80018T MK01-70001W | |
| | LandLotArea (m2) | Area | 58867.4 | |
| | GeocodeID | Label | 254XCJFLKJSNEJK | |
| | ParcelType | Label | Subterranean | |
| | SVYFileNumber | Label | 0536-1985 Sample Value(s): 3557-2019 | |
| | LotStatus | Label | Live Sample Value(s): Provisional | |
| | OldFormatLotNumber | Label | MK01-229-1 | |
| | BalanceLotIndicator | Boolean | TRUE FALSE | |
| | HouseNumber | Label | 38D | |
| | StreetName_StreetCode | Label | JALAN MAT JAMBOL(MAJ01M) | |
| | LevelNumber | Label | 01 | |
| | UnitNumber | Label | 05 | |
| | BuildingName_Source | Label | ISLAND VIEW (URA) | |
| | PostalCode | Label | 119522 | |
| | PlanNumber | Label | CP20628 | |

Traffic Light

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |

| | |
|------------|--------------|
| ObjectType | TRAFFICLIGHT |
|------------|--------------|

Tree

| | | | | |
|------------------------------|--|----------------------|------------------|--|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Planting | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LANDSCAPE_TREE | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| | Status | | Label | Sample Value(s): To be felled/removed To be planted/proposed/new To be transplanted To be retained |
| | Girth (m) | | Length | N.A |
| | ReasonForRemoval | | Label | N.A |
| | Species | | Label | N.A |
| | TreeNumber | | Label | N.A |
| | TreeSize | | Label | N.A |
| | SingleStem | | Boolean | TRUE FALSE |
| | SGPset GeographicElementDimension | | | |
| | IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| | Height (m) | | Length | N.A |

Water Body

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERBODY | | | |

Water Feature

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERFEATURE | | | |

Watercourse

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERBODY | | | |

Waterfront

| | | | | |
|-----------------------------|----------------------|--|--|--|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | | | | |

| | | | | |
|----------------|-----------------|----------------------|--------------|--------------|
| | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERBODY | | | |

IfcGrid

Gridline

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGrid | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Grid | Grid | Grid | Grid |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Structural Grid

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGrid | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Grid | Grid | Grid | Grid |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcJunctionBox

Junction Box

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcJunctionBox | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Lightning Control Box

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcJunctionBox | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | POWER | | | |
| ObjectType | N.A | | | |

OG Box

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcJunctionBox | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Electrical Equipment | N.A |
| PredefinedType | POWER | | | |
| ObjectType | N.A | | | |

Power

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcJunctionBox | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | POWER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_JunctionBox | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

SCV Box

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcJunctionBox | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | POWER | | | |
| ObjectType | N.A | | | |

Traffic Control Box

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcJunctionBox | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TRAFFICCONTROL | | | |

IfcMember

Stringer

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcMember | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | STRINGER | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Supporting Structure

| | | | | |
|-----------------------------|-------------------|--------------------------------|----------------|--------------|
| Ifc4 Entity | IfcMember | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Steel | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 Predefined PropertySet | Pset_MemberCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | FireRating (hr) | Label | N.A |
| IFC4 UserDefined PropertySet | SGPset_Member | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Combustible | Boolean | FALSE TRUE FALSE |
| | Material_MeltingPoint (C) | Label | N.A |

IfcMotorConnection

Governor

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcMotorConnection | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mechanical Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_GOVERNOR | | | |
| IFC4 UserDefined PropertySet | SGPset_MotorConnection | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GovernorType | Label | Over speed | |

Governor Rope

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcMotorConnection | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mechanical Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_GOVERNOR | | | |
| IFC4 UserDefined PropertySet | SGPset_MotorConnection | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Governor_RopeDiameter | Length | N.A | |

Motor

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcMotorConnection | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mechanical Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_MotorConnection | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | NoVoltRelease | Boolean | TRUE FALSE | |
| | OverloadRelay | Boolean | TRUE FALSE | |
| | MagneticTrip | Boolean | TRUE FALSE | |

Traction Machine

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcMotorConnection | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mechanical Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT_TRACTIONMACHINE | | | |
| IFC4 UserDefined PropertySet | SGPset_MotorConnection | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RopeDiameter (mm) | Length | N.A | |
| | RopeCount | Integer | N.A | |

IfcOpeningElement

Access Opening

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Void | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Air Intake Opening

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Void | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Entrance Opening

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Generic Models | N.A |
| PredefinedType | OPENING | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_OpeningElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | MainEntrance | Boolean | TRUE FALSE | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Exit Opening

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Void | N.A |

| | |
|----------------|------------------|
| PredefinedType | Need not specify |
| ObjectType | N.A |

Opening

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Shaft Openings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_OpeningElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EngineeredSmokeControlSystem | Boolean | TRUE FALSE | |
| | MainEntrance | Boolean | TRUE FALSE | |

Opening Element

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Generic Models | N.A |
| PredefinedType | OPENING | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_OpeningElementCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Existing | |

Opening Element

| | | | | |
|-----------------------------|-------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Recess

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Void | N.A |
| PredefinedType | RECESS | | | |
| ObjectType | N.A | | | |

Slab Opening

| | | | | |
|-----------------------------|-------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Shaft Openings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Unprotected Opening

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Void | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Ventilation Opening

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcOpeningElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Opening | Opening | Void | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcPile

Pile

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|-----------------|
| Ifc4 Entity | IfcPile | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Base Plate | Structural Foundations | Concrete Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Piling

| | | | | |
|-----------------------------|-----------------|----------------------|------------------------|-----------------|
| Ifc4 Entity | IfcPile | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Base Plate | Structural Foundations | Concrete Column |
| PredefinedType | SUPPORT | | | |
| ObjectType | N.A | | | |

IfcPlate

Curtain Panel

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcPlate | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Curtain Wall | Curtain Wall | Curtain Systems | N.A |
| PredefinedType | CURTAIN_PANEL | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Orifice Plate

| | | | | |
|-----------------------------|-----------------|----------------------|-----------------|--------------|
| Ifc4 Entity | IfcPlate | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Curtain Wall | Curtain Wall | Curtain Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ORIFICE | | | |

Solar Panel

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPlate | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Curtain Wall | Curtain Wall | Curtain Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SOLARPANEL | | | |
| IFC4 Predefined PropertySet | Pset_PlateCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Steel Plate

| | | | | |
|-----------------------------|-------------------|--|----------------|--------------|
| Ifc4 Entity | IfcPlate | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | SHEET | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Stainless Steel Sample Value(s): Mild Steel | | |

IfcProject

GIS Coordinates

| | | | | |
|-----------------------------|--------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcProject | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ifc Project Manager | Floor Manager | Project Information | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | Sample Attribute Values | | |
| | Eastings | N.A | | |
| | Northings | N.A | | |
| IFC4 Predefined PropertySet | IfcMapConversion | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | N.A | N.A | N.A | |

Project Global Positioning

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcProject | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Project Manager | Floor Manager | Project Information | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | Eastings | | N.A | |
| | Northings | | N.A | |
| IFC4 Predefined PropertySet | IfcMapConversion | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | N.A | N.A | N.A | |

IfcRailing

Baluster

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | GUARDRAIL | | | |
| ObjectType | N.A | | | |

Balustrade

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | BALUSTRADE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_RailingCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Height (m) | Length | N.A | |
| | Status | Label | Existing | |

Bollard

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BOLLARD | | | |

Escalator Handrail

| | | | | |
|-------------|------------|--|--|--|
| Ifc4 Entity | IfcRailing | | | |
|-------------|------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ESCALATORHANDRAIL | | | |
| IFC4 UserDefined PropertySet | SGPset_Railing | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Balustrade_Material | Label | N.A | |

External Railing

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_RailingCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE | |

Grab Bar

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | HANDRAIL | | | |
| ObjectType | N.A | | | |

Guardrail

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | GUARDRAIL | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Glass | | |
| IFC4 UserDefined PropertySet | SGPset_RailingDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Height (mm) | Length | N.A | |
| | LateralLoad (kN/m) | Label | N.A | |
| | SGPset_Railing | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TypeOfGlass | Label | Toughened Glass | |
| SafetyBarrier | Boolean | TRUE FALSE | | |
| TypeOfBarrier | Label | Full Height Barrier | | |
| ExternalReference | Label | Drawing No. 4 | | |

Handrail

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | Railing |
| PredefinedType | HANDRAIL | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Metal | |
| IFC4 UserDefined PropertySet | SGPset_Railing | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | KerbWidth (mm) | Length | N.A | |
| | KerbHeight (mm) | Length | N.A | |
| | SGPset_RailingDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| Height | Length | N.A | | |

Outrigger

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Platform Lift Partition

| | | | | |
|-----------------------------|-----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PLATFORMLIFTPARTITION | | | |

Prefabricated Railing

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Railing | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |

Rail

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|----------------|-----------|---------|----------|-----|
| | Railing | Railing | Railings | N.A |
| PredefinedType | GUARDRAIL | | | |
| ObjectType | N.A | | | |

Railing

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | Component |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Metal | |
| IFC4 UserDefined PropertySet | SGPset_Railing | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | N.A | |
| | ExternalReference | Label | Drawing 06 LTA/SDRE14/5/RAL1 STANDARD DETAILS OF ROAD ELEMENTS | |

Raised Barrier

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | GUARDRAIL | | | |
| ObjectType | N.A | | | |

Safety Railing

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Security Fence

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Staircase Handrail

| | | | | |
|-------------|------------|--|--|--|
| Ifc4 Entity | IfcRailing | | | |
|-------------|------------|--|--|--|

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | HANDRAIL | | | |
| ObjectType | N.A | | | |

Vehicle Impact Guard

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PIER | | | |

IfcRamp

Curved Ramp

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CURVEDRAMP | | | |
| IFC4 UserDefined PropertySet | SGPset_Ramp | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TransitionRamp | Boolean | TRUE FALSE | |
| | Vehicular | Boolean | TRUE FALSE | |
| | SGPset_RampDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| Gradient | Label | N.A | | |

Exit Ramp

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_RampCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireExit | Boolean | TRUE FALSE | |

External Exit Ramp

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

| | | | |
|-----------------------------|--------------------------------------|------------------|-------------------------------|
| IFC4 Predefined PropertySet | Pset_RampCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | FireExit | Boolean | TRUE FALSE |
| | IsExternal | Boolean | TRUE FALSE |

Flared Kerb Ramp

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLAREDKERBRAMP | | | |
| IFC4 UserDefined PropertySet | SGPset_Ramp | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Internal Exit Ramp

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_RampCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE FALSE | |
| | FireExit | Boolean | TRUE FALSE | |

Kerb Ramp

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |
| PredefinedType | STRAIGHT_RUN_RAMP | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Ramp | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |
| | SGPset_RampDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Gradient | Label | N.A | |
| Width (mm) | Length | N.A | | |

Ramp

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| IFC4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |

| | | | |
|---------------------------------------|---------------------------------------|-------------------------------|-------------------------------|
| PredefinedType | Need not specify | | |
| ObjectType | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_Ramp | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE |
| | Vehicular | Boolean | TRUE FALSE |
| | SGPset_RampDimension | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| Width (mm) | Length | N.A | |

Ramp Kerb

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Ramp | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | KerbHeight (mm) | Length | N.A | |

Straight Ramp

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |
| PredefinedType | STRAIGHT_RUN_RAMP | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Ramp | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Ingress | Boolean | TRUE FALSE | |
| | Accessway | Boolean | TRUE FALSE | |
| | Egress | Boolean | TRUE FALSE | |
| Vehicular | Boolean | TRUE FALSE | | |

Transition

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRamp | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Ramp | Object | Ramps | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcRampFlight

Rampflight

| | |
|-----------------------------|---------------|
| Ifc4 Entity | IfcRampFlight |
| Proposed BIM Representation | |

| | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Ramp</td> <td>Object</td> <td>Ramps</td> <td>Item</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Ramp | Object | Ramps | Item |
|--------------------------------|--|--------------------------------|---------------|------------------------|--------------------------|---------|--------------|-------|------|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Ramp | Object | Ramps | Item | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_RampFlight <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>BarrierFreeAccessibility</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | BarrierFreeAccessibility | Boolean | TRUE FALSE | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| BarrierFreeAccessibility | Boolean | TRUE FALSE | | | | | | | |

IfcRoof

Covering

| Ifc4 Entity | IfcRoof | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|------|------|-------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Roof</td> <td>Roofs</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Roof | Roof | Roofs | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Roof | Roof | Roofs | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Flat Roof

| Ifc4 Entity | IfcRoof | | | | | | | | |
|-------------------------------|---|-------------------------------|-------------------------|------------------------|---------------------|-------|----------|-------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Roof</td> <td>Roofs</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Roof | Roof | Roofs | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Roof | Roof | Roofs | N.A | | | | | | |
| PredefinedType | FLAT_ROOF | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Reinforced Concrete</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Reinforced Concrete | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | Reinforced Concrete | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_RoofCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Status</td> <td>Label</td> <td>Existing</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | Status | Label | Existing | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | |
| Status | Label | Existing | | | | | | | |

Green Roof

| Ifc4 Entity | IfcRoof | | | | | | | | |
|-----------------------------|--|------------|-------------------------|-------|-------|------|------|-------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Roof</td> <td>Roofs</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Roof | Roof | Roofs | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Roof | Roof | Roofs | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Plant</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Plant | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | Plant | | | | | | | | |

Jack Roof

| Ifc4 Entity | IfcRoof | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|------|------|-------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Roof</td> <td>Roofs</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Roof | Roof | Roofs | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Roof | Roof | Roofs | N.A | | | | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|--------------------------------|
| PredefinedType | USERDEFINED | | |
| ObjectType | JACK_ROOF | | |
| Material | Attributes | | Sample Attribute Values |
| | Name | N.A | |
| IFC4 Predefined PropertySet | Pset_RoofCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | Status | Label | New Existing |
| IFC4 UserDefined PropertySet | SGPset_Roof | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | RoofFinish_Type | Label | Jack Roof |

Mono-pitch Roof

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcRoof | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Roofs | N.A |
| PredefinedType | SHED_ROOF | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_RoofCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | N.A | |

Pitch Roof

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcRoof | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Roofs | N.A |
| PredefinedType | GABLE_ROOF | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_RoofCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Existing | |

Roof

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRoof | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Roofs | N.A |
| PredefinedType | Need not specify | | | |

| | | | |
|------------------------------|---------------------------------------|----------------------------|--|
| ObjectType | N.A | | |
| Material | Attributes | | Sample Attribute Values |
| | Name | MET Plastic Metal | |
| IFC4 Predefined PropertySet | Pset_RoofCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | ThermalTransmittance | Thermal Transmittance | N.A |
| | AcousticRating | Label | N.A |
| | FireRating (hr) | Label | N.A |
| Status | Label | Temporary Existing New | |
| IFC4 UserDefined PropertySet | SGPset_Roof | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | RTTV (W/m2) | Label | N.A |
| | WeightGroup | Label | N.A |
| | Weight (kg) | Real | N.A |
| | Material_DaylightReflectance | Label | N.A |
| | Material_SpecularReflectance | Label | N.A |
| | Material_DiffuseReflectance | Label | N.A |
| | ConstructionMethod | Label | N.A |
| | ExternalReference | Label | ASTM E108 Standard Test Methods for Fire Tests |
| | FlameSpreadClass | Label | N.A |
| | Combustible | Boolean | TRUE FALSE |
| | Perforated | Boolean | TRUE FALSE |

Shelter

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRoof | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Roofs | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcShadingDevice

Awning

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Generic Models | N.A |
| PredefinedType | AWNING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | Non-drip acrylic | | |
| IFC4 UserDefined PropertySet | SGPset_ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| | Combustible | Boolean | FALSE | |
| | Retractable | Boolean | TRUE FALSE | |
| FlameSpreadClass | Label | N.A | | |

Balcony Screen

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BALCONYSCREEN | | | |
| IFC4 UserDefined PropertySet | SGPset_ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Retractable | Boolean | TRUE FALSE | |

Canopy

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CANOPY | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Non-drip acrylic | |
| IFC4 Predefined PropertySet | Pset_ShadingDeviceCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New Existing | |
| IFC4 UserDefined PropertySet | SGPset_ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Retractable | Boolean | TRUE FALSE | |

Covering

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Non-drip acrylic | |
| IFC4 UserDefined PropertySet | SGPset_ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Retractable | Boolean | TRUE FALSE | |
| | SpringOpenType | Boolean | TRUE FALSE | |

Drop Down Panel

| | | | | |
|-----------------------------|------------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Curtain Panel | N.A |

| | |
|----------------|---------------|
| PredefinedType | USERDEFINED |
| ObjectType | DROPDOWNPANEL |

External Fins

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EXTERNALFINS | | | |
| IFC4 UserDefined PropertySet | SGPset_ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Spacing (mm) | Length | 0 | |

Louvred Panel

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LOUVREDPANEL | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_ShadingDeviceCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ShadingDeviceType | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Porosity | Label | Sample Value(s): 50 | |
| | PanelDepth (mm) | Length | N.A | |
| | PanelSpacing (mm) | Length | N.A | |
| Inclination | Integer | N.A | | |

Outer Shell Faade

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OUTERSHELL | | | |

Parasol

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |

| | |
|------------|---------|
| ObjectType | PARASOL |
|------------|---------|

Perforated Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PERFORATEDPANEL | | | |
| IFC4 UserDefined PropertySet | SGPset ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Porosity | Label | Sample Value(s): 50 | |
| | PerforationDiameter (mm) | Length | N.A | |

Retractable Screen

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | SHUTTER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Retractable | Boolean | TRUE FALSE | |

Roll-down Curtain

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ROLLDOWNCURTAIN | | | |

Roof Screen

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SCREEN | | | |

Screen

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SCREEN | | | |
| Material | | | | |

| | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | |
|--------------------------------|---|--------------------------------|-------------------------|------------------------|----------|-------|---------------------|
| Attributes | Sample Attribute Values | | | | | | |
| Name | N.A | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_ShadingDevice</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Porosity</td> <td>Label</td> <td>Sample Value(s): 50</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Porosity | Label | Sample Value(s): 50 |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | |
| Porosity | Label | Sample Value(s): 50 | | | | | |

Screen

| Ifc4 Entity | IfcShadingDevice | | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|-----------------|---------------|--------|-------------------|--------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | |
| ObjectType | LOUVREDPANEL | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_ShadingDevice</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>PanelDepth (mm)</td> <td>Length</td> <td>N.A</td> </tr> <tr> <td>PanelSpacing (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | PanelDepth (mm) | Length | N.A | PanelSpacing (mm) | Length | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| PanelDepth (mm) | Length | N.A | | | | | | | | |
| PanelSpacing (mm) | Length | N.A | | | | | | | | |

Screen

| Ifc4 Entity | IfcShadingDevice | | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|----------|---------------|---------------------|--------------------------|--------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | |
| ObjectType | PERFORATEDPANEL | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_ShadingDevice</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Porosity</td> <td>Label</td> <td>Sample Value(s): 50</td> </tr> <tr> <td>PerforationDiameter (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Porosity | Label | Sample Value(s): 50 | PerforationDiameter (mm) | Length | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| Porosity | Label | Sample Value(s): 50 | | | | | | | | |
| PerforationDiameter (mm) | Length | N.A | | | | | | | | |

Shading Device

| Ifc4 Entity | IfcShadingDevice | | | | | | | | | |
|--------------------------------|--|--------------------------------|-------------------------|------------------------|--------|---------------|--------------|----------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | |
| Name | N.A | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_ShadingDeviceCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Status</td> <td>Label</td> <td>Temporary</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | Status | Label | Temporary | | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| Status | Label | Temporary | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_ShadingDevice</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Fixed</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>Retractable</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Fixed | Boolean | TRUE FALSE | Retractable | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| Fixed | Boolean | TRUE FALSE | | | | | | | | |
| Retractable | Boolean | TRUE FALSE | | | | | | | | |

Shelter

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Shutter Board

| | | | | |
|-----------------------------|-------------------|--------------------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SHUTTERBOARD | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Sun-breaker

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OUTERSHELL | | | |

Sun-shading Device

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Trellis

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TRELLIS | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Metal | | |
| IFC4 UserDefined PropertySet | SGPset_ShadingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Porosity | Label | Sample Value(s): 50 | |

Weather Feature

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OUTERSHELL | | | |

Window Screen

| | | | | |
|-----------------------------|--------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcShadingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Roof | Roof | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SCREEN | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_ShadingDeviceCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New | |

IfcSlab

Access Platform

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_SlabCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Cast-in-situ Slab

| | | | | |
|------------------------------|--------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Concrete | | |
| IFC4 UserDefined PropertySet | SGPset_Slab | | | |

| | | | |
|---------------------------------|---------------------------------------|------------------|-------------------------------|
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | ConstructionMethod | Label | Cast-in-situ |
| SGPset_SlabReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | WeldedMesh | Boolean | TRUE FALSE |

Catwalk

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CATWALK | | | |
| IFC4 UserDefined PropertySet | SGPset_Slab | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Perforated | Boolean | TRUE FALSE | |

Ceiling Slab

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Reinforced Concrete | |

Double T Slab

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_PrecastSlab | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | TypeDesignator | Label | Double T Slab | |

Engineered Stone Flooring Finish

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOOR | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | | | | |

| | | |
|--|------|------------------|
| | Name | Engineered Stone |
|--|------|------------------|

Engineered Timber Flooring

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOOR | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Engineered Timber | | |

Equipment Platform

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Flared Side Ramp

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Floor

| | | | | |
|------------------------------|--------------------------------------|--|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOOR | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | MET Concrete Plastic Timber Nylon Brick Wood Engineered Timber Natural Stone Reinforced Concrete | | |
| IFC4 Predefined PropertySet | Pset_SlabCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | Timber | |
| | Combustible | Boolean | TRUE FALSE | |
| | FireRating | Label | N.A | |
| | Status | Label | Existing New | |
| IsExternal | Boolean | TRUE FALSE | | |
| IFC4 UserDefined PropertySet | SGPset_SlabDimension | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| Width (mm) | Length | N.A |

SGPset_Slab

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| Watertight | Boolean | TRUE FALSE |
| FlameSpreadClass | Label | N.A |
| FireStop | Boolean | TRUE FALSE |
| ConstructionMethod | Label | N.A |
| PressureImpregnated | Boolean | TRUE FALSE |
| AntiSlipSurface | Boolean | TRUE FALSE |
| FinishType | Label | N.A |

Glass Floor

| Ifc4 Entity | IfcSlab | | | | | | | | |
|--------------------------------|--|--------------------------------|-------------------------|------------------------|------------------|-------|------|--------|------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Slab | Slab | Floors | Slab |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Slab | Slab | Floors | Slab | | | | | | |
| PredefinedType | FLOOR | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Glass</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Glass | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | Glass | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_SlabCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | FireRating (hr) | Label | N.A | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | |
| FireRating (hr) | Label | N.A | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_Slab</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FlameSpreadClass</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | FlameSpreadClass | Label | N.A | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| FlameSpreadClass | Label | N.A | | | | | | | |

Green Roof

| Ifc4 Entity | IfcSlab | | | | | | | | |
|-----------------------------|--|------------|-------------------------|-------|-------|------|------|--------|------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Slab | Slab | Floors | Slab |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Slab | Slab | Floors | Slab | | | | | | |
| PredefinedType | ROOF | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Plant</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Plant | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | Plant | | | | | | | | |

Ground

| Ifc4 Entity | IfcSlab | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|------|------|--------|------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Slab | Slab | Floors | Slab |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Slab | Slab | Floors | Slab | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Hollow Core Slab

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_PrecastSlab | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | TypeDesignator | Label | Hollow core | |

Intermediate Platform

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | INTERMEDIATEPLATFORM | | | |

Intermediate Slab

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Landing

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | LANDING | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_SlabCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE TRUE FALSE | |
| Status | Label | New | | |

Ledge

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Non-combustible Floor

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOOR | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_SlabCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | TRUE FALSE | |

Power Float Concrete Floor

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Slab | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FinishType | Label | Power Float Concrete | |

Precast Landing

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | LANDING | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Slab | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Precast | |
| | MechanicalConnectionType | Label | Flexible loops | |

Precast Slab

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Slab | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Precast | |
| | MechanicalConnectionType | Label | Column shoes Flexible loops Sample Value(s): Spiral Connector Grouted Sleeves | |
| | SGPset_SlabReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| LatticeGirderReinforcement | Boolean | TRUE FALSE | | |

Prefabricated And Prefinished Floor

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | FLOOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Slab | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated and Prefinished | |

Prefabricated Slab

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Slab | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |
| | Accreditation_PAS | Boolean | TRUE FALSE | |

RC ledges (cantilevered)

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Reinforced Concrete | | |

Ramp Landing

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | LANDING | | | |
| ObjectType | N.A | | | |

Roof

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |

| | |
|----------------|------|
| PredefinedType | ROOF |
| ObjectType | N.A |

Roof Slab

| Ifc4 Entity | IfcSlab | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|------------------------|----------------------|--------------------------------|-----------|------------------------|----------------------|-----------------------|-----|-----------------|-------|-----|------------------|---------|--------------|------------|---------|--------------|--------------------------------|-----------|------------------------|------------|--------|-----|
| Proposed BIM Representation | ArchiCad Slab | OpenBuildings Slab | Revit Floors | Tekla Slab | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | ROOF | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | | | | | | | |
| Material | Attributes Name | Sample Attribute Values Reinforced Concrete | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_SlabCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ThermalTransmittance</td> <td>Thermal Transmittance</td> <td>N.A</td> </tr> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>Status</td> <td>Label</td> <td>Existing</td> </tr> </tbody> </table> | | | | IFC4 Predefined Property Name | Data Type | Sample Property Values | ThermalTransmittance | Thermal Transmittance | N.A | FireRating (hr) | Label | N.A | Combustible | Boolean | TRUE FALSE | Status | Label | Existing | | | | | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| ThermalTransmittance | Thermal Transmittance | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| FireRating (hr) | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| Combustible | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| Status | Label | Existing | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Slab <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>WeightGroup</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Weight (kg)</td> <td>Real</td> <td>N.A</td> </tr> <tr> <td>FlameSpreadClass</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Perforated</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> SGPset_SlabDimension <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Width (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | WeightGroup | Label | N.A | Weight (kg) | Real | N.A | FlameSpreadClass | Label | N.A | Perforated | Boolean | TRUE FALSE | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Width (mm) | Length | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| WeightGroup | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| Weight (kg) | Real | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| FlameSpreadClass | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| Perforated | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| Width (mm) | Length | N.A | | | | | | | | | | | | | | | | | | | | | | | |

Service Road

| | | | | |
|-----------------------------|-------------------------|------------------------------|------------------------|----------------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad Slab | OpenBuildings Slab | Revit Floors | Tekla Slab |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Shelter

| | | | | |
|-----------------------------|-------------------------|------------------------------|------------------------|---------------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad Slab | OpenBuildings Slab | Revit Floors | Tekla N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Slab

| | | | |
|-----------------------------|---------|--|--|
| Ifc4 Entity | IfcSlab | | |
| Proposed BIM Representation | | | |

| | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Slab | Slab | Floors | Slab | | | | | | | | | | | | | | | | |
|--------------------------------|--|--------------------------------|-------------------------|------------------------|---------------------|--------|------|--------------------------------|-----------|------------------------|---------------------------|---------|----------------------|--------------------|-------|----------------------------|----------|---------|--------------|------------|---------|--------------|------------|-------|-----|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | | | | | | | |
| Slab | Slab | Floors | Slab | | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | | | | | | | |
| Material | <table border="1"> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> <tr> <td>Name</td> <td>Reinforced Concrete</td> </tr> </table> | Attributes | Sample Attribute Values | Name | Reinforced Concrete | | | | | | | | | | | | | | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | | | | | | | | | | | | | | | |
| Name | Reinforced Concrete | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_SlabCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AcousticRating</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE TRUE FALSE</td> </tr> <tr> <td>Status</td> <td>Label</td> <td>Temporary New Existing</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | AcousticRating | Label | N.A | FireRating (hr) | Label | N.A | Combustible | Boolean | FALSE TRUE FALSE | Status | Label | Temporary New Existing | | | | | | | | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| AcousticRating | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| FireRating (hr) | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| Combustible | Boolean | FALSE TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| Status | Label | Temporary New Existing | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_SlabDimension</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Length (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> <p>SGPset_Slab</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ChemicalResistantMaterial</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>FireStop</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>Perforated</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>FinishType</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Length (mm) | Length | N.A | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ChemicalResistantMaterial | Boolean | TRUE FALSE | ConstructionMethod | Label | N.A | FireStop | Boolean | TRUE FALSE | Perforated | Boolean | TRUE FALSE | FinishType | Label | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| Length (mm) | Length | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| ChemicalResistantMaterial | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| ConstructionMethod | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | |
| FireStop | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| Perforated | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | |
| FinishType | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | |

Slab Cover

| Ifc4 Entity | IfcSlab | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|------|------|--------|------|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Slab | Slab | Floors | Slab |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Slab | Slab | Floors | Slab | | | | | | |
| PredefinedType | FLOOR | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Steel Deck

| Ifc4 Entity | IfcSlab | | | | | | | | |
|-----------------------------|--|------------|-------------------------|-------|-------|------|------|--------|------|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Slab</td> <td>Slab</td> <td>Floors</td> <td>Slab</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Slab | Slab | Floors | Slab |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Slab | Slab | Floors | Slab | | | | | | |
| PredefinedType | FLOOR | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| Material | <table border="1"> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> <tr> <td>Name</td> <td>Steel</td> </tr> </table> | Attributes | Sample Attribute Values | Name | Steel | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | Steel | | | | | | | | |

IfcStair

Access Ladder

| Ifc4 Entity | IfcStair | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|-------|-------|--------|------|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Stair | Stair | Stairs | Item |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Stair | Stair | Stairs | Item | | | | | | |

| | | |
|----------------|-------------------|--------------------------------|
| PredefinedType | USERDEFINED | |
| ObjectType | LADDER | |
| Material | Attributes | Sample Attribute Values |
| | Name | N.A |

Access Staircase

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Cat Ladder

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LADDER | | | |
| IFC4 Predefined PropertySet | Pset_ StairCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Reference | Label | CATLADDER | |

Circular Staircase

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | SPIRAL_STAIR | | | |
| ObjectType | N.A | | | |

Curved Staircase

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | CURVED_RUN_STAIR | | | |
| ObjectType | N.A | | | |

Exit Staircase

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |

| PredefinedType | Need not specify | | | | | | | | | | | | | | | | | |
|--------------------------------|--|------------------------|--|--------------------------------|-------------------------|------------------------|------------|---------|--------------|--------------------------------|-----------|------------------------|---------------------|---------|--------------|-------------|---------|----------------------|
| ObjectType | N.A | | | | | | | | | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th colspan="2">Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td colspan="2">Timber</td> </tr> </tbody> </table> | | | Attributes | Sample Attribute Values | | Name | Timber | | | | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | | | | | | | | |
| Name | Timber | | | | | | | | | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_StairCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireExit</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | | | IFC4 Predefined Property Name | Data Type | Sample Property Values | FireExit | Boolean | TRUE FALSE | IsExternal | Boolean | TRUE FALSE | FireRating (hr) | Label | N.A | | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | |
| FireExit | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | |
| IsExternal | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | |
| FireRating (hr) | Label | N.A | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_StairDimension</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Width (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> <p>SGPset_Stair</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>PressureImpregnated</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE TRUE FALSE</td> </tr> </tbody> </table> | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Width (mm) | Length | N.A | IFC4 UserDefined Property Name | Data Type | Sample Property Values | PressureImpregnated | Boolean | TRUE FALSE | Combustible | Boolean | FALSE TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | |
| Width (mm) | Length | N.A | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | |
| PressureImpregnated | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | |
| Combustible | Boolean | FALSE TRUE FALSE | | | | | | | | | | | | | | | | |

External Exit Staircase

| Ifc4 Entity | IfcStair | | | | | | | | | | | |
|-----------------------------|--|--------|-------|--|----------|---------------|-------|-------|-------|-------|--------|------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table> | | | | ArchiCad | OpenBuildings | Revit | Tekla | Stair | Stair | Stairs | Item |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | |
| Stair | Stair | Stairs | Item | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | |

Ladder

| Ifc4 Entity | IfcStair | | | | | | | | | | | | | | | | | |
|--------------------------------|--|-------------------------|-------|--------------------------------|-----------|------------------------|-------------------|---------|-------------------------|-----------------------|--------|------|---------------------|--------|-----|--------------------|--------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table> | | | | ArchiCad | OpenBuildings | Revit | Tekla | Stair | Stair | Stairs | Item | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | |
| Stair | Stair | Stairs | Item | | | | | | | | | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | | | | | | | | | |
| ObjectType | LADDER | | | | | | | | | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_StairCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>HasNonSkidSurface</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | | | IFC4 Predefined Property Name | Data Type | Sample Property Values | HasNonSkidSurface | Boolean | TRUE FALSE | | | | | | | | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | |
| HasNonSkidSurface | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_Stair</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ExternalReference</td> <td>Label</td> <td>EN 131 Ladder Standards</td> </tr> <tr> <td>Ladder_RungClearWidth</td> <td>Length</td> <td>N.A</td> </tr> <tr> <td>Ladder_RungDiameter</td> <td>Length</td> <td>N.A</td> </tr> <tr> <td>Ladder_RungSpacing</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ExternalReference | Label | EN 131 Ladder Standards | Ladder_RungClearWidth | Length | N.A | Ladder_RungDiameter | Length | N.A | Ladder_RungSpacing | Length | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | |
| ExternalReference | Label | EN 131 Ladder Standards | | | | | | | | | | | | | | | | |
| Ladder_RungClearWidth | Length | N.A | | | | | | | | | | | | | | | | |
| Ladder_RungDiameter | Length | N.A | | | | | | | | | | | | | | | | |
| Ladder_RungSpacing | Length | N.A | | | | | | | | | | | | | | | | |

Precast Staircase

| Ifc4 Entity | IfcStair | | | | | | | | | | | |
|-----------------------------|--|--------|-------|--|----------|---------------|-------|-------|-------|-------|--------|------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table> | | | | ArchiCad | OpenBuildings | Revit | Tekla | Stair | Stair | Stairs | Item |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | |
| Stair | Stair | Stairs | Item | | | | | | | | | |

| PredefinedType | Need not specify | | | | | | | | | |
|------------------------------|---|--------------------------------|------------------------|------------------------|--------------------|-------|---------|-------------------|---------|--------------|
| ObjectType | N.A | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Stair | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Precast</td> </tr> <tr> <td>Accreditation_PAS</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Precast | Accreditation_PAS | Boolean | TRUE FALSE |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| | ConstructionMethod | Label | Precast | | | | | | | |
| Accreditation_PAS | Boolean | TRUE FALSE | | | | | | | | |
| | | | | | | | | | | |

Ship Ladder

| Ifc4 Entity | IfcStair | | | | | | | | |
|------------------------------|---|--------------------------------|------------------------|------------------------|--------------------------|-------|------------|--------|------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Stair | Stair | Stairs | Item |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Stair | Stair | Stairs | Item | | | | | | |
| | | | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | LADDER | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_StairCommon | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Reference</td> <td>Label</td> <td>SHIPLADDER</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | Reference | Label | SHIPLADDER | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | |
| | Reference | Label | SHIPLADDER | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Stair | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ShipLadder_WorkLoad (kN)</td> <td>Real</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ShipLadder_WorkLoad (kN) | Real | N.A | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | |
| | ShipLadder_WorkLoad (kN) | Real | N.A | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Spiral Staircase

| Ifc4 Entity | IfcStair | | | | | | | | | |
|-----------------------------|--|-------------------------------|-------------------------|------------------------|----------|---------|--------------|------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Stair | Stair | Stairs | Item | |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Stair | Stair | Stairs | Item | | | | | | | |
| | | | | | | | | | | |
| PredefinedType | SPIRAL_STAIR | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | | |
| | Attributes | Sample Attribute Values | | | | | | | | |
| Name | N.A | | | | | | | | | |
| | | | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_StairCommon | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireExit</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | FireExit | Boolean | TRUE FALSE | IsExternal | Boolean | TRUE FALSE |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | |
| | FireExit | Boolean | TRUE FALSE | | | | | | | |
| IsExternal | Boolean | TRUE FALSE | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Stair

| Ifc4 Entity | IfcStair | | | | | | | | |
|------------------------------|--|-------------------------------|------------------------|------------------------|------------|---------|--------------|--------|------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Stair</td> <td>Stair</td> <td>Stairs</td> <td>Item</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Stair | Stair | Stairs | Item |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Stair | Stair | Stairs | Item | | | | | | |
| | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_StairCommon | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | IsExternal | Boolean | TRUE FALSE | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | |
| IsExternal | Boolean | TRUE FALSE | | | | | | | |
| | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Stair | | | | | | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| Perforated | Boolean | TRUE FALSE |

Staircase

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Timber Metal | | |
| IFC4 Predefined PropertySet | Pset_StairCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New Existing | |
| | IsExternal | Boolean | TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_StairDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Width (mm) | Length | N.A | |
| | SGPset_Stair | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PressureImpregnated | Boolean | TRUE FALSE | |

Staircore

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_StairCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New | |

IfcStairFlight

Curved Stair Flight

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcStairFlight | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | CURVED | | | |
| ObjectType | N.A | | | |

Precast Stair Flight

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcStairFlight | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_StairFlight | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Precast | |
| | MechanicalConnectionType | Label | Flexible loops | |

Spiral Stair Flight

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcStairFlight | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | SPIRAL | | | |
| ObjectType | N.A | | | |

Stair Flight

| | | | | |
|-----------------------------|--------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcStairFlight | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_StairFlightCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | RiserHeight (mm) | Length | N.A | |
| | TreadLength (mm) | Length | N.A | |
| | NumberOfRiser | Integer | N.A | |
| | NumberOfTreads | Integer | N.A | |

Stair Winder

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcStairFlight | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WINDER | | | |

Staircase

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcStairFlight | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | Stair | Stairs | Item |
| PredefinedType | Need not specify | | | |

| | |
|------------|-----|
| ObjectType | N.A |
|------------|-----|

IfcSystemFurnitureElement

Prefabricated Kitchen Unit

| | | | | |
|-----------------------------|---------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcSystemFurnitureElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PREFABRICATEDKITCHENUNIT | | | |

IfcTransportElement

Bed Lift

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeLift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BedLift | Boolean | TRUE FALSE | |

Car Parking Lift

| | | | | |
|---------------------------------|--|-----------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CARLIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeLift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RatedSpeed | Label | Sample Value(s): 30 m/min | |
| | SGPset_TransportElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| DischargeCapacityRate (cars/hr) | Label | Sample Value(s): 30 cars/hr | | |

Compensating Rope

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |

| | | | |
|------------------------------|--|------------------|------------------------------------|
| Ifc4 UserDefined PropertySet | SGPset_TransportElement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | ExternalReference | Label | EN 12385-5 Steel Wire Ropes Safety |
| | SGPset_TransportElementTypeLift | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | CompensatingRope_NominalDiameter | Length | N.A |

Escalator

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | ESCALATOR | | | |
| ObjectType | N.A | | | |
| Ifc4 UserDefined PropertySet | SGPset_TransportElementTypeEscalator | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AuxiliaryBrake | Boolean | TRUE FALSE | |
| | NonFrictionDrivingElement | Boolean | TRUE FALSE | |
| | DrivingElementSafetyFactor | Integer | 5 | |
| | TrapezoidalBeltSafetyFactor | Integer | 3 | |
| | ElectromechanicalBrakeType | Boolean | TRUE FALSE | |
| | AuxiliaryBrake_MechanicalType | Boolean | TRUE FALSE | |
| | ChainCount | Integer | 5 | |
| | InteriorPanelMaterial | Label | N.A | |
| | NominalSpeed (m/s) | Label | N.A | |
| | CombTeeth_Width (mm) | Length | N.A | |
| | CombTeeth_Radius (mm) | Length | N.A | |
| | CombTeeth_Angle | Label | N.A | |
| CombTeeth_MeshDepth (mm) | Length | N.A | | |
| CombTeeth_Clearance (mm) | Length | N.A | | |

Escalator Pallet

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | ESCALATOR | | | |
| ObjectType | N.A | | | |
| Ifc4 UserDefined PropertySet | SGPset_TransportElementTypeEscalator | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PalletWidth (mm) | Length | N.A | |
| | PalletStepHeight (mm) | Length | N.A | |
| | PalletStepWidth (mm) | Length | N.A | |

Escalator Steps

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | ESCALATOR | | | |
| ObjectType | N.A | | | |

Evacuation Lift

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypelift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EvacuationLift | Boolean | TRUE FALSE | |
| | SGPset_TransportElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |

Fire Escape Bed Lift

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypelift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireFightingLift | Boolean | TRUE FALSE | |
| | BedLift | Boolean | TRUE FALSE | |

Fire Lift

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypelift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireFightingLift | Boolean | TRUE FALSE | |
| | MinimumLoad (kg) | Real | N.A | |
| | RatedSpeed | Label | N.A | |
| | ClearWidth (mm) | Length | N.A | |
| | ClearDepth (mm) | Length | N.A | |
| | EvacuationLift | Boolean | TRUE FALSE | |
| | SGPset_TransportElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| BarrierFreeAccessibility | Boolean | TRUE FALSE | | |

Fire Lift Car

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeLift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireFightingLift | Boolean | TRUE FALSE | |

Goods Lift

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GOODSLIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeLift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RatedLoad | Label | N.A | |

Lift

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 Predefined PropertySet | Pset_TransportElementCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireExit | Boolean | TRUE FALSE | |
| Status | Label | N.A | | |

Lift Car

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 Predefined PropertySet | Pset_TransportElementCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | CapacityWeight | Real | N.A | |
| CapacityPeople | Integer | N.A | | |

| | | | |
|---|--|-------------------------------|---|
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeLift | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | RatedSpeed | Label | Sample Value(s): 2m/s |
| | RatedLoad (kg/m2) | Label | N.A |
| | ClearWidth (mm) | Length | N.A |
| | ClearDepth (mm) | Length | N.A |
| | StaticLoad | Label | N.A |
| | PlatformSupportSystemType | Label | Screw Hydraulic Chain Sample Value(s): Nut |
| | SafetyGear | Boolean | TRUE FALSE |
| | DriveSystemType | Label | N.A |
| | TransmissionUnitCount | Integer | N.A |
| | ClearHeight | Length | N.A |
| | ClearWidth | Length | N.A |
| | ClearDepth | Length | N.A |
| | TravelHeight (m) | Length | Sample Value(s): 30m |
| | ControlDevice_OperableDistance | Length | N.A |
| | RopeCount | Integer | N.A |
| | SGPset_TransportElement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE |
| SGPset_TransportElementTypeLiftDimension | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| Length (mm) | Length | N.A | |
| Width (mm) | Length | N.A | |

Lift Car Glass Wall

| | | | | |
|--------------------------------|---------------------|--------------------------------|-------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Glass | | |

Lift Trap Door

| | | | | |
|---------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeLift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TrapDoor_OpenOutward | Boolean | TRUE FALSE | |

Moving Walk Belt

| | | | | |
|--------------------------------|---------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |

| | | | | |
|----------------|-------------------|-----------|----------------------|-----|
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | MOVINGWALKWAY | | | |
| ObjectType | N.A | | | |

Moving Walkway

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | MOVINGWALKWAY | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeMovingWalkway | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AuxiliaryBrake | Boolean | TRUE FALSE | |
| | ElectromechanicalBrakeType | Boolean | TRUE FALSE | |
| | AuxiliaryBrake_MechanicalType | Boolean | TRUE FALSE | |
| InteriorPanelMaterial | Label | N.A | | |

PWD Evacuation Lift

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeLift | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EvacuationLift | Boolean | TRUE FALSE | |
| | SGPset_TransportElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| BarrierFreeAccessibility | Boolean | TRUE FALSE | | |

Passenger Lift

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFT | | | |

Tensioning Pulley

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |

| | | | |
|------------------------------|--|------------------|-------------------------------|
| ObjectType | LIFT | | |
| IFC4 UserDefined PropertySet | SGPset_TransportElementTypeLift | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | TensioningPulley_PitchDiameter | Length | N.A |
| | TensioningPulley_NipGuard | Boolean | TRUE FALSE |

IfcUnitaryControlElement

Lift Car Control Button

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFTCARCONTROLBUTTON | | | |
| IFC4 UserDefined PropertySet | SGPset_UnitaryControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TelephoneButton | Boolean | TRUE FALSE | |

Lift Car Control Panel

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFTCARCONTROLPANEL | | | |

Lift Landing Call Button

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFTCALLBUTTON | | | |

IfcWall

Barrier

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BARRIER | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Watertight | Boolean | TRUE FALSE | |

Blockwall

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BLOCKWALL | | | |

Boundary Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BOUNDARYWALL | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PorousFence | Boolean | TRUE FALSE | |

Bund Wall

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BUND | | | |

Cast-in-situ Wall

| | | | | |
|--------------------------------|---------------------------------------|----------------------|-------------------------------|----------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Concrete Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Cast-in-situ | |
| | SGPset_WallReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| PrefabricatedReinforcementCage | Boolean | TRUE FALSE | | |

Cavity Barrier

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| | Combustible | Boolean | TRUE FALSE | |

Divider

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Double Bay Facade Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|----------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Concrete Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Precast | |

DryWall

| | | | | |
|------------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | ELEMENTEDWALL | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |
| | Combustible | Boolean | TRUE FALSE | |
| | LoadBearing | Boolean | TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| StrengthClass | Label | N.A |

SGPset_ConcreteElementGeneral

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| ReinforcementStrengthClass | Label | N.A |

External Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE FALSE | |
| | Combustible | Boolean | FALSE TRUE FALSE | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Material_DiffuseReflectance | Label | N.A | |

Fence

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BOUNDARYWALL | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Metal | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE FALSE | |
| | Status | Label | Demolished Sample Value(s): Existing/New | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PorousFence | Boolean | TRUE FALSE | |

Glass Wall

| | | | | |
|-----------------------------|---------|--|--|--|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | | | | |

| | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel | |
|--------------------------------|--|--------------------------------|-------------------------|------------------------|------------------|-------|------|-------------|---------|-------|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Glass</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Glass | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | |
| Name | Glass | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_WallCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | FireRating (hr) | Label | N.A | Combustible | Boolean | FALSE |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| FireRating (hr) | Label | N.A | | | | | | | | |
| Combustible | Boolean | FALSE | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_Wall</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FlameSpreadClass</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | FlameSpreadClass | Label | N.A | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| FlameSpreadClass | Label | N.A | | | | | | | | |

Internal Wall

| Ifc4 Entity | IfcWall | | | | | | | | | |
|-------------------------------|--|-------------------------------|-------------------------|------------------------|------------|---------|--------------|-------------|---------|-------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | |
| Name | N.A | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_WallCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | IsExternal | Boolean | TRUE FALSE | Combustible | Boolean | FALSE |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| IsExternal | Boolean | TRUE FALSE | | | | | | | | |
| Combustible | Boolean | FALSE | | | | | | | | |

Kerb

| Ifc4 Entity | IfcWall | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|------|------|-------|-------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | KERB | | | | | | | | |

Knock-out Panel

| Ifc4 Entity | IfcWall | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|------------|---------|------|-------|-------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | KNOCKOUTPANEL | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_Wall</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RightOfWay</td> <td>Boolean</td> <td>TRUE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | RightOfWay | Boolean | TRUE | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| RightOfWay | Boolean | TRUE | | | | | | | |

Lightweight Concrete Panel

| | | | | |
|-----------------------------|-------------------|----------------------|---------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Autoclaved Lightweight Concrete | |

Load-bearing Wall

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | LoadBearing | Boolean | TRUE FALSE | |
| | IsExternal | Boolean | TRUE FALSE | |
| | FireRating (hr) | Label | N.A | |

Masonry

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Brick | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | Brick | |

Multi-tier Wall

| | | | | |
|------------------------------|--------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset Wall | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| ConstructionMethod | Label | Precast |

Non-combustible Wall

| Ifc4 Entity | IfcWall | | | | | | | | | | |
|-------------------------------|--|------------------------|---------------|-------------------------------|-----------|------------------------|-------------|---------|--------------|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Combustible</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | | | IFC4 Predefined Property Name | Data Type | Sample Property Values | Combustible | Boolean | TRUE FALSE | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | |
| Combustible | Boolean | TRUE FALSE | | | | | | | | | |

Non-load-bearing External Wall

| Ifc4 Entity | IfcWall | | | | | | | | | | | |
|-------------------------------|--|------------------------|---------------|-------------------------------|-----------|------------------------|-------------|---------|--------------|------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>LoadBearing</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | | | IFC4 Predefined Property Name | Data Type | Sample Property Values | LoadBearing | Boolean | TRUE FALSE | IsExternal | Boolean | TRUE FALSE |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | |
| LoadBearing | Boolean | TRUE FALSE | | | | | | | | | | |
| IsExternal | Boolean | TRUE FALSE | | | | | | | | | | |

Non-load-bearing Internal Wall

| Ifc4 Entity | IfcWall | | | | | | | | | | | | | | |
|-------------------------------|--|------------------------|---------------|-------------------------------|-----------|------------------------|-------------|---------|--------------|------------|---------|--------------|-------------|---------|-------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>LoadBearing</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>IsExternal</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table> | | | IFC4 Predefined Property Name | Data Type | Sample Property Values | LoadBearing | Boolean | TRUE FALSE | IsExternal | Boolean | TRUE FALSE | Combustible | Boolean | FALSE |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | |
| LoadBearing | Boolean | TRUE FALSE | | | | | | | | | | | | | |
| IsExternal | Boolean | TRUE FALSE | | | | | | | | | | | | | |
| Combustible | Boolean | FALSE | | | | | | | | | | | | | |

Parapet Wall

| Ifc4 Entity | IfcWall | | | | | | | | | | |
|-----------------------------|--|------------|-------------------------|-------|-------|------|------|-------|-------|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | | | |
| PredefinedType | PARAPET | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | |
| | | | | | | | | | | | |

| | | |
|--|------|-----|
| | Name | N.A |
|--|------|-----|

Partition Wall

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | PARTITIONING | | | |
| ObjectType | N.A | | | |

Party Wall

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Brick | | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Existing | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | IsPartyWall | Boolean | TRUE FALSE | |

Perimeter Wall

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE FALSE | |

Phenolic Panel

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | PARTITIONING | | | |
| ObjectType | N.A | | | |
| Material | | | | |

| Attributes | Sample Attribute Values |
|------------|-------------------------|
| Name | Phenolic |

Precast Parapet Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | PARAPET | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Precast | |
| | MechanicalConnectionType | Label | Flexible loops | |

Precast Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Precast | |
| | MechanicalConnectionType | Label | Column shoes Flexible loops Sample Value(s): Spiral Connector Grouted Sleeves | |

Precast Wall Off-form

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Off-form Precast | |

Precision Blockwall

| | | | | |
|------------------------------|--------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BLOCKWALL | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| PrecisionBlockwall | Boolean | TRUE FALSE |

Prefabricated And Prefinished Wall

| Ifc4 Entity | IfcWall | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|--------------------|-------|-------------------------------|-------|-------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated and Prefinished</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Prefabricated and Prefinished | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ConstructionMethod | Label | Prefabricated and Prefinished | | | | | | | |

Prefabricated Wall

| Ifc4 Entity | IfcWall | | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|--------------------|-------|---------------|-------------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated</td> </tr> <tr> <td>Accreditation_PAS</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Prefabricated | Accreditation_PAS | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| ConstructionMethod | Label | Prefabricated | | | | | | | | |
| Accreditation_PAS | Boolean | TRUE FALSE | | | | | | | | |

Proscenium Wall

| Ifc4 Entity | IfcWall | | | | | | | | |
|-------------------------------|---|-------------------------------|---------------|------------------------|-----------------|-------|------|-------|-------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FireRating (hr)</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | FireRating (hr) | Label | N.A | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | |
| FireRating (hr) | Label | N.A | | | | | | | |

Recyclables Refuse Chute

| Ifc4 Entity | IfcWall | | | | | | | | |
|-----------------------------|--|------------|-------------------------|-------|-------|------|------|-------|-------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | RECYCLABLESCHUTE | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | N.A | | | | | | | | |

| | | | |
|-----------------------------|--------------------------------------|------------------|-------------------------------|
| IFC4 Predefined PropertySet | Pset_WallCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | LoadBearing | Boolean | TRUE FALSE |

Refuse Chute

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| IFC4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | REFUSECHUTE | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | LoadBearing | Boolean | TRUE FALSE | |

Retaining Wall

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RETAININGWALL | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE FALSE | |

Separating Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE TRUE FALSE | |
| | FireRating (hr) | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireStop | Boolean | TRUE FALSE | |

Shear Wall

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | SHEAR | | | |
| ObjectType | N.A | | | |

Skim Coat Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FinishType | Label | Skim coat | |

Vapour Barrier

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Vapour Barrier | |
| IFC4 Predefined PropertySet | Pset_WallCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Vertical Partition

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | PARTITIONING | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Glass | |

Wall

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |

| | | | |
|------------------------------|---------------------------------------|--|---|
| PredefinedType | Need not specify | | |
| ObjectType | N.A | | |
| Material | Attributes | | Sample Attribute Values |
| | Name | | Reinforced Concrete Plastic Nylon Brick Glass Glass Block Engineered Timber Tiles Ceramic Tiles |
| IFC4 Predefined PropertySet | Pset_WallCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | IsExternal | Boolean | TRUE FALSE |
| | LoadBearing | Boolean | TRUE FALSE |
| | ThermalTransmittance | Thermal Transmittance | Sample Value(s): 1 W/m2 K |
| | AcousticRating | Label | N.A |
| | FireRating (hr) | Label | N.A |
| | Combustible | Boolean | TRUE FALSE |
| | FireRating | Label | N.A |
| | ThermalTransmittance (W/m2 K) | Thermal Transmittance | Sample Value(s): 1 W/m2 K |
| Status | Label | New Existing | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Material_SpecularReflectance | Label | N.A |
| | CorrectionFactor | Real | Sample Value(s): 1.17 |
| | Watertight | Boolean | TRUE FALSE |
| | WaterSealant | Boolean | TRUE FALSE |
| | ConstructionMethod | Label | N.A |
| | FireStop | Boolean | TRUE FALSE |
| | FlameSpreadClass | Label | Sample Value(s): Class 0 Class 1 Class 2 Class 3 Class 4 |
| | ExternalReference | Label | BS 476 Part 7 British Standard 476 Fire Tests |
| FinishType | Label | Lime Plaster Timber Shanghai Plaster Fair-faced Brickwalls | |
| IFC4 UserDefined PropertySet | SGPset_WallDimension | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Length (mm) | Length | N.A |

Wall Paper

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FinishType | Label | Wall Paper | |

Wall Vinyl Tile

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Panel |
| PredefinedType | Need not specify | | | |

| ObjectType | N.A | | | | |
|------------|---|------------|-------------------------|------|-------|
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Vinyl</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Vinyl |
| Attributes | Sample Attribute Values | | | | |
| Name | Vinyl | | | | |

Wire-mesh Screen

| Ifc4 Entity | IfcWall | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|------|------|-------|-------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>Wall</td> <td>Walls</td> <td>Panel</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Wall | Wall | Walls | Panel |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Wall | Wall | Walls | Panel | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | WIREMESHSCREEN | | | | | | | | |

IfcWasteTerminal

Chute Interface

| Ifc4 Entity | IfcWasteTerminal | | | | | | | | |
|-----------------------------|--|----------------|---------------|-------|-------|---------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | CHUTEINTERFACE | | | | | | | | |

Recyclables Outdoor Throw Point

| Ifc4 Entity | IfcWasteTerminal | | | | | | | | |
|-----------------------------|--|----------------|---------------|-------|-------|---------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | RECYCLABLESTHROWPOINT | | | | | | | | |

Refuse Outdoor Throw Point

| Ifc4 Entity | IfcWasteTerminal | | | | | | | | |
|-----------------------------|--|----------------|---------------|-------|-------|---------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Object</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | REFUSETHROWPOINT | | | | | | | | |

IfcWindow

Bay Window

| Ifc4 Entity | IfcWindow | | | | | | | | |
|------------------------------|--|----------|---------------|-------|-------|--------|--------|---------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Window</td> <td>Window</td> <td>Windows</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Window | Window | Windows | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Window | Window | Windows | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | BAYWINDOW | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Window | | | | | | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| OperationType | Label | N.A |

Dormer Window

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DORMER | | | |
| IFC4 Predefined PropertySet | Pset_WindowCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New | |

Fragmentation Plate

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VENTILATIONSLEEVE | | | |

Louvre

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LOUVRE | | | |
| IFC4 UserDefined PropertySet | SGPset_Window | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FixedLouvreBlade | Boolean | TRUE FALSE | |

Skylight

| | | | | |
|-----------------------------|--------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | SKYLIGHT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_WindowCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_Window | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Material_SpecularReflectance | Label | N.A |
| | OperationType | Label | N.A |

Skylight Frame

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | SKYLIGHT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Vent

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Metal | |
| IFC4 Predefined PropertySet | Pset_WindowCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Existing New | |

Ventilation Sleeve

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VENTILATIONSLEEVE | | | |
| IFC4 UserDefined PropertySet | SGPset_WindowDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | InnerDiameter (mm) | Length | N.A | |
| | OuterDiameter (mm) | Length | N.A | |

Window

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |

| | | | |
|------------------------------|---------------------------------------|-----------------------|--------------------------------|
| PredefinedType | WINDOW | | |
| ObjectType | N.A | | |
| Material | Attributes | | Sample Attribute Values |
| | Name | Glass UPVC | |
| IFC4 Predefined PropertySet | Pset_WindowCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | IsExternal | Boolean | TRUE FALSE |
| | ThermalTransmittance | Thermal Transmittance | Sample Value(s): 1 W/m2 K |
| | FireRating (hr) | Label | N.A |
| | FireExit | Boolean | TRUE FALSE |
| Status | Label | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Window | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | OperationType | Label | N.A |
| | PercentageOfOpening | Real | Sample Value(s): 50 |
| | Material_DaylightReflectance | Label | N.A |
| | Material_DiffuseReflectance | Label | N.A |
| | Material_SpecularReflectance | Label | N.A |
| | ShadingCoefficient_Glass | Real | N.A |
| | IsBuiltIn | Boolean | TRUE FALSE |
| | ShadingCoefficient | Real | N.A |
| | ConstructionMethod | Label | N.A |
| | WithMetalGrill | Boolean | TRUE FALSE |
| | CorrosionResistant | Boolean | TRUE FALSE |
| | Fixed | Boolean | TRUE FALSE |
| | FireAccessOpening | Boolean | TRUE FALSE |
| | IsLaminated | Boolean | TRUE FALSE |
| | Combustible | Boolean | FALSE TRUE FALSE |
| InsectScreen | Boolean | TRUE FALSE | |

Window

| | | | | |
|------------------------------|--------------------------------------|-----------------------|--------------------------------|--------------|
| IFC4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Attributes | Attributes | | Sample Attribute Values | |
| | TransomThickness | N.A | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | Glass | | |
| IFC4 Predefined PropertySet | Pset_WindowCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ThermalTransmittance (W/m2 K) | Thermal Transmittance | Sample Value(s): 1 W/m2 K | |
| | Status | Label | Existing New | |
| | IfcWindowLiningProperties | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| N.A | N.A | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_Window | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| ShadingCoefficient_Glass | Real | N.A |
| ShadingCoefficient | Real | N.A |
| OperationType | Label | SLIDING |
| WithFanlight | Boolean | N.A |

Window Ledge

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcWindow | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Window | Window | Windows | N.A |
| PredefinedType | WINDOW | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Ledge | | |

ELECTRICAL ELEMENTS

IfcAirTerminal

Louvre

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcAirTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | LOUVRE | | | |
| ObjectType | N.A | | | |

IfcAlarm

Alarm

| | | | | |
|-----------------------------|------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcAlarm | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Home Fire Alarm Device

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAlarm | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HOMEFIREALARMDEVICE | | | |
| IFC4 UserDefined PropertySet | SGPset Alarm | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |

| | | | |
|--|----------------|---------|--------------|
| | SmokeDetection | Boolean | TRUE FALSE |
|--|----------------|---------|--------------|

Manual Call Point

| | | | | |
|-----------------------------|------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcAlarm | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | BREAKGLASSBUTTON | | | |
| ObjectType | N.A | | | |

Siren Alarm

| | | | | |
|-----------------------------|-----------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcAlarm | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | SIREN | | | |
| ObjectType | N.A | | | |

Sound Alarm

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAlarm | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | BELL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Alarm | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SoundLevel (dBA) | Label | Sample Value(s): 5 dBA | |
| | ElectronicallyInterlocked | Boolean | TRUE FALSE | |

Visual Alarm

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAlarm | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | LIGHT | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Alarm | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlashingRate (flash/min) | Label | Sample Value(s): 30 flash/min | |

Visual Alarm Light Housing

| | | | | |
|-----------------------------|-----------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcAlarm | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | LIGHT | | | |
| ObjectType | N.A | | | |

Visual Indicator

| | | | | |
|-----------------------------|-----------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcAlarm | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VISUALINDICATOR | | | |

IfcAudioVisualAppliance

Amplifier

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | AMPLIFIER | | | |
| ObjectType | N.A | | | |

Battery Telephone Point

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Data Devices | N.A |
| PredefinedType | TELEPHONE | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_AudioVisualAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | IntercomSystemType | Label | Sample Value(s): Master | |

CCTV

| | | | | |
|-----------------------------|-------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Security Devices | N.A |
| PredefinedType | CAMERA | | | |
| ObjectType | N.A | | | |

Loudspeaker

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Fire Alarm Devices | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LOUDSPEAKER | | | |

Microphone

| | | | | |
|-------------|-------------------------|--|--|--|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
|-------------|-------------------------|--|--|--|

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | MICROPHONE | | | |
| ObjectType | N.A | | | |

Speaker

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Fire Alarm Devices | N.A |
| PredefinedType | SPEAKER | | | |
| ObjectType | N.A | | | |

Switcher

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | SWITCHER | | | |
| ObjectType | N.A | | | |

Video Image Fire Detection Camera

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Security Devices | N.A |
| PredefinedType | CAMERA | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_AudioVisualAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | VideoFireImageDetection | Boolean | TRUE FALSE | |

Voice Communication Handset

| | | | | |
|-----------------------------|-------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcAudioVisualAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Telephone Devices | N.A |
| PredefinedType | TELEPHONE | | | |
| ObjectType | N.A | | | |

IfcCableCarrierSegment

Cable Carrier Segment

| | | | | |
|-----------------------------|------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Cable Tray | Place Raceray | Cable Trays | N.A |
| PredefinedType | Need not specify | | | |

| | |
|------------|-----|
| ObjectType | N.A |
|------------|-----|

Cable Tray

| | | | | |
|-----------------------------|------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Cable Tray | Place Raceray | Cable Trays | N.A |
| PredefinedType | CABLETRAYSEGMENT | | | |
| ObjectType | N.A | | | |

Conduit

| | | | | |
|-----------------------------|------------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Conduits | N.A |
| PredefinedType | CONDUITSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Flexible Metal Conduit

| | | | | |
|-----------------------------|------------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Conduits | N.A |
| PredefinedType | CONDUITSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Flexible Metal | | |

Liquid Tight Flexible Metal Conduit

| | | | | |
|-----------------------------|------------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Conduits | N.A |
| PredefinedType | CONDUITSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Liquid Tight Flexible Metal | | |

Metal Conduit

| | | | | |
|-----------------------------|------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Conduits | N.A |
| PredefinedType | CONDUITSEGMENT | | | |

| | | | |
|------------|-------------------|--------------------------------|--|
| ObjectType | N.A | | |
| Material | Attributes | Sample Attribute Values | |
| | Name | Metal | |

Metal Trunking

| | | | | |
|-----------------------------|------------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Cable Tray | Place Raceray | Cable Trays | N.A |
| PredefinedType | CABLETRUNKINGSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Metal | | |

Rigid Metal Conduit

| | | | | |
|-----------------------------|------------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Duct | Duct | Conduits | N.A |
| PredefinedType | CONDUITSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Rigid Metal | | |

Trunking

| | | | | |
|-----------------------------|------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCableCarrierSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Cable Tray | Place Raceray | Cable Trays | N.A |
| PredefinedType | CABLETRUNKINGSEGMENT | | | |
| ObjectType | N.A | | | |

IfcCableFitting

Cable Fitting

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCableFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipework | Raceway | Conduits | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_CableFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Cable Segment

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|---|--------------|
| Ifc4 Entity | IfcCableSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_CableSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 638 Code of practice for electrical installations SS 299 Fire-resistant cables of rated voltage up to and including 600/1000 V for fixed installations having low emission of smoke and corrosive gases when affected by fire NFPA 262 Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces SS 254 Electrical apparatus for explosive gas atmospheres | |
| | FireRating (hr) | Label | N.A | |
| | Cable_MineralInsulatedMetalSheathed | Boolean | TRUE FALSE | |
| | Cable_AluminiumSheathed | Boolean | TRUE FALSE | |
| | Cable_CopperSheathed | Boolean | TRUE FALSE | |
| Cable_MetalCladded | Boolean | TRUE FALSE | | |

Down Conductor

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCableSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_DOWNCONDUCTOR | | | |
| IFC4 UserDefined PropertySet | SGPset_CableSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | LinkedToNaturalRebar | Boolean | TRUE FALSE | |
| | LPS_ConnectedToFoundation | Boolean | TRUE FALSE | |

Natural Down Conductor

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCableSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_NATURALDOWNCONDUCTOR | | | |

Power Cable

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCableSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|-----|
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_CableSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Signal Cable

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCableSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_CableSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Wire Cable

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCableSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcCommunicationsAppliance

Antennae

| | | | | |
|-----------------------------|----------------------------|--------------------------------|----------------|--------------|
| Ifc4 Entity | IfcCommunicationsAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | ANTENNA | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Computer

| | | | | |
|-----------------------------|----------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcCommunicationsAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | COMPUTER | | | |
| ObjectType | N.A | | | |

Distress Button

| | | | | |
|-----------------------------|----------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCommunicationsAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DISTRESSBUTTON | | | |

Integrated Communication Console

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCommunicationsAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | INTEGRATEDCOMMUNICATIONCONSOLE | | | |
| IFC4 UserDefined PropertySet | SGPset_CommunicationsAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | IntercomSystemType | Label | Sample Value(s): Master | |

Network Appliance

| | | | | |
|-----------------------------|----------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcCommunicationsAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | NETWORKAPPLIANCE | | | |
| ObjectType | N.A | | | |

IfcDamper

Blade

| | | | | |
|-----------------------------|-------------------|--------------------------------|---------------|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Air Terminal | Air Terminals | N.A |
| PredefinedType | FIRE DAMPER | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Blade | | |

Flange Sleeve

| | | | | |
|-----------------------------|-------------------|--------------------------------|------------------|--------------|
| Ifc4 Entity | IfcDamper | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Duct Accessories | N.A |
| PredefinedType | FIRE DAMPER | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Flange | | |

IfcDiscreteAccessory

Air-finial

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_AIRFINIAL | | | |

Air-termination Tape

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_TAPE | | | |

Bi-metallic Connector

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_BIMETALLICCONNECTOR | | | |

Flush Bolt

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLUSHBOLT | | | |

Lightning Tape

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_LIGHTNINGTAPE | | | |
| IFC4 UserDefined PropertySet | SGPset_DiscreteAccessory | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | LPS_ConnectedToRebar | Boolean | TRUE FALSE | |
| | LPS_ConnectedToFoundation | Boolean | TRUE FALSE | |

Locking Device

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Metal capping

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_METALCAPPING | | | |

Panic Device

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Strike Pad

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_STRIKEPAD | | | |

Test Link Box

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDiscreteAccessory | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_TESTLINKBOX | | | |

IfcDistributionChamberElement

Earth Pit

| | | | | |
|-----------------------------|-------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_EARTHPIIT | | | |

Air Cleaning Equipment

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRCLEANINGEQUIPMENT | | | |

Coffee Maker

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | COFFEEMAKER | | | |

Dishwasher

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | DISHWASHER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CapacityWeight (kg) | Real | in kg | |

Drinking Fountain

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRINKINGFOUNTAIN | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WithHoodedJet | Boolean | TRUE FALSE | |

Electric Cooker

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | ELECTRICCOOKER | | | |
| ObjectType | N.A | | | |

| | | | |
|------------------------------|---|------------------|--|
| Ifc4 UserDefined PropertySet | SGPset_ElectricApplianceTypeElectricCooker | | |
| | Ifc4 UserDefined Property Name | Data Type | Sample Property Values |
| | ElectricCookerType | Label | BOILINGPAN TILTINGBOILINGPAN TILTINGROASTEDTIN FIXEDROASTEDTIN |

Electric Heater

| | | | | |
|-----------------------------|----------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | FREESTANDINGELECTRICHEATER | | | |
| ObjectType | N.A | | | |

Freezer

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | FREEZER | | | |
| ObjectType | N.A | | | |

Fume Hood

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FUMEHOOD | | | |

Hand Dryer

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | HANDDRYER | | | |
| ObjectType | N.A | | | |

High Pressure Cleaner

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HIGHPRESSURECLEANER | | | |

Ice Maker

| | | | | |
|-------------|----------------------|--|--|--|
| Ifc4 Entity | IfcElectricAppliance | | | |
|-------------|----------------------|--|--|--|

| | | | | |
|-----------------------------|--------------------|----------------------|----------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ICEMAKER | | | |

Range Hood

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RANGEHOOD | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ApprovedExtinguishingSystem | Boolean | TRUE FALSE | |

Refrigerator

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | REFRIGERATOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlammableRefrigerant | Boolean | TRUE FALSE | |

Scraper

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SCRAPER | | | |

Standalone Refrigerator

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | STANDALONEREFRIGIRATOR | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlammableRefrigerant | Boolean | TRUE FALSE | |

Steam Cleaner

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | STEAMCLEANER | | | |

Television

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TELEVISION | | | |

Washing Machine

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | WASHINGMACHINE | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CapacityWeight (kg) | Real | in kg | |

Water Cooler

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | FREESTANDINGWATERCOOLER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WithHoodedJet | Boolean | TRUE FALSE | |

Water Dispenser

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricAppliance | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERDISPENSER | | | |

Water Heater

| | | | | |
|-------------|----------------------|--|--|--|
| Ifc4 Entity | IfcElectricAppliance | | | |
|-------------|----------------------|--|--|--|

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Electrical Equipment | N.A |
| PredefinedType | FREESTANDINGWATERHEATER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricAppliance | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | MainsPressureType | Boolean | TRUE FALSE | |
| | PressureAndTemperatureReliefValveWithControllingStopcock | Boolean | TRUE FALSE | |

IfcElectricDistributionBoard

Distribution Board

| | | | | |
|-----------------------------|------------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricDistributionBoard | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | DISTRIBUTIONBOARD | | | |
| ObjectType | N.A | | | |

Switchboard

| | | | | |
|-----------------------------|------------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricDistributionBoard | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | SWITCHBOARD | | | |
| ObjectType | N.A | | | |

IfcElectricFlowStorageDevice

Battery

| | | | | |
|------------------------------|---|----------------------|---|--------------|
| Ifc4 Entity | IfcElectricFlowStorageDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Electrical Equipment | N.A |
| PredefinedType | BATTERY | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricFlowStorageDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | DischargeTime (hr) | Label | N.A | |
| | ExternalReference | Label | SS CP 10 Code of practice for automatic fire sprinkler system SS 563 Code of practice for the design installation and maintenance of emergency lighting and power supply systems in buildings SS 575 Code of practice for fire hydrant rising mains and hose reel systems SS CP 52 Code of practice for fire hydrant rising mains and hose reel systems | |
| BatteryType | Label | Vented | | |

Battery Backup Power Supply

| | | | | |
|-----------------------------|------------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricFlowStorageDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Electrical Equipment | N.A |
| PredefinedType | UPS | | | |
| ObjectType | N.A | | | |

Electrical Equipment

| | | | | |
|------------------------------|---|----------------------|---|--------------|
| Ifc4 Entity | IfcElectricFlowStorageDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Electrical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricFlowStorageDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 254 Electrical apparatus for explosive gas atmospheres | |

Electrical Equipment - Electric Flow Storage Device

| | | | | |
|------------------------------|---|----------------------|---|--------------|
| Ifc4 Entity | IfcElectricFlowStorageDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Electrical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricFlowStorageDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 254 Electrical apparatus for explosive gas atmospheres | |

UPS

| | | | | |
|-----------------------------|------------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricFlowStorageDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Electrical Equipment | N.A |
| PredefinedType | UPS | | | |
| ObjectType | N.A | | | |

IfcElectricGenerator

Diesel Generator

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricGenerator | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Mechanical Equipment | N.A |
| PredefinedType | ENGINEGENERATOR | | | |
| ObjectType | N.A | | | |

Emergency Generator

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricGenerator | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EMERGENCYENGINEGENERATOR | | | |

Generator

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcElectricGenerator | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Mechanical Equipment | N.A |
| PredefinedType | ENGINEGENERATOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ElectricGenerator | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Standby | Boolean | TRUE FALSE | |
| | DischargeTime (hr) | Label | N.A | |
| | ExternalReference | Label | SS 535 Code of practice for installation operation maintenance performance and construction SS CP 10 Code of practice for automatic fire sprinkler system SS 563 Code of practice for the design installation and maintenance of emergency lighting and power supply systems in buildings SS 575 Code of practice for fire hydrant rising mains and hose reel systems SS CP 52 Code of practice for fire hydrant rising mains and hose reel systems | |

Genset

| | | | | |
|-----------------------------|----------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricGenerator | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Element | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Standby Generating Plant

| | | | | |
|-----------------------------|------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcElectricGenerator | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | STANDBYGENERATINGPLANT | | | |

IfcFlowInstrument

Thermocouple Display Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFlowInstrument | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | THERMOCOUPLEPANEL | | | |
| IFC4 UserDefined PropertySet | SGPset_FlowInstrument | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AlarmPanel | Boolean | TRUE FALSE | |

IfcLightFixture

Beacon Light

| | | | | |
|-----------------------------|------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcLightFixture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Lighting Fixtures | N.A |
| PredefinedType | SECURITYLIGHTING | | | |
| ObjectType | N.A | | | |

Emergency Lighting

| | | | | |
|-----------------------------|------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcLightFixture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Lighting Fixtures | N.A |
| PredefinedType | SECURITYLIGHTING | | | |
| ObjectType | N.A | | | |

Lighting Fixture

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcLightFixture | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Lighting Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_LightFixture | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EnergyEfficiency | Integer | N.A | |
| | IndexOfProtection | Label | IP66 | |
| | ColorRenderingIndex | Integer | N.A | |
| | ColorTemperature (K) | Real | N.A | |
| Intensity | Integer | N.A | | |

IfcOutlet

Communication Fixture

| | | | | |
|-----------------------------|-----------------|----------------------|-----------------------|--------------|
| Ifc4 Entity | IfcOutlet | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Communication Devices | N.A |

| | |
|----------------|------------------|
| PredefinedType | Need not specify |
| ObjectType | N.A |

Electrical Fixture

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcOutlet | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Electrical Socket Outlet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcOutlet | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | POWEROUTLET | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset Outlet | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | OutletType | Label | Sample Value(s): 2 P PE | |

Single Phase Socket Outlet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcOutlet | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Fixtures | N.A |
| PredefinedType | POWEROUTLET | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset Outlet | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | OutletSocketType | Label | Single Phase | |

Three Phase Socket Outlet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcOutlet | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Fixtures | N.A |
| PredefinedType | POWEROUTLET | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset Outlet | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | OutletSocketType | Label | Three Phase | |

Circuit Breaker

| | | | | |
|-----------------------------|---------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcProtectiveDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Fixtures | N.A |
| PredefinedType | CIRCUITBREAKER | | | |
| ObjectType | N.A | | | |

High Rupturing Capacity Fuse

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcProtectiveDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | N.A | N.A | Electrical Equipment | N.A |
| PredefinedType | FUSEDISCONNECTOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ProtectiveDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FuseDisconnectoralType | Label | HRC | |

Moulded Case Circuit Breaker

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcProtectiveDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | N.A | N.A | Electrical Equipment | N.A |
| PredefinedType | FUSEDISCONNECTOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ProtectiveDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FuseDisconnectoralType | Label | ENGINEPROTECTIONDEVICE | |

IfcProtectiveDeviceTrippingUnit

Electro Magnetic

| | | | | |
|-----------------------------|---------------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcProtectiveDeviceTrippingUnit | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | N.A | N.A | Electrical Equipment | N.A |
| PredefinedType | ELECTROMAGNETIC | | | |
| ObjectType | N.A | | | |

IfcSensor

Beam Detector

| | | | | |
|-----------------------------|-----------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SMOKEDETECTOR | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|--|
| Ifc4 UserDefined PropertySet | SGPset_Sensor | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | SmokeDetectorType | Label | Sample Value(s): Optical beam line smoke detector Point smoke detector |

Fire Sensor

| | | | | |
|-----------------------------|-----------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | FIRESENSOR | | | |
| ObjectType | N.A | | | |

Gas Detector

| | | | | |
|-----------------------------|-----------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | GASSENSOR | | | |
| ObjectType | N.A | | | |

Heat Detector

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | HEATSENSOR | | | |
| ObjectType | N.A | | | |
| Ifc4 UserDefined PropertySet | SGPset_Sensor | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EngineeredSmokeControlSystem | Boolean | TRUE FALSE | |

Movement Sensor

| | | | | |
|-----------------------------|-----------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Security Devices | N.A |
| PredefinedType | MOVEMENTSENSOR | | | |
| ObjectType | N.A | | | |

Refuse-Level Sensor

| | | | | |
|------------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | LEVELSENSOR | | | |
| ObjectType | N.A | | | |
| Ifc4 UserDefined PropertySet | SGPset_Sensor | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| Declaration | Label | N.A |

Sensor

| | | | | |
|-----------------------------|------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Smoke Detector

| Ifc4 Entity | IfcSensor | | | |
|------------------------------|--------------------------------|---|------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | SMOKESENSOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Sensor | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | EngineeredSmokeControlSystem | Boolean | TRUE FALSE | |
| ExternalReference | Label | SS CP 10 Code of practice for automatic fire sprinkler system | | |

Smoke Detector

| | | | | |
|-----------------------------|-----------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | FIRESENSOR | | | |
| ObjectType | N.A | | | |

Thermocouple

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Solid | Fire Alarm Devices | N.A |
| PredefinedType | TEMPERATURESENSOR | | | |
| ObjectType | N.A | | | |

Valve Position Sensor

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | CONTACTSENSOR | | | |
| ObjectType | N.A | | | |

Solar Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSolarDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Equipment | Electrical Equipment | N.A |
| PredefinedType | SOLARPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SolarDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | N.A | |

Bed Lift Switch

| | | | | |
|-----------------------------|--------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcSwitchingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BEDLIFTSWITCH | | | |

EV Shut-off Switch

| | | | | |
|-----------------------------|--------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcSwitchingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EVSHUTOFFSWITCH | | | |

Emergency Stop

| | | | | |
|-----------------------------|--------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcSwitchingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | EMERGENCYSTOP | | | |
| ObjectType | N.A | | | |

Evacuation Switch

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSwitchingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EVACUATIONSWITCH | | | |
| IFC4 UserDefined PropertySet | SGPset_SwitchingDevice | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Breakable | Boolean | TRUE FALSE | |

Fire Lift Switch

| | | | | |
|-----------------------------|--------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcSwitchingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIRELIFTSWITCH | | | |

Lighting Switch

| | | | | |
|-----------------------------|--------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcSwitchingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Lighting Devices | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Manual Overriding Mechanism

| | | | | |
|-----------------------------|--------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcSwitchingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | EMERGENCYSTOP | | | |
| ObjectType | N.A | | | |

Stop Switch

| | | | | |
|-----------------------------|--------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcSwitchingDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MANUALSWITCH | | | |

IfcTransformer

Inverter

| | | | | |
|------------------------------|---------------------------------------|--|-------------------------------|--------------|
| Ifc4 Entity | IfcTransformer | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | INVERTER | | | |
| ObjectType | N.A | | | |
| Ifc4 UserDefined PropertySet | SGPset_Transformer | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | DischargeTime (hr) | Label | N.A | |
| ExternalReference | Label | SS CP 10 Code of practice for automatic fire sprinkler system SS 563 Code of practice for the design installation and maintenance of emergency lighting and power supply systems in buildings SS 575 Code of practice for fire hydrant rising mains and hose reel systems SS | | |

| | | | |
|--|--|--|--|
| | | | CP 52 Code of practice for fire hydrant rising mains and hose reel systems |
|--|--|--|--|

Transformer

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransformer | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcUnitaryControlElement

Automatic Rescue Device

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AUTOMATICRESCUEDEVICE | | | |

Control Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | CONTROLPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ UnitaryControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PWCS_AirIntakeValve | Boolean | TRUE FALSE | |
| | PWCS_DischargeValve | Boolean | TRUE FALSE | |
| | PWCS_TemporaryStorageSection | Boolean | TRUE FALSE | |
| | IPRating | Integer | Sample Value(s): 65 | |
| | PWCS_Flushing | Boolean | TRUE FALSE | |
| | PWCS_CollectionStation | Boolean | TRUE FALSE | |
| | Ammeter | Boolean | TRUE FALSE | |
| | IndicatingLight | Boolean | TRUE FALSE | |
| | StartStopPushButton | Boolean | TRUE FALSE | |
| | FaultResetPushButton | Boolean | TRUE FALSE | |
| | AutoManualSelectorSwitch | Boolean | TRUE FALSE | |
| | Automatic | Boolean | TRUE FALSE | |
| | NominalVoltage (Volt) | Real | N.A | |
| | EngineeredSmokeControlSystem | Boolean | TRUE FALSE | |
| | SmokePurging | Boolean | TRUE FALSE | |
| JetFan | Boolean | TRUE FALSE | | |
| ElectricVehicle | Boolean | TRUE FALSE | | |

Door Status Panel

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | INDICATORPANEL | | | |

| | |
|------------|-----|
| ObjectType | N.A |
|------------|-----|

Electrical Equipment

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnitaryControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 254 Electrical apparatus for explosive gas atmospheres | |

Electrical Equipment - Unitary Control Element

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnitaryControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 254 Electrical apparatus for explosive gas atmospheres | |

FCC Equipment

| | | | | |
|-----------------------------|--------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Fire Alarm Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | ALARMPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnitaryControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AutomaticFireAlarmSystem | Boolean | TRUE FALSE | |

Gas Detection Panel

| | | | | |
|-------------|--------------------------|--|--|--|
| Ifc4 Entity | IfcUnitaryControlElement | | | |
|-------------|--------------------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | GASDETECTIONPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnityControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AlarmPanel | Boolean | TRUE FALSE | |

Lift Supervisory Panel

| | | | | |
|-----------------------------|------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnityControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LIFTSUPERVISORYPANEL | | | |

Main Fire Alarm Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnityControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | ALARMPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnityControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireAlarmPanel | Boolean | TRUE FALSE | |
| | Purpose | Label | MAINPANEL | |

Main Smoke Control Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnityControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | ALARMPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnityControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SmokeControlPanel | Boolean | TRUE FALSE | |
| | Purpose | Label | MAINPANEL | |

Operator Panel

| | | | | |
|-----------------------------|------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnityControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OPERATORPANEL | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_UnityControlElement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | PWCS_CollectionStation | Boolean | TRUE FALSE |

Stopping Device

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnityControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Fixtures | N.A |
| PredefinedType | CONTROLPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnityControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StoppingDevice | Boolean | TRUE FALSE | |

Sub Fire Alarm Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnityControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | ALARMPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnityControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireAlarmPanel | Boolean | TRUE FALSE | |
| | Purpose | Label | SUBPANEL | |

Sub Smoke Control Panel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcUnityControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | ALARMPANEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_UnityControlElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Purpose | Label | SUBPANEL | |

Voice Communication Panel

| | | | | |
|------------------------------|-----------------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcUnityControlElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Electrical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VOICECOMMUNICATIONPANEL | | | |
| IFC4 UserDefined PropertySet | SGPset_UnityControlElement | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| TwoWayCommunication | Boolean | TRUE FALSE |
| OneWayCommunication | Boolean | TRUE FALSE |

EXTERNAL WORKS ELEMENTS

IfcCivilElement

Carriageway

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_CARRIAGEWAY | | | |
| IFC4 UserDefined PropertySet | SGPset_CivilElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadCategory | Label | 1/2/3/4/5 | |
| | AccelerationLane | Boolean | TRUE FALSE | |
| | DecelerationLane | Boolean | TRUE FALSE | |
| | FireEngineAccessRoad | Boolean | TRUE FALSE | |

Road Kerb

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROADKERB | | | |

Side Table

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_SIDETABLE | | | |

Slip Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcCivilElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Slab |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_CARRIAGEWAY | | | |
| IFC4 UserDefined PropertySet | SGPset_CivilElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SlipRoad | Boolean | TRUE FALSE | |

Activity Generating Use Zone

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Activity Generating Use Zone | |
| | GIS_Name | Label | N.A | |

Approved Railway Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Rail Station | |
| | GIS_Name | Label | N.A | |

Bencoolen Street

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Bencoolen Street | |
| | | | | |

Botanic Gardens Vicinity Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Botanic Gardens Vicinity Area | |
| | | | | |

| | | | |
|--|----------|-------|-----|
| | GIS_Name | Label | N.A |
|--|----------|-------|-----|

Bras Basah Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Bras Basah Road | |

Building Height Control

| | | | | |
|-----------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Building Height Control | |
| | GIS_Name | Label | N.A | |
| | BuildingHeightControl_Height (m) | Length | N.A | |
| BuildingHeightControl_StoreyCount | Integer | N.A | | |

Building Height Control Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Building Height Control Area | |
| | GIS_Name | Label | N.A | |

Bus Stop

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_TRANSPORTNODE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |

| | | | |
|--|---------|---------|--------------|
| | BusStop | Boolean | TRUE FALSE |
|--|---------|---------|--------------|

Campus Boulevard

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Campus Boulevard | |

Car-lite Precincts

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_CARLITEPRECINCTS | | | |

Central Business District Incentive

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Central Business District Incentive | |
| | GIS_Name | Label | Cecil St Robinson Rd Shenton Way Tanjong Pagar Anson | |

Clemenceau Avenue

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Clemenceau Avenue | |

Commercial

| | | | | |
|-------------|----------------------|--|--|--|
| Ifc4 Entity | IfcGeographicElement | | | |
|-------------|----------------------|--|--|--|

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |

Conservation Area

| | | | | |
|------------------------------|---------------------------------------|---|---|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| Ifc4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Conservation Area | |
| | GIS_Name | Label | Geylang Tiong Bahru River Valley Balestier Beach Road Jalan Besar Jalan Jurong Kechil Joo Chiat Mount Sophia Tanjong Katong Upper Circular Road | |
| GIS_ConservationAreaType | Label | Historic District Residential Historic District Secondary Settlement Others Bungalows | | |

Conservation Special Control

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| Ifc4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Conservation Special Control | |
| | GIS_Name | Label | Shopfront Control Staircase Control Residential Front Control Forecourt Control Corner Unit Control Conserved Extent Control | |

Conserved Building

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| Ifc4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Conserved Building | |
| | GIS_Name | Label | N.A | |

Core Area

| | | | | |
|-------------|----------------------|--|--|--|
| Ifc4 Entity | IfcGeographicElement | | | |
|-------------|----------------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Core Area | |
| | GIS_Name | Label | Sample Value(s): Chinatown Kampong Glam Little India | |

Designated Landed Housing Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | N.A | |
| | GIS_Name | Label | N.A | |

Drainage Reserve

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_DRAINAGERESERVE | | | |

Elevated Pedestrian Link

| | | | | |
|-----------------------------|----------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ELEVATEDPEDESTRIANLINK | | | |

Envelope Control Site

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Envelope Control Site | |
| | GIS_Name | Label | N.A | |

GIS Scheme

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | N.A | |
| | GIS_Name | Label | N.A | |

Geylang Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Geylang Road | |

Good Class Bungalow Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Good Class Bungalow Area | |
| | GIS_Name | Label | 2-storey | |
| | ApprovedStoreyHeight (m) | Length | N.A | |

HDB Estate Parcel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | N.A | |
| | GIS_Name | Label | HBD Estate | |

Handy Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Handy Road | |

Hill Street

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Hill Street | |

Historical Conservation District

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Historical Conservation District | |
| | GIS_Name | Label | Little India Kampong Glam Chinatown Boat Quay | |

Industrial Estate Parcel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | N.A | |
| | GIS_Name | Label | Industrial Estate | |

Key Growth Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Key Growth Area | |
| | GIS_Name | Label | N.A | |

Key Route

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_KEYROUTE | | | |

Lamp Post

| | | | | |
|-----------------------------|----------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Lighting Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_LAMPPOST | | | |

Landed Housing Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ApprovedStoreyHeight (m) | Length | N.A | |
| | GIS_Scheme | Label | Landed Housing Area | |
| GIS_Name | Label | 2-storey | | |

Lorong

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | RoadName | Label | Lorong |

Lower Height Control Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BuildingHeightControl_Height (m) | Length | N.A | |
| | BuildingHeightControl_StoreyCount | Integer | N.A | |
| | GIS_Scheme | Label | Lower Height Control Area | |
| GIS_Name | Label | N.A | | |

Major Transport Node

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | WCP Buffer | |
| | GIS_Name | Label | Kallang MRT | |

Master Plan

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_MASTERPLAN | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_MasterPlanUse | Label | N.A | |
| | GIS_PlanningArea | Label | N.A | |
| | GIS_LandOwnership | Label | N.A | |
| GIS_GovernmentLandSale | Boolean | TRUE FALSE | | |

Master Plan Parcel

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |

| | | | |
|------------------------------|---------------------------------------|------------------|--|
| PredefinedType | USERDEFINED | | |
| ObjectType | GIS_MASTERPLAN | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | GIS_AllowableMasterPlanUse | Label | Business Park Residential Residential/Institution Commercial and Residential Residential with Commercial at 1st Storey White Commercial & Residential Civic and Community Institution Residential with 1st Storey Commercial Business Park - White Health and Medical Care Hotel Business Whites Place of Worship Sports and Recreation Transport Facilities Educational Institution Agriculture |
| | GIS_PlanningArea | Label | Punggol Digital District Museum Marina South Marina East and Straits View Newton River Valley Outram Downtown Core Jurong Lake Orchard Paya Lebar Central Singapore River Woodlands Central Rochor (Bras Basah Bugis) Geylang Kampong Bugis Woodlands North Bayshore Jurong Lake District Chinatown Little India Kampong Glam Boat Quay Blair Plain Emerald Hill Cairnhill Central Area Lim Chu Kang Value Source: To refer to URA Master Plan Planning Area layers |
| | FloorAreaRatio | Real | N.A |
| GIS_Region | Label | Central | |

Middle Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Middle Road | |

National Monument

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | National Monument | |
| | GIS_Name | Label | N.A | |

Night Lighting Area

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |

| | | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|-----|
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Night Lighting Area | |
| | GIS_Name | Label | N.A | |

Non-landed Residential Estate Parcel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | N.A | |
| | GIS_Name | Label | Non-landed Residential Estate | |

Orchard Boulevard

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Orchard Boulevard | |

Orchard Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Orchard Road | |

PUB Water Catchment Boundaries

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |

| PredefinedType | USERDEFINED | | | | | | | | | |
|------------------------------|--|--------------------------------|------------------------|------------------------|------------|-------|--------|----------|-------|-----|
| ObjectType | GIS_FEATURE | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>GIS_Scheme</td> <td>Label</td> <td>Kranji</td> </tr> <tr> <td>GIS_Name</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | GIS_Scheme | Label | Kranji | GIS_Name | Label | N.A |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| GIS_Scheme | Label | Kranji | | | | | | | | |
| GIS_Name | Label | N.A | | | | | | | | |
| | | | | | | | | | | |

Paya Lebar Expressway

| Ifc4 Entity | IfcGeographicElement | | | | | | | | |
|------------------------------|--|--------------------------------|------------------------|------------------------|----------|-------|-----------------------|------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Mesh | Mesh | Topography | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Mesh | Mesh | Topography | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | GIS_ROAD | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RoadName</td> <td>Label</td> <td>Paya Lebar Expressway</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | RoadName | Label | Paya Lebar Expressway | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | |
| RoadName | Label | Paya Lebar Expressway | | | | | | | |
| | | | | | | | | | |

Penang Road

| Ifc4 Entity | IfcGeographicElement | | | | | | | | |
|------------------------------|--|--------------------------------|------------------------|------------------------|----------|-------|-------------|------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Mesh | Mesh | Topography | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Mesh | Mesh | Topography | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | GIS_ROAD | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RoadName</td> <td>Label</td> <td>Penang Road</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | RoadName | Label | Penang Road | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | |
| RoadName | Label | Penang Road | | | | | | | |
| | | | | | | | | | |

Prinsep Street

| Ifc4 Entity | IfcGeographicElement | | | | | | | | |
|------------------------------|---|--------------------------------|------------------------|------------------------|----------|-------|----------------|------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Mesh | Mesh | Topography | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Mesh | Mesh | Topography | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | GIS_ROAD | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>RoadName</td> <td>Label</td> <td>Prinsep Street</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | RoadName | Label | Prinsep Street | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | |
| RoadName | Label | Prinsep Street | | | | | | | |
| | | | | | | | | | |

Promenade Reserve Line

| Ifc4 Entity | IfcGeographicElement | | | | | | | | |
|-----------------------------|---|---------------|---------------|-------|-------|------|------|------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Mesh</td> <td>Mesh</td> <td>Topography</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Mesh | Mesh | Topography | N.A |
| | ArchiCad | OpenBuildings | Revit | Tekla | | | | | |
| Mesh | Mesh | Topography | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | GIS_PROMENADERESERVELINE | | | | | | | | |

Proposed Landed Housing Cluster

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Landed Housing Area | |
| | GIS_Name | Label | N.A | |
| ConstructionPhase | Label | New | | |

Public Road

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |

Queen Street

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Queen Street | |

River Valley Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | River Valley Road | |

Road

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |

| | | | |
|------------------------------|--|------------------|-------------------------------|
| PredefinedType | USERDEFINED | | |
| ObjectType | GIS_ROAD | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | RoadCategory | Label | N.A |
| | RoadName | Label | Lorong 23 Aljunied |
| | SGPset_GeographicElementDimension | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| Area (m2) | Area | N.A | |

Road Reserve Line

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Massing | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROADRESERVELINE | | | |

Rochor Canal Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Rochor Canal Road | |

Safeguarded Site

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Safeguarded Site | |
| | GIS_Name | Label | N.A | |

Scotts Road

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | RoadName | Label | Scotts Road |

Selegie Road

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Selegie Road | |

Sindo Industrial Estate Parcel

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | N.A | |
| | GIS_Name | Label | Sindo Industrial Estate | |

Site Boundary (Nuisance Buffer)

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_NUISANCE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | N.A | |
| | GIS_Name | Label | Nuisance Buffer | |

Special Control Area

| | | | | |
|------------------------------|---------------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset_GeographicElement | | | |

| | | | |
|--|---------------------------------------|------------------|-------------------------------|
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | GIS_Scheme | Label | Special Control Area |
| | GIS_Name | Label | N.A |

Strategic Area Boundary

| | | | | |
|-----------------------------|---------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_STRATEGICAREABOUNDARY | | | |

Strategic Development Incentive

| | | | | |
|------------------------------|---------------------------------------|----------------------|---------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Strategic Development Incentive | |
| | GIS_Name | Label | Anson | |

Street Block Control Area

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_FEATURE | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | GIS_Scheme | Label | Street Block Control Area | |
| | GIS_Name | Label | N.A | |

Taxi Stand

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_TRANSPORTNODE | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TaxiStand | Boolean | TRUE FALSE | |

Through Block Link

| | | | | |
|-----------------------------|----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_THROUGHBLOCKLINK | | | |

Underground Pedestrian Link

| | | | | |
|-----------------------------|-------------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_UNDERGROUNDPEDESTRIANLINK | | | |

Vertical Circulation Point

| | | | | |
|-----------------------------|------------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_VERTICALCIRCULATIONPOINT | | | |

Victoria Street

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Victoria Street | |

Waterloo Street

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ROAD | | | |
| IFC4 UserDefined PropertySet | SGPset GeographicElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | RoadName | Label | Waterloo Street | |

Zonal Vehicle Parking

| | | | | |
|-------------|----------------------|--|--|--|
| Ifc4 Entity | IfcGeographicElement | | | |
|-------------|----------------------|--|--|--|

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Mesh | Mesh | Topography | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GIS_ZONALVEHICLEPARKING | | | |

FIRE PROTECTION ELEMENTS

IfcFireSuppressionTerminal

Breaching Inlet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | BREECHINGINLET | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_FireSuppressionTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ID | Label | N.A | |

Fire Hydrant

| | | | | |
|------------------------------|---|------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Mechanical Equipment | N.A |
| PredefinedType | FIREHYDRANT | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_FireSuppressionTerminalTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Temporary | |
| IFC4 UserDefined PropertySet | SGPset_FireSuppressionTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ID | Label | N.A | |
| | Private | Boolean | TRUE FALSE | |
| | Public | Boolean | TRUE FALSE | |
| | RunningPressure (bar) | Label | Sample Value(s): 5 bar | |
| | FlowRate (m3/s) | Volumetric FlowRate | Sample Value(s): 2 L/s | |
| FlowRate | Volumetric FlowRate | Sample Value(s): 2 L/s | | |

Foam Inlet

| | | | | |
|-----------------------------|----------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |

| | |
|------------|-----------|
| ObjectType | FOAMINLET |
|------------|-----------|

Foam Nozzle

| | | | | |
|-----------------------------|----------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Sprinklers | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FOAMNOZZLE | | | |

Hose Reel

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Mechanical Equipment | N.A |
| PredefinedType | HOSEREEL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_FireSuppressionTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Hose_NominalDiameter (mm) | Length | Sample Value(s): 50 mm | |
| | ExternalReference | Label | SS 575 Code of practice for fire hydrant rising mains and hose reel systems Sample Value(s): 30m | |
| Hose_Length (mm) | Length | Sample Value(s): 30m | | |

Sprinkler

| | | | | |
|---------------------------------------|--|-------------------------------|-------------------------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Sprinkler | Sprinklers | N.A |
| PredefinedType | SPRINKLER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_FireSuppressionTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlowRate (m3/s) | Volumetric FlowRate | Sample Value(s): 3 L/min 56 L/min | |
| | Pressure | Label | Sample Value(s): 50 kPa | |
| | Kfactor | Label | Sample Value(s): 11.5 | |
| | SGPset_FireSuppressionTerminalTypeSprinkler | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| ActivationTemperature | Real | N.A | | |

IfcPipeSegment

Hose

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Mechanical Equipment | N.A |

| | | | |
|------------------------------|---------------------------------------|------------------|--|
| PredefinedType | FLEXIBLESEGMENT | | |
| ObjectType | N.A | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | InnerDiameter (mm) | Length | N.A |
| | WorkingPressure (psi) | Real | N.A |
| | PressureRange (psi) | Real | N.A |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Coupling_Diameter (mm) | Length | N.A |
| | Length (mm) | Length | N.A |
| | ExternalReference | Label | SS 233 Specification for flexible rubber tubing rubber hose and rubber hose assemblies for use in LPG vapour phase installations |

Pipe Segment

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlowRate (m3/s) | Volumetric FlowRate | Sample Value(s): 3 L/min | |

Standby Fire Hose

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | STANDBYFIREHOSE | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegmentDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Diameter (mm) | Length | N.A | |

IfcPump

Fire Pump

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | ENDSUCTION | | | |
| ObjectType | N.A | | | |

Fire Pump

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Jockey Pump

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | JOCKEYPUMP | | | |

Pump

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Pump | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireRating (hr) | Label | Sample Value(s): 1 hr | |

Pump

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | SPLITCASE | | | |
| ObjectType | N.A | | | |

IfcTank

Clean Agent Fire Extinguisher

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREEXTINGUISHINGTANK | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExtinguisherType | Label | Clean Agent | |

| | | | |
|--|---------|---------|--------------|
| | Standby | Boolean | TRUE FALSE |
|--|---------|---------|--------------|

Dry Chemical Fire Extinguisher

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREEXTINGUISHINGTANK | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | OperatingWeight (kg) | Real | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExtinguisherType | Label | Dry Chemical | |

Fire Extinguishing Tank

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREEXTINGUISHINGTANK | | | |

Hydrant Tank

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |

Wet Chemical Fire Extinguisher

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREEXTINGUISHINGTANK | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExtinguisherType | Label | Wet Chemical | |

IfcValve

Sprinkler Control Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SPRINKLERCONTROL | | | |

MECHANICAL ELEMENTS

IfcFan

Jet Fan

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcFan | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Mechanical Equipment | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcPump

Pump

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcSolarDevice

Solar Panel

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcSolarDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Equipment | Electrical Equipment | N.A |
| PredefinedType | SOLARPANEL | | | |
| ObjectType | N.A | | | |

IfcTransportElement

Goods Lift

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcTransportElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Transport Element | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |

| | |
|------------|-----------|
| ObjectType | GOODSLIFT |
|------------|-----------|

PLUMBING ELEMENTS

IfcBoiler

Boiler

| | | | | |
|--|---|-----------------------------------|--------------------------------------|---------------------|
| Ifc4 Entity | IfcBoiler | | | |
| Proposed BIM Representation | ArchiCad Flow Equipment | OpenBuildings Equipment | Revit Mechanical Equipment | Tekla N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Boiler | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AI_AmmoniaAndAmmonium (mg/Nm3) | Label | N.A | |
| | AI_Antimony (mg/Nm3) | Label | N.A | |
| | AI_Arsenic (mg/Nm3) | Label | N.A | |
| | AI_Benzene (mg/Nm3) | Label | N.A | |
| | AI_Cadmium (mg/Nm3) | Label | N.A | |
| | AI_CarbonMonoxide (mg/Nm3) | Label | N.A | |
| | AI_Chlorine (mg/Nm3) | Label | N.A | |
| | AI_Copper (mg/Nm3) | Label | N.A | |
| | AI_DioxinsAndFurans (TEQ/Nm3) | Label | N.A | |
| | AI_EthyleneOxide (mg/Nm3) | Label | N.A | |
| | AI_FluorineAndHydrofluoricAcid (mg/Nm3) | Label | N.A | |
| | AI_Formaldehyde (mg/Nm3) | Label | N.A | |
| | AI_HydrogenChloride (mg/Nm3) | Label | N.A | |
| | AI_HydrogenSulphide (mg/Nm3) | Label | N.A | |
| | AI_Lead (mg/Nm3) | Label | N.A | |
| | AI_Mercury (mg/Nm3) | Label | N.A | |
| | AI_OxidesOfNitrogen (mg/Nm3) | Label | N.A | |
| | AI_ParticulateSubstances (mg/Nm3) | Label | N.A | |
| AI_StyreneMonomer (mg/Nm3) | Label | N.A | | |
| AI_SulphurDioxide (mg/Nm3) | Label | N.A | | |
| AI_SulphurTrioxideAndAcidGases (mg/Nm3) | Label | N.A | | |
| AI_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3) | Label | N.A | | |
| AI_VinylChlorideMonomer (mg/Nm3) | Label | N.A | | |

Boiler

| | | | | |
|-----------------------------|-----------------------------------|-----------------------------------|--------------------------------------|---------------------|
| Ifc4 Entity | IfcBoiler | | | |
| Proposed BIM Representation | ArchiCad Flow Equipment | OpenBuildings Equipment | Revit Mechanical Equipment | Tekla N.A |
| PredefinedType | WATER | | | |
| ObjectType | N.A | | | |

Steam Condensate Tank

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBoiler | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |

| | | | | |
|----------------|----------------|-----------|----------------------|-----|
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | STEAM | | | |
| ObjectType | N.A | | | |

IfcBuildingElementProxy

Fuel Burning Equipment

| | | | | |
|--|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FUELBURNINGEQUIPMENT | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AI_AmmoniaAndAmmonium (mg/Nm3) | Label | N.A | |
| | AI_Antimony (mg/Nm3) | Label | N.A | |
| | AI_Arsenic (mg/Nm3) | Label | N.A | |
| | AI_Benzene (mg/Nm3) | Label | N.A | |
| | AI_Cadmium (mg/Nm3) | Label | N.A | |
| | AI_CarbonMonoxide (mg/Nm3) | Label | N.A | |
| | AI_Chlorine (mg/Nm3) | Label | N.A | |
| | AI_Copper (mg/Nm3) | Label | N.A | |
| | AI_DioxinsAndFurans (TEQ/Nm3) | Label | N.A | |
| | AI_EthyleneOxide (mg/Nm3) | Label | N.A | |
| | AI_FluorineAndHydrofluoricAcid (mg/Nm3) | Label | N.A | |
| | AI_Formaldehyde (mg/Nm3) | Label | N.A | |
| | AI_HydrogenChloride (mg/Nm3) | Label | N.A | |
| | AI_HydrogenSulphide (mg/Nm3) | Label | N.A | |
| | AI_Lead (mg/Nm3) | Label | N.A | |
| | AI_Mercury (mg/Nm3) | Label | N.A | |
| | AI_OxidesOfNitrogen (mg/Nm3) | Label | N.A | |
| | AI_ParticulateSubstances (mg/Nm3) | Label | N.A | |
| | AI_StyreneMonomer (mg/Nm3) | Label | N.A | |
| AI_SulphurDioxide (mg/Nm3) | Label | N.A | | |
| AI_SulphurTrioxideAndAcidGases (mg/Nm3) | Label | N.A | | |
| AI_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3) | Label | N.A | | |
| AI_VinylChlorideMonomer (mg/Nm3) | Label | N.A | | |

Incinerator

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | INCINERATOR | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxy | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AI_AmmoniaAndAmmonium (mg/Nm3) | Label | N.A | |
| | AI_Antimony (mg/Nm3) | Label | N.A | |
| | AI_Arsenic (mg/Nm3) | Label | N.A | |
| | AI_Benzene (mg/Nm3) | Label | N.A | |
| | AI_Cadmium (mg/Nm3) | Label | N.A | |
| | AI_CarbonMonoxide (mg/Nm3) | Label | N.A | |
| | AI_Chlorine (mg/Nm3) | Label | N.A | |

| | | |
|--|-------|-----|
| Al_Copper (mg/Nm3) | Label | N.A |
| Al_DioxinsAndFurans (TEQ/Nm3) | Label | N.A |
| Al_EthyleneOxide (mg/Nm3) | Label | N.A |
| Al_FluorineAndHydrofluoricAcid (mg/Nm3) | Label | N.A |
| Al_Formaldehyde (mg/Nm3) | Label | N.A |
| Al_HydrogenChloride (mg/Nm3) | Label | N.A |
| Al_HydrogenSulphide (mg/Nm3) | Label | N.A |
| Al_Lead (mg/Nm3) | Label | N.A |
| Al_Mercury (mg/Nm3) | Label | N.A |
| Al_OxidesOfNitrogen (mg/Nm3) | Label | N.A |
| Al_ParticiulateSubstances (mg/Nm3) | Label | N.A |
| Al_StyreneMonomer (mg/Nm3) | Label | N.A |
| Al_SulphurDioxide (mg/Nm3) | Label | N.A |
| Al_SulphurTrioxideAndAcidGases (mg/Nm3) | Label | N.A |
| Al_SulphurTrioxideOrSulphuricAcidMist (mg/Nm3) | Label | N.A |
| Al_VinylChlorideMonomer (mg/Nm3) | Label | N.A |

Permanent Unit Number Tag

| Ifc4 Entity | IfcBuildingElementProxy | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|------------|-------|-------|------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Morph</td><td>Solid</td><td>Pipe Accessories</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Morph | Solid | Pipe Accessories | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Morph | Solid | Pipe Accessories | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | PERMANENTUNITNUMBERTAG | | | | | | | | |
| Ifc4 UserDefined PropertySet | SGPset_BuildingElementProxy <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>UnitNumber</td><td>Label</td><td>N.A</td></tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | UnitNumber | Label | N.A | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| UnitNumber | Label | N.A | | | | | | | |

Rung

| Ifc4 Entity | IfcBuildingElementProxy | | | | | | | | |
|-----------------------------|--|----------------|-------------------------|-------|--------------------|---------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Model Element</td><td>Object</td><td>Generic Models</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | RUNG | | | | | | | | |
| Material | <table border="1"> <thead> <tr><th>Attributes</th><th>Sample Attribute Values</th></tr> </thead> <tbody> <tr><td>Name</td><td>Non-skid aluminium</td></tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Non-skid aluminium | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | Non-skid aluminium | | | | | | | | |

Slot-outlet

| Ifc4 Entity | IfcBuildingElementProxy | | | | | | | | |
|-----------------------------|--|----------------|---------------|-------|-------|---------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>Model Element</td><td>Object</td><td>Generic Models</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Object | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Object | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | SLOTOUTLET | | | | | | | | |

Valve Protection Cover

| Ifc4 Entity | IfcBuildingElementProxy | | | | | | | | |
|-----------------------------|--|----------|---------------|-------|-------|--|--|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| | | | | | | | | | |

| | | | | |
|----------------|----------------------|-------|----------------|-----|
| | Morph | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VALVEPROTECTINGCOVER | | | |

Water Level

| | | | | |
|-----------------------------|-------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | 2D_WATERLINELEVEL | | | |

IfcBurner

Barbecue Pit

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBurner | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OPENFLAMECOOKING | | | |

Cooking Hob

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBurner | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OPENFLAMECOOKING | | | |

Open Flame Appliance

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcBurner | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OPENFLAMECOOKING | | | |

IfcCoolingTower

Cooling Tower

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcCoolingTower | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Access Manhole

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ACCESSMANHOLE | | | |

Chamber Cover

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CHAMBERCOVER | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FinishType | Label | N.A | |
| | Lockable | Boolean | TRUE | |

Covering

| | | | | |
|-----------------------------|------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Hinged Cover

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HINGEDCOVER | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Inspection Chamber Cover

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Slab | Generic Models | N.A |

| | | | |
|------------------------------|---------------------------------------|---|------------------------------------|
| PredefinedType | USERDEFINED | | |
| ObjectType | INSPECTIONCHAMBERCOVER | | |
| Material | Attributes | | Sample Attribute Values |
| | Name | Heavy Duty Cast Iron | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Grade | Label | Grade A2 Sample Value(s): C B |
| ExternalReference | Label | SS30 Manhole tops and surface-box tops PUB/WRN/STD/017A STANDARD INSPECTION CHAMBER FRAME AND COVER | |

Manhole Cover

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Slab | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MANHOLECOVER | | | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS30 Manhole tops and surface-box tops PUB/WRN/STD/015A PUB/WRN/STD/016A STANDARD MEDIUM DUTY MANHOLE FRAME AND COVER | |

PWCS Manhole Cover

| | | | | |
|------------------------------|---------------------------------------|---|-------------------------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Covering | Slab | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PWCSMANHOLECOVER | | | |
| IFC4 UserDefined PropertySet | SGPset_Covering | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Watertight | Boolean | TRUE FALSE | |
| ExternalReference | Label | SS 30 Manhole tops and surface-box tops | | |

Pit Lid

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Morph | Solid | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ACCESSMANHOLE | | | |

Tank Cover

| | | | | |
|-----------------------------|-------------|--|--|--|
| Ifc4 Entity | IfcCovering | | | |
| Proposed BIM Representation | | | | |

| | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Morph</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Morph | Solid | Generic Models | N.A | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|----------------------|---------|--------------|--------------------|---------|--------------|----------|---------|--------------|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | |
| Morph | Solid | Generic Models | N.A | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Covering <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>NonDuplicableKeyLock</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>CorrosionResistant</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>Lockable</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | NonDuplicableKeyLock | Boolean | TRUE FALSE | CorrosionResistant | Boolean | TRUE FALSE | Lockable | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| NonDuplicableKeyLock | Boolean | TRUE FALSE | | | | | | | | | | | |
| CorrosionResistant | Boolean | TRUE FALSE | | | | | | | | | | | |
| Lockable | Boolean | TRUE FALSE | | | | | | | | | | | |

IfcDiscreteAccessory

Benching

| Ifc4 Entity | IfcDiscreteAccessory | | | | | | | | |
|-----------------------------|---|----------------|---------------|-------|-------|---------------|-------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Solid | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Solid | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | BENCHING | | | | | | | | |

Dry Weather Flow

| Ifc4 Entity | IfcDiscreteAccessory | | | | | | | | |
|-----------------------------|---|----------------|---------------|-------|-------|---------------|-------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Solid | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Model Element | Solid | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | DRYWEATHERFLOW | | | | | | | | |

Stainless Steel Bracket

| Ifc4 Entity | IfcDiscreteAccessory | | | | | | | | |
|-----------------------------|---|----------------|-------------------------|-------|-------|-------|-------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Morph</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Morph | Solid | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Morph | Solid | Generic Models | N.A | | | | | | |
| PredefinedType | BRACKET | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | N.A | | | | | | | | |

Stainless Steel Tapered Round Nut

| Ifc4 Entity | IfcDiscreteAccessory | | | | | | | | |
|-----------------------------|---|----------------|-------------------------|-------|-------|-------|-------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Morph</td> <td>Solid</td> <td>Generic Models</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Morph | Solid | Generic Models | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Morph | Solid | Generic Models | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | TAPEREDNUTS | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>N.A</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | |
| Attributes | Sample Attribute Values | | | | | | | | |
| Name | N.A | | | | | | | | |

Abandoned Chamber

| | | | | |
|-----------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_DistributionChamberElementCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Abandoned | |

Access Chamber

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ACCESSCHAMBER | | | |

Air Valve Chamber

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRVALVECHAMBER | | | |

Chamber

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Inspection Chamber

| | | | | |
|-----------------------------|-------------------------------|---|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | INSPECTIONCHAMBER | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Heavy Duty Cast Iron HDPE Sample Value(s): High Density Polyethylene | | |

| | | | |
|--|---|---|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_DistributionChamberElementTypeInspectionChamber | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | WithBackdrop | Boolean | TRUE FALSE |
| | SGPset_DistributionChamberElementDimension | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Length (mm) | Length | N.A |
| | Width (mm) | Length | N.A |
| | Depth (mm) | Length | N.A |
| | TopLevel | Label | N.A |
| | InvertLevel | Label | N.A |
| | Height (mm) | Length | N.A |
| | Diameter (mm) | Length | N.A |
| SGPset_DistributionChamberElement | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| ExternalReference | Label | BS EN 13598-1 Plastics piping systems for non-pressure underground drainage and sewerage. | |

Knock-out Pot

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | KNOCKOUTPOT | | | |

Lightning Pits

| | | | | |
|-----------------------------|-------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LPS_EARTHPIIT | | | |

Manhole

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | MANHOLE | | | |
| ObjectType | N.A | | | |

| | | | |
|-----------------------------|--|------------------|-------------------------------|
| IFC4 Predefined PropertySet | Pset_DistributionChamberElementCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | Status | Label | New Abandoned |

| | | | |
|------------------------------|---|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_DistributionChamberElement | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | HDPELiningwithIntegralAnchorStudAllAr ound | Boolean | TRUE FALSE |
| | WithVortexDrop | Boolean | TRUE FALSE |
| | SGPset_DistributionChamberElementTypeManhole | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | WithBackdrop | Boolean | TRUE FALSE |

| | | | |
|--|---|------------------|-------------------------------|
| | SGPset DistributionChamberElementDimension | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Length (mm) | Length | N.A |
| | Width (mm) | Length | N.A |
| | Depth (mm) | Length | N.A |
| | TopLevel | Label | N.A |
| | InvertLevel | Label | N.A |
| | Height (mm) | Length | N.A |
| | Diameter (mm) | Length | N.A |

Meter Chamber

| | | | | |
|-----------------------------|-------------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Generic Models | N.A |
| PredefinedType | METERCHAMBER | | | |
| ObjectType | N.A | | | |

Sampling Sump

| | | | | |
|------------------------------|--|----------------------|---|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SAMPLINGSUMP | | | |
| IFC4 UserDefined PropertySet | SGPset DistributionChamberElement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 593 Annex P Code of Practice for Pollution Control | |

Screen Chamber

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SCREENCHAMBER | | | |

Sump

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | SUMP | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset DistributionChamberElementDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Length (mm) | Length | N.A | |
| | Width (mm) | Length | N.A | |
| | Depth (mm) | Length | N.A | |
| | TopLevel | Label | N.A | |
| | InvertLevel | Label | N.A | |
| | Height (mm) | Length | N.A | |

| | | | |
|--|---------------|--------|-----|
| | Diameter (mm) | Length | N.A |
|--|---------------|--------|-----|

Trade Effluent Discharge

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SAMPLINGSUMP | | | |
| IFC4 UserDefined PropertySet | SGPset_DistributionChamberElementSamplingSump | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TED_TemperatureOfDischarge (mg/l) | Label | N.A | |
| | TED_Colour (mg/l) | Label | N.A | |
| | TED_PHValue (mg/l) | Label | N.A | |
| | TED_BiochemicalOxygenDemand (mg/l) | Label | N.A | |
| | TED_ChemicalOxygenDemand (mg/l) | Label | N.A | |
| | TED_TotalSuspendedSolid (mg/l) | Label | N.A | |
| | TED_TotalDissolvedSolid (mg/l) | Label | N.A | |
| | TED_Chloride (mg/l) | Label | N.A | |
| | TED_Sulphate (mg/l) | Label | N.A | |
| | TED_Sulphide (mg/l) | Label | N.A | |
| | TED_Cyanide (mg/l) | Label | N.A | |
| | TED_Detergent (mg/l) | Label | N.A | |
| | TED_GreaseAndOil (mg/l) | Label | N.A | |
| | TED_Arsenic (mg/l) | Label | N.A | |
| | TED_Barium (mg/l) | Label | N.A | |
| | TED_Tin (mg/l) | Label | N.A | |
| | TED_Iron (mg/l) | Label | N.A | |
| | TED_Beryllium (mg/l) | Label | N.A | |
| | TED_Boron (mg/l) | Label | N.A | |
| | TED_Manganese (mg/l) | Label | N.A | |
| | TED_PhenolicCompound (mg/l) | Label | N.A | |
| | TED_Cadmium (mg/l) | Label | N.A | |
| | TED_Chromium (mg/l) | Label | N.A | |
| | TED_Copper (mg/l) | Label | N.A | |
| | TED_Lead (mg/l) | Label | N.A | |
| | TED_Mercury (mg/l) | Label | N.A | |
| | TED_Nickel (mg/l) | Label | N.A | |
| | TED_Selenium (mg/l) | Label | N.A | |
| | TED_Silver (mg/l) | Label | N.A | |
| | TED_Zinc (mg/l) | Label | N.A | |
| | TED_MetalsInTotal (mg/l) | Label | N.A | |
| TED_Chlorine (mg/l) | Label | N.A | | |
| TED_Phosphate (mg/l) | Label | N.A | | |
| TED_Calcium (mg/l) | Label | N.A | | |
| TED_Magnesium (mg/l) | Label | N.A | | |
| TED_Nitrate (mg/l) | Label | N.A | | |

Trench

| | | | | |
|-----------------------------|-------------------------------|--------------------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | TRENCH | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Reinforced Concrete | | |

Valve Chamber

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | VALVECHAMBER | | | |
| ObjectType | N.A | | | |

Wash-out Chamber

| | | | | |
|-----------------------------|-------------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcDistributionChamberElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WASHOUTCHAMBER | | | |

IfcEngine

Engine

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcEngine | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcFilter

Oil Filter

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcFilter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | OILFILTER | | | |
| ObjectType | N.A | | | |

Overflow Strainer

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFilter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | STRAINER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Filter | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CorrosionResistant | Boolean | N.A | |

Scrubber

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcFilter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SCRUBBER | | | |

Strainer

| | | | | |
|-----------------------------|-------------------|--------------------------------|----------------------|--------------|
| Ifc4 Entity | IfcFilter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | STRAINER | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Water Filter

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcFilter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | WATERFILTER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_FilterTypeWaterFilter | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WaterFilterType | Label | Sample Value(s): FILTRATION_SAND SOFTENING_ZEOLITE FILTRATION_DIATOMACEOUSEARTH | |

IfcFireSuppressionTerminal

Dividing Breeching

| | | | | |
|-----------------------------|----------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DIVIDINGBREECHING | | | |

Drencher

| | | | | |
|-----------------------------|----------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Mechanical Equipment | N.A |

| | |
|----------------|-------------|
| PredefinedType | USERDEFINED |
| ObjectType | DRENCHER |

Foam Inlet

| | | | | |
|-----------------------------|----------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FOAMINLET | | | |

Water Mist

| | | | | |
|-----------------------------|----------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERMIST | | | |

Water Monitor

| | | | | |
|-----------------------------|----------------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcFireSuppressionTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERMONITOR | | | |

IfcFlowInstrument

Pressure Gauge

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFlowInstrument | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |
| PredefinedType | PRESSUREGAUGE | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_FlowInstrument | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | HighPressureSection (psi) | Real | N.A | |
| LowPressureSection (psi) | Real | N.A | | |

IfcFlowMeter

Electric Meter

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcFlowMeter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |

| | |
|----------------|-------------|
| PredefinedType | ENERGYMETER |
| ObjectType | N.A |

Fuel Meter

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcFlowMeter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FUELMETER | | | |

Gas Meter

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcFlowMeter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |
| PredefinedType | GASMETER | | | |
| ObjectType | N.A | | | |

Submeter

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFlowMeter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |
| PredefinedType | WATERMETER | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_FlowMeterOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Purpose | Label | SUBMETER | |

Vapour Meter

| | | | | |
|-----------------------------|--------------------------|--------------------------------|------------------|--------------|
| Ifc4 Entity | IfcFlowMeter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VAPOURMETER | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Tin Iron | | |

Water Bulk Meter

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcFlowMeter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |
| PredefinedType | WATERMETER | | | |
| ObjectType | N.A | | | |

Water Meter

| | | | | |
|------------------------------|--|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcFlowMeter | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Pipe Accessory | Pipe Accessories | N.A |
| PredefinedType | WATERMETER | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_FlowMeterOccurrence | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Purpose | Label | MASTER SUBMETER PRIVATE | |
| | Pset_EnvironmentallImpactIndicators | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | WaterConsumptionPerUnit (L) | Volume | N.A | |
| IFC4 UserDefined PropertySet | SGPset_FlowMeter | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WaterSupplySource | Label | N.A | |
| | Capacity (L) | Label | N.A | |
| | UnitNumberTag | Boolean | TRUE FALSE | |
| | UnitNumber | Label | N.A | |
| | ConnectionSize (mm) | Length | N.A | |
| | SGPset_FlowMeterDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Diameter (mm) | Length | N.A | |
| | Length (mm) | Length | N.A | |
| | SGPset_FlowMeterTypeWaterMeter | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | MaximumFlowRate (m3/s) | Volumetric FlowRate | N.A | |

IfcGeographicElement

Water Feature

| | | | | |
|-----------------------------|----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcGeographicElement | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERFEATURE | | | |

IfcHeatExchanger

Vaporiser

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcHeatExchanger | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VAPORISER | | | |

Grease Trap

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcInterceptor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | GREASE | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Interceptor | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | MassDensity (mg/l) | Label | In mg/liter | |
| | ExternalReference | Label | BS-EN1825 Grease separators. Principles of design performance and testing marking and quality control ASME A112.14.3 Hydromechanical Grease Interceptors PUB/WRN/STD/040 PUB/WRN/STD/041 STANDARD GREASE TRAP | |
| | CalculatedNS (mm) | Length | N.A | |
| | Fr_OccasionallyOrAlways | Boolean | TRUE FALSE | |
| | Ft_above60degreeC | Boolean | TRUE FALSE | |
| | CalculatedQs (L/s) | Label | N.A | |
| | SGPset_InterceptorDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Height (mm) | Length | N.A | |
| | Width (mm) | Length | N.A | |
| | Length (mm) | Length | N.A | |

Interceptor (Oil and grease)

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcInterceptor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | OIL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_InterceptorDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TopLevel | Label | N.A | |
| | InvertLevel | Label | N.A | |
| | Width (mm) | Length | N.A | |
| | Length (mm) | Length | N.A | |
| | Height (mm) | Length | N.A | |
| | Diameter (mm) | Length | N.A | |

Oil Interceptor

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcInterceptor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | OIL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_InterceptorDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Height (mm) | Length | N.A | |
| Width (mm) | Length | N.A | | |

| | | | |
|--|-------------|--------|-----|
| | Length (mm) | Length | N.A |
|--|-------------|--------|-----|

Portable Grease Trap

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcInterceptor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | GREASE | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Interceptor | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Portable | Boolean | TRUE FALSE | |

IfcPipeFitting

Bend

| | | | | |
|-----------------------------|-------------------|---|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | BEND | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Ductile iron uPVC (SS 213) Sample Value(s): Lined cast iron HDPE (BS EN 1519) Hubless cast iron with epoxy coating (BS EN 877) Polypropylene (BS EN 1451-1) Ductile iron (BS EN 598) | | |

Branch-off

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | JUNCTION | | | |
| ObjectType | N.A | | | |

Drain Channel Bend

| | | | | |
|-----------------------------|------------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRAINCHANNELBEND | | | |

Entry Cap

| | | | | |
|-------------|----------------|--|--|--|
| Ifc4 Entity | IfcPipeFitting | | | |
|-------------|----------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | ENTRY | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | VapourTight | Boolean | TRUE FALSE | |
| | Lockable | Boolean | TRUE FALSE | |

Exit Cap

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | EXIT | | | |
| ObjectType | N.A | | | |

Flange

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | CONNECTOR | | | |
| ObjectType | N.A | | | |

Flange Adaptor

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLANGEADAPTOR | | | |

Flange Joint

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | CONNECTOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | Class K9 | |

Flexible Coupling

| | | | | |
|-----------------------------|----------------|--|--|--|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | | | | |

| | | | | |
|----------------|------------------|----------------------|---------------|--------------|
| | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLEXIBLECOUPLING | | | |

Flexible Joint

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | CONNECTOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset PipeFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | HotDippedGalvanised | Boolean | TRUE FALSE | |

Floor Flange

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | TRANSITION | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset PipeFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WithFlange | Boolean | TRUE FALSE | |

Inspection Opening

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | ENTRY | | | |
| ObjectType | N.A | | | |

Junction

| | | | | |
|-----------------------------|-------------------|--|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | JUNCTION | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | uPVC (SS 213) Sample Value(s): HDPE (BS EN 1519) Hubless cast iron with epoxy coating (BS EN 877) Polypropylene (BS EN 1451-1) Ductile iron (BS EN 598) | | |

Male Adapter

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MALEADAPTER | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeFittingDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Diameter (mm) | Length | N.A | |

Pan Collar

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | TRANSITION | | | |
| ObjectType | N.A | | | |

Pipe Fitting

| | | | | |
|---------------------------------------|---------------------------------------|---|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Metal Ductile Iron Sample Value(s): Vitrified clay | | |
| IFC4 UserDefined PropertySet | SGPset_PipeFitting | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Pre-insulated | Boolean | TRUE FALSE | |
| | CorrosionResistant | Boolean | TRUE FALSE | |
| | HighTemperatureResistant (C) | Label | N.A | |
| | PressureRating (bar) | Label | N.A | |
| | PolyethyleneSleeve | Boolean | TRUE FALSE | |
| | WaterProofingTape | Boolean | TRUE FALSE | |
| | Thickness (mm) | Length | N.A | |
| | WeldedJoint | Boolean | TRUE FALSE | |
| | ProtectiveCoating | Boolean | TRUE FALSE | |
| | CathodicProtection | Boolean | TRUE FALSE | |
| | HeatResistant | Boolean | TRUE FALSE | |
| | SGPset_PipeFittingDimension | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| InnerDiameter (mm) | Length | N.A | | |
| OuterDiameter (mm) | Length | N.A | | |

Pipe Fitting Insulation

| | | | | |
|-----------------------------|----------------|--|--|--|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | | | | |

| | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|-----------------------------|--------------|--------------------------|---------------------|-------|-------------|------------------------|---------|-------|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | |
| Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeFitting <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Insulation_FlameSpreadClass</td> <td>Label</td> <td>Sample Value(s): Class 0</td> </tr> <tr> <td>Insulation_Material</td> <td>Label</td> <td>Foam Rubber</td> </tr> <tr> <td>Insulation_Combustible</td> <td>Boolean</td> <td>FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Insulation_FlameSpreadClass | Label | Sample Value(s): Class 0 | Insulation_Material | Label | Foam Rubber | Insulation_Combustible | Boolean | FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| Insulation_FlameSpreadClass | Label | Sample Value(s): Class 0 | | | | | | | | | | | |
| Insulation_Material | Label | Foam Rubber | | | | | | | | | | | |
| Insulation_Combustible | Boolean | FALSE | | | | | | | | | | | |

Short Piece

| Ifc4 Entity | IfcPipeFitting | | | | | | | | |
|-----------------------------|--|---------------|---------------|-------|-------|--------------|----------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | SHORTPIECE | | | | | | | | |

Spigot and Socket

| Ifc4 Entity | IfcPipeFitting | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|-------------------|--------------|----------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | SPIGOTANDSOCKET | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeFitting <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ExternalReference</td> <td>Label</td> <td>Class K9</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ExternalReference | Label | Class K9 | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ExternalReference | Label | Class K9 | | | | | | | |

Swan Neck

| Ifc4 Entity | IfcPipeFitting | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|-------------------|--------------|----------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeFitting <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ExternalReference</td> <td>Label</td> <td>Drawing 1</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ExternalReference | Label | Drawing 1 | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ExternalReference | Label | Drawing 1 | | | | | | | |

Thermal Pipe Fitting Insulation

| Ifc4 Entity | IfcPipeFitting | | | | | | | | |
|------------------------------|--|---------------|---------------|-------|-------|--------------|----------------|---------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>Pipe Accessory</td> <td>Pipe Fittings</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeFitting | | | | | | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|---|-----------|------------------------|
| ThermalInsulation_Material | Label | N.A |
| ThermalInsulation_Material_MeltingPoint (C) | Label | N.A |

Vertical Grating

| | | | | |
|-----------------------------|-----------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcPipeFitting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | OBSTRUCTION | | | |
| ObjectType | N.A | | | |

IfcPipeSegment

Abandoned Pipe

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Abandoned | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FilledOrGrouted | Label | N.A | |

Air Vent Pipe

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |

Blowdown Discharge Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

Box Culvert

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BOXCULVERT | | | |

Bypass Channel

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BYPASSCHANNEL | | | |

Canal

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | GUTTER | | | |
| ObjectType | N.A | | | |

Channel

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CHANNEL | | | |

Common Channel

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CHANNEL | | | |

Culvert

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | CULVERT | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| | Status | Label | Existing |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Footpath | Boolean | TRUE FALSE |
| | LoadBearing | Boolean | TRUE FALSE |
| | MaintainedByOwner | Boolean | TRUE FALSE |
| | Shared | Boolean | TRUE FALSE |
| | ConstructionMethod | Label | Improvement |
| | SGPset_PipeSegmentDimension | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Width (mm) | Length | N.A |
| | Length (mm) | Length | N.A |
| | Height (mm) | Length | N.A |
| | Thickness (mm) | Length | N.A |

Drain

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | GUTTER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegmentDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Width (mm) | Length | N.A | |
| | Thickness (mm) | Length | N.A | |
| | Length (mm) | Length | N.A | |

Drain-line

| | | | | |
|-----------------------------|-------------------|--|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Ductile iron Sample Value(s): Vitrified clay HDPE | | |

Drain-off Discharge Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

Drainage Pipe

| | | | | |
|-------------|----------------|--|--|--|
| Ifc4 Entity | IfcPipeSegment | | | |
|-------------|----------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlowRate (L/min) | Volumetric FlowRate | Sample Value(s): 600 L/min | |

Entrance Culvert

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ENTRANCECULVERT | | | |

Existing Sewerage

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Existing | |

Filling Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

Flare Stack

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FLARESTACK | | | |

Flexible Pipe

| | | | | |
|-----------------------------|----------------|--|--|--|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | | | | |

| | | | | |
|----------------|-----------------|----------------------|--------------|--------------|
| | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Flexible Pipe | Flex Pipes | N.A |
| PredefinedType | FLEXIBLESEGMENT | | | |
| ObjectType | N.A | | | |

Flexible Sprinkler Dropper

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Flexible Pipe | Flex Pipes | N.A |
| PredefinedType | FLEXIBLESEGMENT | | | |
| ObjectType | N.A | | | |

Gutter

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|---|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | GUTTER | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Existing Sample Value(s): New | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | MaintainedByOwner | Boolean | TRUE FALSE | |
| | Shared | Boolean | TRUE FALSE | |
| | ConstructionMethod | Label | Improvement Reconstruction Sample Value(s): Reconstruction | |
| | RoughnessCoefficient | Label | N.A | |
| | CatchmentArea (m2) | Area | N.A | |
| | SGPset_PipeSegmentDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Width (mm) | Length | N.A | |
| | Length (mm) | Length | N.A | |
| | Height (mm) | Length | N.A | |
| | Thickness (mm) | Length | N.A | |

Inlet Pipe

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

New Drain-line

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New | |

New Sewerage

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | New | |

Non-combustible Pipe

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Combustible | Boolean | FALSE | |
| Material_MeltingPoint (C) | Label | N.A | | |

Open Drain

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | GUTTER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | N.A | |

Outlet Pipe

| | | | | |
|-------------|----------------|--|--|--|
| Ifc4 Entity | IfcPipeSegment | | | |
|-------------|----------------|--|--|--|

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

Overflow Discharge Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

Overflow Pipe

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Perforated Pipe

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Perforated | Boolean | TRUE FALSE | |

Perimeter Overflow

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | GUTTER | | | |
| ObjectType | N.A | | | |

Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| PredefinedType | RIGIDSEGMENT | | |
| ObjectType | N.A | | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | InnerDiameter (mm) | Length | N.A |
| | OuterDiameter (mm) | Length | N.A |
| IFC4 UserDefined PropertySet | SGPset_PipeSegmentDimension | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Length (mm) | Length | N.A |
| | InnerDiameter (mm) | Length | N.A |
| | OuterDiameter (mm) | Length | N.A |
| Gradient | Label | N.A | |

Pipe Insulation

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Insulation_FlameSpreadClass | Label | Sample Value(s): Class 0 | |
| | Insulation_Material | Label | Foam Rubber | |
| Insulation_Combustible | Boolean | FALSE | | |

Pipe Outlet

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Pipe Segment

| | | | | |
|-----------------------------|-------------------|---|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Metal Stainless Steel Vitrified Clay BS EN 295 Ductile iron Cast iron uPVC (SS 272) uPVC (SS 213) Paint Polyethylene Sample Value(s): Ductile Iron BS EN 598 Polymer Concrete BS EN 14636 Reinforced Concrete BS EN 1916 Reinforced Concrete SS183 RC pipe Vitrified clay uPVC HDPE (BS EN 1519) Polymer concrete (BS EN 14636) Reinforced Concrete (RC) (SS | | |

| | | | |
|------------------------------|---------------------------------------|--|--|
| | | 183/BS EN 1916) Vitriified Clay (BS EN 295) Ductile iron (BS EN 598) Hubless cast iron with epoxy coating (BS EN 877) Polypropylene (BS EN 1451-1) | |
| IFC4 Predefined PropertySet | Pset_PipeSegmentTypeCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | Status | Label | Existing New <i>Sample Value(s):</i> New |
| | WorkingPressure (psi) | Real | N.A |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Pre-insulated | Boolean | TRUE FALSE |
| | CalculatedQapproved (L/s) | Label | N.A |
| | CalculatedDN (DUs- litres/second) | Label | in mm |
| | CorrosionResistant | Boolean | TRUE FALSE |
| | HighTemperatureResistant (C) | Label | N.A |
| | PressureRating (bar) | Label | N.A |
| | ExternalReference | Label | BS EN 295 Vitriified clay pipe systems for drains and sewers |
| | PolyethyleneSleeve | Boolean | TRUE FALSE |
| | WaterProofingTape | Boolean | TRUE FALSE |
| | Thickness (mm) | Length | N.A |
| | ConstructionMethod | Label | Direct pipe jacking |
| | AnfiCorrosionProtection | Boolean | TRUE FALSE |
| | DesignedAgainstLongTermCorrosion | Boolean | TRUE FALSE |
| | InternalLiner (mm) | Length | CAC/HDPE |
| | Combustible | Boolean | TRUE FALSE |
| | FireRating (hr) | Label | N.A |
| ProtectiveCoating | Boolean | TRUE FALSE | |
| CathodicProtection | Boolean | TRUE FALSE | |
| HeatResistant | Boolean | TRUE FALSE | |

Pipe Segment

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Rain Water Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

Rainwater Outlet

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RAINWATEROUTLET | | | |

Roof Gutter

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | GUTTER | | | |
| ObjectType | N.A | | | |

Scupper Drain

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SCUPPERDRAIN | | | |

Short Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | SPOOL | | | |
| ObjectType | N.A | | | |

Surface Drain

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | GUTTER | | | |
| ObjectType | N.A | | | |

Thermal Pipe Insulation

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PipeSegment | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ThermalInsulation_Material | Label | N.A | |
| | ThermalInsulation_Material_MeltingPoint (C) | Label | N.A | |

Vent Pipe

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|----------------|--------------|------|-------|-----|
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | RIGIDSEGMENT | | | |
| ObjectType | N.A | | | |

Warning Pipe

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Washout Pipe

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Weep Hole

| | | | | |
|-----------------------------|------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPipeSegment | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcPump

Chemical Appliance

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Pump

| | | | | |
|-----------------------------|------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

| | | | |
|------------------------------|---------------------------------------|---------------------|-------------------------------|
| IFC4 Predefined PropertySet | Pset_PumpOccurrence | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | BaseType | Label | FRAME |
| IFC4 UserDefined PropertySet | SGPset_Pump | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | WorkingPressure (psi) | Real | N.A |
| | Duty | Boolean | TRUE FALSE |
| | FlowRate (m3/s) | Volumetric FlowRate | N.A |

Submersible Pump

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe | Pipe | Pipes | N.A |
| PredefinedType | SUBMERSIBLEPUMP | | | |
| ObjectType | N.A | | | |

Sump Pump

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcPump | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Pump | Mechanical Equipment | N.A |
| PredefinedType | SUMPPUMP | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Pump | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Standby | Boolean | TRUE FALSE | |
| | Duty | Boolean | TRUE FALSE | |
| | Capacity (L) | Label | N.A | |
| | FlowRate (m3/s) | Volumetric FlowRate | N.A | |
| | InternalSurfaceArea (m2) | Area | N.A | |
| StandbyGenerator | Boolean | TRUE FALSE | | |

IfcRailing

Backguard

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BACKGUARD | | | |

Guardrail

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | N.A |

| | |
|----------------|-----------|
| PredefinedType | GUARDRAIL |
| ObjectType | N.A |

IfcSanitaryTerminal

Ambulant Disabled Urinal

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | URINAL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AmbulantDisabled | Boolean | TRUE FALSE | |

Ambulant Disabled Water Closet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERCLOSET | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AmbulantDisabled | Boolean | TRUE FALSE | |

Bathtub

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | BATH | | | |
| ObjectType | N.A | | | |

Bidet

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | BIDET | | | |
| ObjectType | N.A | | | |

Breeching Inlet

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Equipment | Plumbing Fixtures | N.A |

| | |
|----------------|----------------|
| PredefinedType | USERDEFINED |
| ObjectType | BREECHINGINLET |

Chemical Appliance

| | | | | |
|-----------------------------|---------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Child Urinal

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | URINAL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset SanitaryTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ChildrenFriendly | Boolean | TRUE FALSE | |

Fixture

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Fogger

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FOGGER | | | |

Hot Tub Shower

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Hydropool Shower

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Hydrotherapy Pool Shower

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Jacuzzi Shower

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Mister

| | | | | |
|-----------------------------|---------------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fire Protection | Mechanical Equipment | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MISTER | | | |

Onsen Pool Shower

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Plumbing Fixture

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Pool Shower

| | | | | |
|-------------|---------------------|--|--|--|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
|-------------|---------------------|--|--|--|

| | | | | |
|-----------------------------|--------------------|----------------------|-------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Sanitary Fixture

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Sanitary Terminal

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Shower

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WithPlug | Boolean | TRUE FALSE | |

Shower Point

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Sink

| | | | | |
|------------------------------|--|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SINK | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminalTypeSink | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|--------------------------------|
| SinkType | Label | RINSING VEGETABLEPREPARATION |

SGPset_SanitaryTerminal

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| Siphoning | Boolean | TRUE FALSE |

Skimmer

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | POOLSKIMMER | | | |

Spa Pool Shower

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Sprinkler

| Ifc4 Entity | IfcSanitaryTerminal | | | |
|------------------------------|--------------------------------|----------------------|----------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Terminal | Sprinkler | Sprinklers | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SPRINKLER | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FlowRate (L/min) | Volumetric FlowRate | Sample Value(s): 600 L/min | |

Urinal

| Ifc4 Entity | IfcSanitaryTerminal | | | |
|------------------------------|--|----------------------|------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | URINAL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminalTypeUrinal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Mounting | Label | WALLHUNG | |
| Waterless | Boolean | TRUE FALSE | | |

Wading Pool Shower

| | | | | |
|-------------|---------------------|--|--|--|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
|-------------|---------------------|--|--|--|

| | | | | |
|-----------------------------|--------------------|----------------------|-------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

Wash Basin

| | | | | |
|------------------------------|---|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Drains&Basins | Plumbing Fixtures | N.A |
| PredefinedType | WASHHANDBASIN | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ChildrenFriendly | Boolean | TRUE FALSE | |
| | SGPset_SanitaryTerminalTypeWashHandBasin | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Mounting | Label | COUNTERTOP | |

Water Closet

| | | | | |
|------------------------------|---|----------------------|---|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERCLOSET | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |
| | FlushVolume (DUs- litres/second) | Label | in liters | |
| | ExternalReference | Label | SS574 Specification for dual flush low capacity water closet (WC) up to 4.5/3.0 litres capacity | |
| | ReducedFlushVolume (L) | Label | N.A | |
| | FullFlushVolume (L) | Label | N.A | |
| | IsSingleFlush | Boolean | TRUE FALSE | |
| | ChildrenFriendly | Boolean | TRUE FALSE | |
| | SGPset_SanitaryTerminalTypeWaterCloset | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PanMounting | Label | PEDESTAL | |
| ToiletPanType | Label | SQUAT | | |

Waterless Urinal

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | URINAL | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SanitaryTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |

| | | | |
|--|-------------------|-------|---|
| | ExternalReference | Label | ASME A112.19.19 Vitreous China Nonwater Urinals |
|--|-------------------|-------|---|

Whirlpool Shower

| | | | | |
|-----------------------------|---------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcSanitaryTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | SHOWER | | | |
| ObjectType | N.A | | | |

IfcSensor

Leak Sensor

| | | | | |
|-----------------------------|-----------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | LEAKSENSOR | | | |

Level Sensor

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Electrical Fixtures | N.A |
| PredefinedType | LEVELSENSOR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Sensor | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReactionTime | Label | N.A | |

Overflow Warning Alarm

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | FLOWSENSOR | | | |
| ObjectType | N.A | | | |

PH Monitoring Device

| | | | | |
|-----------------------------|-----------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Generic Models | N.A |
| PredefinedType | PHSENSOR | | | |
| ObjectType | N.A | | | |

VOC Monitoring System

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | GASSENSOR | | | |
| ObjectType | N.A | | | |

Warning Alarm

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | FLOWSENSOR | | | |
| ObjectType | N.A | | | |

Water Level Sensing Device

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcSensor | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | LEVELSENSOR | | | |
| ObjectType | N.A | | | |
| Ifc4 UserDefined PropertySet | SGPset_Sensor | | | |
| | Ifc4 UserDefined Property Name | Data Type | Sample Property Values | |
| | IndependentPowerSupply | Boolean | TRUE FALSE | |
| | AC (Volt) | Real | N.A | |
| | DC (Volt) | Real | N.A | |

IfcSolarDevice

Solar Water Heater

| | | | | |
|-----------------------------|-----------------|----------------------|----------------------|--------------|
| Ifc4 Entity | IfcSolarDevice | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | SOLARCOLLECTOR | | | |
| ObjectType | N.A | | | |

IfcStackTerminal

Cowl

| | | | | |
|-----------------------------|------------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcStackTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |

| | |
|----------------|------|
| PredefinedType | COWL |
| ObjectType | N.A |

Vent Cap

| | | | | |
|-----------------------------|------------------|----------------------|---------------|--------------|
| Ifc4 Entity | IfcStackTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Fitting | Pipe Accessory | Pipe Fittings | N.A |
| PredefinedType | COWL | | | |
| ObjectType | N.A | | | |

IfcTank

Backwash Water Holding Tank

| | | | | |
|-----------------------------|--------------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BACKWASHWATERHOLDINGTANK | | | |

Balancing Tank

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BALANCINGTANK | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TradeEffluent | Boolean | TRUE FALSE | |
| | AquaticFacility | Boolean | TRUE FALSE | |
| | ExternalReference | Label | SS 593 Annex P Code of Practice for Pollution Control | |
| | NoBackflowThroughOverflowPipe | Boolean | TRUE FALSE | |
| OverflowPipeAsWarningDevice | Boolean | TRUE FALSE | | |

Blowdown Tank

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BLOWDOWN | | | |

Chemical Tank

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | STORAGE | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|---------------------------------------|
| ObjectType | N.A | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | StorageType | Label | CHEMICAL |
| | NominalCapacity | Real | N.A |
| IFC4 UserDefined PropertySet | SGPset_Tank | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | ChemicalType | Label | Sample Value(s): Boric Acid Cyanide |
| | StateofMatter | Label | Sample Value(s): Gas Liquid Solid |

Containment Facility

| | | | | |
|-----------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Plumbing Fixtures | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |

Day Tank

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Steel | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalCapacity | Real | Sample Value(s): 1000 L | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FuelType | Label | DIESEL | |

Detention Tank

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalCapacity | Real | N.A | |

| | | | |
|---------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_Tank | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | IsPotable | Boolean | TRUE FALSE |
| | SGPset_TankDimension | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Width (mm) | Length | N.A |
| Length (mm) | Length | N.A | |
| Height (mm) | Length | N.A | |

Dilution Tank

| | | | | |
|---------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DILUTIONTANK | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TradeEffluent | Boolean | TRUE FALSE | |

Ejector Tank

| | | | | |
|--------------------------------|-----------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EJECTORTANK | | | |

Fertilizer Storage

| | | | | |
|--------------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Plumbing Fixtures | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | StorageType | Label | Fertilizer | |

Fuel Tank

| | | | | |
|--------------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |

| | | | |
|------------------------------|---------------------------------------|------------------|---------------------------------------|
| | StorageType | Label | FUEL |
| | NominalCapacity | Real | N.A |
| IFC4 UserDefined PropertySet | SGPset_Tank | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | FuelType | Label | Sample Value(s): Diesel LPG |
| | StateofMatter | Label | Sample Value(s): Gas Liquid Solid |
| | ProtectiveCoating | Boolean | TRUE FALSE |
| | CathodicProtection | Boolean | TRUE FALSE |
| | CorrosionResistant | Boolean | TRUE FALSE |

Gas Tank

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | StorageType | Label | GAS | |

Hazardous Substances

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | HazardousSubstances | Boolean | TRUE FALSE | |
| | HazardousSubstancesMass | Real | N.A | |

Hazardous Waste

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | HazardousWaste | Boolean | TRUE FALSE | |

Holding Tank

| | | | | |
|-----------------------------|---------|--|--|--|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | | | | |

| | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
|----------------|---|-------------------|---------------|-------|-------|----------------|-----------|-------------------|-----|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Flow Equipment | Equipment | Plumbing Fixtures | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | HOLDINGTANK | | | | | | | | |

Industrial Waste Storage

| Ifc4 Entity | IfcTank | | | | | | | | |
|-------------------------------|--|-------------------------------|---------------|------------------------|-------------|--------|--------|-------------------|-----|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Object</td> <td>Object</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Object | Plumbing Fixtures | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Object | Object | Plumbing Fixtures | N.A | | | | | | |
| PredefinedType | STORAGE | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_TankTypeCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>StorageType</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | StorageType | Label | N.A | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | |
| StorageType | Label | N.A | | | | | | | |

LPG Cylinder

| Ifc4 Entity | IfcTank | | | | | | | | | | | | |
|--------------------------------|--|--|---------------|------------------------|----------------------|----------------|-----------------------|----------------------|-------|--|---------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | |
| Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | | | | | |
| PredefinedType | PRESSUREVESSEL | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_TankTypeCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>OperatingWeight (kg)</td> <td>Real</td> <td>Sample Value(s): 15kg</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | OperatingWeight (kg) | Real | Sample Value(s): 15kg | | | | | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| OperatingWeight (kg) | Real | Sample Value(s): 15kg | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_Tank</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>FuelType</td> <td>Label</td> <td>LPG</td> </tr> <tr> <td>ExternalReference</td> <td>Label</td> <td>SS 99 Welded low carbon steel cylinders for storage and transportation of compressed liquefied gases</td> </tr> <tr> <td>Standby</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | FuelType | Label | LPG | ExternalReference | Label | SS 99 Welded low carbon steel cylinders for storage and transportation of compressed liquefied gases | Standby | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| FuelType | Label | LPG | | | | | | | | | | | |
| ExternalReference | Label | SS 99 Welded low carbon steel cylinders for storage and transportation of compressed liquefied gases | | | | | | | | | | | |
| Standby | Boolean | TRUE FALSE | | | | | | | | | | | |

Oil Tank

| Ifc4 Entity | IfcTank | | | | | | | | | |
|--------------------------------|---|--|---------------|------------------------|-------------|----------------|--|-------------------|------|-----|
| Proposed BIM Representation | <table border="1"> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Plumbing Fixtures | N.A | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Flow Equipment | Equipment | Plumbing Fixtures | N.A | | | | | | | |
| PredefinedType | STORAGE | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_TankTypeCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>StorageType</td> <td>Label</td> <td>OIL</td> </tr> <tr> <td>NominalCapacity</td> <td>Real</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | StorageType | Label | OIL | NominalCapacity | Real | N.A |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| StorageType | Label | OIL | | | | | | | | |
| NominalCapacity | Real | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_Tank</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>OilType</td> <td>Label</td> <td>Sample Value(s): Lubricant Oil Hydraulic Oil</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | OilType | Label | Sample Value(s): Lubricant Oil Hydraulic Oil | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| OilType | Label | Sample Value(s): Lubricant Oil Hydraulic Oil | | | | | | | | |

| | | | |
|--|---------------|-------|---------------------------------------|
| | StateofMatter | Label | Sample Value(s): Gas Liquid Solid |
|--|---------------|-------|---------------------------------------|

Pesticide Storage

| Ifc4 Entity | IfcTank | | | | | | | | |
|-------------------------------|---|-------------------------------|---------------|------------------------|-------------|--------|-----------|-------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Object</td> <td>Object</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Object | Object | Plumbing Fixtures | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Object | Object | Plumbing Fixtures | N.A | | | | | | |
| PredefinedType | STORAGE | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>StorageType</td> <td>Label</td> <td>Pesticide</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | StorageType | Label | Pesticide | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | |
| StorageType | Label | Pesticide | | | | | | | |

Rainwater Tank

| Ifc4 Entity | IfcTank | | | | | | | | |
|-----------------------------|--|----------------------|---------------|-------|-------|----------------|-----------|----------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Mechanical Equipment</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Mechanical Equipment | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Flow Equipment | Equipment | Mechanical Equipment | N.A | | | | | | |
| PredefinedType | VESSEL | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Recharge well

| Ifc4 Entity | IfcTank | | | | | | | | |
|-----------------------------|---|-------------------|---------------|-------|-------|----------------|-----------|-------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Flow Equipment | Equipment | Plumbing Fixtures | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | RECHARGEWELL | | | | | | | | |

Sampling Tank

| Ifc4 Entity | IfcTank | | | | | | | | |
|--------------------------------|--|---|---------------|------------------------|-------------------|----------------|---|-------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Flow Equipment | Equipment | Plumbing Fixtures | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | SAMPLINGTANK | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ExternalReference</td> <td>Label</td> <td>SS 593 Annex P Code of Practice for Pollution Control</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ExternalReference | Label | SS 593 Annex P Code of Practice for Pollution Control | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ExternalReference | Label | SS 593 Annex P Code of Practice for Pollution Control | | | | | | | |

Storage Tank

| Ifc4 Entity | IfcTank | | | | | | | | |
|-----------------------------|---|-------------------|---------------|-------|-------|----------------|-----------|-------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Flow Equipment</td> <td>Equipment</td> <td>Plumbing Fixtures</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Flow Equipment | Equipment | Plumbing Fixtures | N.A | | | | | | |
| PredefinedType | STORAGE | | | | | | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| ObjectType | N.A | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values |
| | StorageType | Label | FUEL |
| IFC4 UserDefined PropertySet | SGPset_Tank | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | FuelType | Label | Diesel |

Surge Tank

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SURGETANK | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AquaticFacility | Boolean | TRUE FALSE | |

Tank

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Metal | |
| IFC4 UserDefined PropertySet | SGPset_TankDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Width (mm) | Length | N.A | |
| | Length (mm) | Length | N.A | |
| | Height (mm) | Length | N.A | |
| | Diameter (mm) | Length | N.A | |

Temporary Holding Tank

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HOLDINGTANK | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Temporary | |

Waste Storage

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Object | Object | Plumbing Fixtures | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | StorageType | Label | Waste | |

Water Tank

| | | | | |
|------------------------------|---------------------------------------|--------------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | STORAGE | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalCapacity | Real | Sample Value(s): 40 m3 | |
| | StorageType | Label | WATER | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | BoltWithStainlessSteelBracket | Boolean | TRUE FALSE | |
| | FasternWithStainlessSteelFasteners | Boolean | TRUE FALSE | |
| | Watertight | Boolean | TRUE FALSE | |
| | CorrosionResistant | Boolean | TRUE FALSE | |
| | WaterSealant | Boolean | TRUE FALSE | |
| | OneDayRequirement (L) | Label | N.A | |
| | VerticalLifeline | Boolean | TRUE FALSE | |
| | AnchorPoint | Boolean | TRUE FALSE | |
| FireRating (hr) | Label | Sample Value(s): 1 hr | | |
| StorageDuration (mins) | Label | Sample Value(s): 30 mins | | |

Water Tank (Potable Water)

| | | | | |
|------------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | POTABLEWATER | | | |
| IFC4 Predefined PropertySet | Pset_TankTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | NominalCapacity | Real | N.A | |
| IFC4 UserDefined PropertySet | SGPset_TankDimension | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| Height (mm) | Length | N.A |
| Diameter (mm) | Length | N.A |
| Thickness (mm) | Length | N.A |

Water Tank (Sectional)

| | | | | |
|-----------------------------|-------------------|--------------------------------|-------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SECTIONAL | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |

Water Trough

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcTank | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Flow Equipment | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | BASIN | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Tank | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ContinuousUse | Boolean | TRUE FALSE | |

IfcValve

Air Admittance Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRADMITTANCE | | | |

Air Intake Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRINTAKEVALVE | | | |

Air Valve

| | | | | |
|-----------------------------|----------|--|--|--|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | | | | |

| | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | |
|--------------------------------|--|--------------------------------|---------------|------------------------|-------------|--------------------------|-------|--------------------|---------|--------------|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | | |
| PredefinedType | AIRRELEASE | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_Valve</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>OrificeType</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>WithIsolatingValve</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | OrificeType | Label | N.A | WithIsolatingValve | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| OrificeType | Label | N.A | | | | | | | | |
| WithIsolatingValve | Boolean | TRUE FALSE | | | | | | | | |

Anti-vacuum Relief Valve

| Ifc4 Entity | IfcValve | | | | | | | | |
|-----------------------------|--|------------------|---------------|-------|-------|--------------------------|-------|------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | ANTIVACUUM | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Anti-vacuum Valve

| Ifc4 Entity | IfcValve | | | | | | | | |
|-----------------------------|--|------------------|---------------|-------|-------|--------------------------|-------|------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | ANTIVACUUM | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Ball Valve

| Ifc4 Entity | IfcValve | | | | | | | | | |
|-------------------------------|--|-------------------------------|---------------|------------------------|----------------|--------------------------|-------|-----------------------|------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | | |
| PredefinedType | GASTAP | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| IFC4 Predefined PropertySet | <p>Pset_ValveTypeCommon</p> <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ValveMechanism</td> <td>Label</td> <td>BALL</td> </tr> <tr> <td>WorkingPressure (psi)</td> <td>Real</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | ValveMechanism | Label | BALL | WorkingPressure (psi) | Real | N.A |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| ValveMechanism | Label | BALL | | | | | | | | |
| WorkingPressure (psi) | Real | N.A | | | | | | | | |

Change-over Valve

| Ifc4 Entity | IfcValve | | | | | | | | |
|-----------------------------|--|------------------|---------------|-------|-------|--------------------------|-------|------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | CHANGEOVER | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Check Valve

| | |
|-----------------------------|----------|
| Ifc4 Entity | IfcValve |
| Proposed BIM Representation | |

| | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
|-------------------------------|---|-------------------------------|---------------|------------------------|----------------|--------------------------|-------|------------------|-----|
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | CHECK | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon <table border="1"> <thead> <tr> <th>IFC4 Predefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ValveMechanism</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | IFC4 Predefined Property Name | Data Type | Sample Property Values | ValveMechanism | Label | N.A | | |
| IFC4 Predefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ValveMechanism | Label | N.A | | | | | | | |

Chemical Appliance

| Ifc4 Entity | IfcValve | | | | | | | | |
|-----------------------------|--|------------------|---------------|-------|-------|--------------------------|-------|------------------|-----|
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| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | Need not specify | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Double Check Valve

| Ifc4 Entity | IfcValve | | | | | | | | |
|-----------------------------|--|------------------|---------------|-------|-------|--------------------------|-------|------------------|-----|
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| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | DOUBLECHECK | | | | | | | | |
| ObjectType | N.A | | | | | | | | |

Drain Plug

| Ifc4 Entity | IfcValve | | | | | | | | |
|-----------------------------|--|------------------|---------------|-------|-------|--------------------------|-------|------------------|-----|
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| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | DRAINOFFCOCK | | | | | | | | |

Drain-out Test Cock

| Ifc4 Entity | IfcValve | | | | | | | | |
|-----------------------------|--|------------------|---------------|-------|-------|--------------------------|-------|------------------|-----|
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| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | DRAINOFFCOCK | | | | | | | | |

Draining Valve

| Ifc4 Entity | IfcValve | | | | | | | | |
|-----------------------------|--|------------------|---------------|-------|-------|--------------------------|-------|------------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Pipe In-line Flow Device</td> <td>Valve</td> <td>Pipe Accessories</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| Pipe In-line Flow Device | Valve | Pipe Accessories | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | DRAINOFFCOCK | | | | | | | | |

Draw-off Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRAINOFFCOCK | | | |

Emergency Shut-off Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | SAFETYCUTOFF | | | |
| ObjectType | N.A | | | |

Faucet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | FAUCET | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Lockable | Boolean | TRUE FALSE | |
| | FlowRate (m3/s) | Volumetric FlowRate | N.A | |
| | BatteryOperated | Boolean | TRUE FALSE | |
| | ChargeableBatteryOperated | Boolean | TRUE FALSE | |
| | SGPset_ValveTypeFaucet | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FaucetOperation | Label | TIMEDSELF CLOSING | |
| | FaucetType | Label | SPRAY | |

Float Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | ISOLATING | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveOperation | Label | N.A | |

Float Valve

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|-----------------------------|--------------------------------------|------------------|-------------------------------|-----|
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | GASTAP | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveOperation | Label | FLOAT | |

Flush Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | FLUSHING | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Size (mm) | Length | N.A | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | VacuumBreaker | Boolean | TRUE FALSE | |
| | SensorOperated | Boolean | TRUE FALSE | |
| ManualOverride | Boolean | TRUE FALSE | | |

Gas Regulating Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| IFC4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | GASCOCK | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | SS 281 Pressure regulators for liquefied petroleum gases | |

Gas Tap Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| IFC4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | GASTAP | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveOperation | Label | LEVER WHEEL | |

Gate Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | ISOLATING | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveMechanism | Label | N.A | |

Hydrostatic Relief Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HYDROSTATICRELIEF | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | UL 132 Standard for Safety Safety Relief Valves for Anhydrous Ammonia and LP-Gas | |

Infill Point

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | INFILLPOINT | | | |

Isolating Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | ISOLATING | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveMechanism | Label | N.A | |

Landing Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |

| | |
|------------|--------------|
| ObjectType | LANDINGVALVE |
|------------|--------------|

Magnetic Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | GASTAP | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveOperation | Label | SOLENOID | |

Mixing Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | MIXING | | | |
| ObjectType | N.A | | | |

Muzzle operated device

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveOperation | Label | N.A | |

Pilot Reducing Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PILOTREDUCING | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | NonModulatingType | Boolean | TRUE FALSE | |

Pressure Reducing Valve

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|------------------------------|---|------------------|-------------------------------|-----|
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | PRESSUREREDUCING | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | WorkingPressure (psi) | Real | N.A | |
| IFC4 UserDefined PropertySet | SGPset_ValveTypePressureReducing | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | DownstreamPressure (bar) | Label | N.A | |

Pressure Relief Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | PRESSURERELIEF | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ValveTypePressureRelief | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReliefPressure (psi) | Real | N.A | |

Reflux Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | REFLUXVALVE | | | |

Regulating Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | REGULATING | | | |
| ObjectType | N.A | | | |

Sampling Tap

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | FAUCET | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Lockable | Boolean | TRUE FALSE | |

Shut-off Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveOperation | Label | DROPWEIGHT | |

Shut-off Valve

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | ISOLATING | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | FireSuppressionActivated | Boolean | TRUE FALSE | |

Stop Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | ISOLATING | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveMechanism | Label | N.A | |

Stopcock

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | STOPCOCK | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Handle | Boolean | TRUE FALSE | |

Tee-check Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | GASTAP | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValvePattern | Label | STRAIGHT_3_PORT | |

Terminal Draw Off

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRAINOFFCOCK | | | |

Thermostatic Valve

| | | | | |
|-----------------------------|--------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | GASTAP | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | ValveOperation | Label | THERMOSTATIC | |

Vacuum Breaker

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | ANTIVACUUM | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | IntegratedCheckValve | Boolean | TRUE FALSE | |

Valve

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| IFC4 UserDefined PropertySet | SGPset_Valve | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | WithLockingDevice | Boolean | TRUE FALSE |

Water Supply Outlet

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | FAUCET | | | |
| ObjectType | N.A | | | |
| IFC4 Predefined PropertySet | Pset_ValveTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Permanent | |
| IFC4 UserDefined PropertySet | SGPset_Valve | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | QuickCouplerType | Boolean | TRUE FALSE | |

Water Tap

| | | | | |
|-----------------------------|--------------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcValve | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Valve | Pipe Accessories | N.A |
| PredefinedType | FAUCET | | | |
| ObjectType | N.A | | | |

IfcWasteTerminal

Drain Plug

| | | | | |
|-----------------------------|--------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRAINPLUG | | | |

Drop-inlet Chamber

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe In-line Flow Device | Equipment | Plumbing Fixtures | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DROPINLETCHAMBER | | | |
| IFC4 UserDefined PropertySet | SGPset_WasteTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | Drawing No. 5 LTA/SDRE14/2/DRA6 STANDARD DETAILS OF ROAD ELEMENTS | |

Fitting Trap

| | | | | |
|-----------------------------|--------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | WASTETRAP | | | |
| ObjectType | N.A | | | |

Floor Trap

| | | | | |
|------------------------------|---------------------------------------|--|-------------------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | FLOORTRAP | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | uPVC (SS 272) uPVC (SS 213) Sample Value(s): HDPE (BS EN 1519) Ductile iron (BS EN 598) Hubless cast iron with epoxy coating (BS EN 877) Polypropylene (BS EN 1451-1) | | |
| IFC4 Predefined PropertySet | Pset_WasteTerminalTypeCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | Status | Label | Permanent | |
| IFC4 UserDefined PropertySet | SGPset_WasteTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WithApprovedSeal | Boolean | TRUE FALSE | |
| | IsBolted | Boolean | TRUE FALSE | |
| | IsScrewed | Boolean | TRUE FALSE | |

Floor Waste

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | FLOORWASTE | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_WasteTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AntiMosquitoDevice | Boolean | TRUE FALSE | |

Gully Sump

| | | | | |
|-----------------------------|--------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | GULLYSUMP | | | |

| | |
|------------|-----|
| ObjectType | N.A |
|------------|-----|

Gully Trap

| | | | | |
|-----------------------------|--------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | GULLYTRAP | | | |
| ObjectType | N.A | | | |

Return Inlet

| | | | | |
|-----------------------------|--------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RETURNINLET | | | |

Sanitary Fixture

| | | | | |
|-----------------------------|--------------------|----------------------|-------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Plumbing Fixtures | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Shallow Floor Trap

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SHALLOWFLOORTRAP | | | |
| IFC4 UserDefined PropertySet | SGPset_WasteTerminal | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ExternalReference | Label | BS EN 1253-1 Gullies for buildings. Requirements BS EN 1253-2 Gullies for buildings. Test methods | |
| | PassageClearance (mm) | Length | N.A | |
| | WaterSealCompartment (mm) | Length | N.A | |

Waste Sump

| | | | | |
|-----------------------------|--------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WASTESUMP | | | |

Waste Terminal

| | | | | |
|-----------------------------|--------------------|----------------------|------------------|--------------|
| Ifc4 Entity | IfcWasteTerminal | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Pipe Flow Terminal | Fixture | Pipe Accessories | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

STRUCTURAL ELEMENTS

IfcBeam

Beam

| | | | | |
|------------------------------|---------------------------------------|----------------------|--|--------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Beam | Beam | Structural Framing | Beam |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | MET Reinforced Concrete Steel | |
| IFC4 Predefined PropertySet | Pset_BeamCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE FALSE | |
| IFC4 UserDefined PropertySet | SGPset_BeamDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Depth (mm) | Length | N.A | |
| | Width (mm) | Length | N.A | |
| | SGPset_SteelConnection | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | LeftConnectionType | Label | Fixed <i>Sample Value(s):</i> Pinned | |
| | LeftConnectionDetail | Label | Detail 1 <i>Sample Value(s):</i> Detail A Detail B Detail 2 | |
| | RightConnectionType | Label | Fixed <i>Sample Value(s):</i> Pinned | |
| | RightConnectionDetail | Label | Detail 1 <i>Sample Value(s):</i> Detail A Detail B Detail 2 | |

Beam

| | | | | |
|-----------------------------|-------------------|----------------------|---|--------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Beam | Beam | Structural Framing | Beam |
| PredefinedType | BEAM | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Concrete <i>Sample Value(s):</i> Aluminum Timber Steel | |

IFC4 UserDefined
PropertySet

SGPset_BeamReinforcement

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|-------------------------------------|
| TopLeft | Label | 3H323H25 |
| TopMiddle | Label | 3H25 |
| TopRight | Label | 3H323H25 |
| BottomLeft | Label | 3H25 |
| BottomMiddle | Label | 3H323H253H20 |
| BottomRight | Label | 3H25 |
| SideBar | Label | 1H13-250 |
| OuterStirrupsLeft | Label | 1H16-250 |
| OuterStirrupsTypeLeft | Label | U Type Sample Value(s): Torsion |
| InnerStirrupsLeft | Label | 2H10-250 |
| InnerStirrupsTypeLeft | Label | U Type Sample Value(s): C/L Type |
| OuterStirrupsMiddle | Label | 1H16-250 |
| OuterStirrupsTypeMiddle | Label | U Type Sample Value(s): Torsion |
| InnerStirrupsMiddle | Label | 2H10-250 |
| InnerStirrupsTypeMiddle | Label | U Type Sample Value(s): C/L Type |
| OuterStirrupsRight | Label | 1H16-250 |
| OuterStirrupsTypeRight | Label | U Type Sample Value(s): Torsion |
| InnerStirrupsRight | Label | 2H10-250 |
| InnerStirrupsTypeRight | Label | U Type Sample Value(s): C/L Type |
| AsRequiredBottomLeft | Label | 213 |
| AsRequiredBottomMiddle | Label | 321 |
| AsRequiredBottomRight | Label | 432 |
| AsRequiredTopLeft | Label | 231 |
| AsRequiredTopMiddle | Label | 232 |
| AsRequiredTopRight | Label | 345 |
| AsRequiredStirrupsLeft | Label | 213 |
| AsRequiredStirrupsMiddle | Label | 323 |
| AsRequiredStirrupsRight | Label | 532 |
| BeamCage | Boolean | TRUE FALSE |

SGPset_Beam

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|---|
| BeamSpanType | Label | End Span Sample Value(s): Cantilever Single Span Interior Span |
| ReinforcementSteelGrade | Label | fyk 500 N/mm2 Class B |
| ConstructionMethod | Label | Cast Insitu Sample Value(s): Precast PT Beam |
| SectionFabricationMethod | Label | To input with values for submission |

SGPset_ConcreteElementGeneral

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| StrengthClass | Label | C32/40 |

SGPset_SteelElementGeneral

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|-------------------------------------|
| SteelGrade | Label | To input with values for submission |

SGPset_BeamDimension

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|--|
| Mark | Label | 600x300 Sample Value(s): B1 |
| Depth (mm) | Length | 600 |
| Width (mm) | Length | 300 |
| MemberSection | Label | RHS600x30x4 CHS500x3.0 254x254x63 kg/m |

Concrete Beam

| | | | | |
|-----------------------------|----------|---------------|-------|-------|
| IFC4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |

| | | | | |
|---------------------------------------|---------------------------------------|-------------------------------|-------------------------------|---------------|
| | Beam | Beam | Structural Framing | Concrete Beam |
| PredefinedType | BEAM | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_BeamReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AsRequiredBottomLeft | Label | 213 | |
| | AsRequiredBottomMiddle | Label | 321 | |
| | AsRequiredBottomRight | Label | 432 | |
| | AsRequiredTopLeft | Label | 231 | |
| | AsRequiredTopMiddle | Label | 232 | |
| | AsRequiredTopRight | Label | 345 | |
| | AsRequiredStirrupsLeft | Label | 213 | |
| | AsRequiredStirrupsMiddle | Label | 323 | |
| | AsRequiredStirrupsRight | Label | 532 | |
| | OuterStirrupsLeft | Label | 1H16-250 | |
| | InnerStirrupsLeft | Label | 2H10-250 | |
| | OuterStirrupsMiddle | Label | 1H16-250 | |
| | InnerStirrupsMiddle | Label | 2H10-250 | |
| | OuterStirrupsRight | Label | 1H16-250 | |
| | InnerStirrupsRight | Label | 2H10-250 | |
| | ShearLinkAngle | Real | 90 | |
| | OuterStirrupsTypeLeft | Label | U Type | |
| | InnerStirrupsTypeLeft | Label | C/L Type | |
| | OuterStirrupsTypeMiddle | Label | U Type | |
| | InnerStirrupsTypeMiddle | Label | C/L Type | |
| | OuterStirrupsTypeRight | Label | U Type | |
| | InnerStirrupsTypeRight | Label | C/L Type | |
| | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | C32/40 | |
| | SGPset_BeamDimension | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| Depth (mm) | Length | N.A | | |
| Width (mm) | Length | N.A | | |
| Breadth (mm) | Length | N.A | | |
| SGPset_Beam | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| ReinforcementSteelGrade | Label | 500 | | |
| SGPset_Deflection | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| Deflection (mm) | Label | 16 | | |

Concrete Beam (Cantilever)

| | | | | |
|---------------------------------------|---------------------------------------|-------------------------------|-------------------------------|---------------|
| IFC4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Beam | Beam | Structural Framing | Concrete Beam |
| PredefinedType | BEAM | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Deflection | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Deflection (mm) | Label | 16 | |
| | SGPset_BeamDimension | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| Breadth (mm) | Length | N.A | | |

PT Beam

| | | | | |
|------------------------------|---------------------------------------|------------------------------|------------------------------------|-------------------------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad Beam | OpenBuildings Beam | Revit Structural Framing | Tekla Concrete Beam |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PRESTRESSED_BEAM | | | |
| IFC4 UserDefined PropertySet | SGPset_Beam | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PrestressForce (kN) | Label | 100 | |
| | CharacteristicPTTendonStrength | Label | TEXT | |
| | SGPset_BeamReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| NumberOfTendons | Integer | 1 | | |
| TendonDiameter (mm) | Length | 12 | | |

Steel Beam

| | | | | |
|-----------------------------|-------------------------|------------------------------|------------------------------------|----------------------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad Beam | OpenBuildings Beam | Revit Structural Framing | Tekla Steel Beam |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Steel | |

Transfer Beam

| | | | | |
|-----------------------------|-------------------------|------------------------------|------------------------------------|-------------------------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad Beam | OpenBuildings Beam | Revit Structural Framing | Tekla Concrete Beam |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Trellis

| | | | | |
|-----------------------------|-------------------------|------------------------------|------------------------------------|----------------------------|
| Ifc4 Entity | IfcBeam | | | |
| Proposed BIM Representation | ArchiCad Beam | OpenBuildings Beam | Revit Structural Framing | Tekla Steel Beam |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TRELLIS | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Reinforced Concrete Steel | |

IfcBuildingElementProxy

Borehole

| | | | | |
|------------------------------|---|----------------------|--|--------------|
| Ifc4 Entity | IfcBuildingElementProxy | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Generic Models | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BOREHOLE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingElementProxyDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TopLevel | Label | SHD3.423 m <i>Sample Value(s):</i> SHD-50 m | |
| | TerminationLevel | Label | SHD3.423 m <i>Sample Value(s):</i> SHD-50 m | |
| | FirstHardStratumLevel | Label | SHD3.423 m <i>Sample Value(s):</i> SHD-50 m | |
| | Mark | Label | To input with values for submission | |
| | Diameter (mm) | Length | N.A | |
| Depth (mm) | Length | N.A | | |

IfcColumn

Column

| | | | | |
|-----------------------------|--------------------------------------|----------------------|--------------------------------|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Columns | Concrete Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | MET Steel | |
| IFC4 Predefined PropertySet | Pset_ColumnCommon | | | |
| | IFC4 Predefined Property Name | Data Type | Sample Property Values | |
| | IsExternal | Boolean | TRUE FALSE | |

Column (Circular)

| | | | | |
|------------------------------|---------------------------------------|----------------------|---|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Structural Columns | Concrete Column |
| PredefinedType | COLUMN | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Concrete <i>Sample Value(s):</i> Aluminum Timber Steel | |
| IFC4 UserDefined PropertySet | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | C32/40 | |
| | SGPset_SteelElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SteelGrade | Label | To input with values for submission | |

SGPset_Column

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|--|
| ReinforcementSteelGrade | Label | fyk 500 N/mm2 Class B |
| ConstructionMethod | Label | Cast Insitu <i>Sample Value(s):</i> Precast |
| SectionFabricationMethod | Label | To input with values for submission |

SGPset_ColumnStructuralLoad

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| WorkingLoad (kN) | Label | 1234 |

SGPset_ColumnReinforcement

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|--|
| MainRebar | Label | 4H32 |
| OuterStirrups | Label | 1H16-250 |
| OuterStirrupsType | Label | Closed <i>Sample Value(s):</i> Spiral |
| AsRequiredMainRebar (mm2) | Label | 324 |
| AsRequiredStirrups | Label | 543 |

SGPset_ColumnDimension

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|-------------------------------------|
| Mark | Label | C1 <i>Sample Value(s):</i> TC1 |
| Diameter (mm) | Length | 600 |
| Height | Length | 8000 |
| StartingStorey | Label | To input with values for submission |
| EndStorey | Label | To input with values for submission |
| MemberSection | Label | RHS600x30x4 CHS500x3.0 |

SGPset_SteelConnection

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|-------------------------------------|
| ConnectionDetailsTop | Label | To input with values for submission |
| ConnectionTypeTop | Label | To input with values for submission |
| ConnectionDetailsBottom | Label | To input with values for submission |
| ConnectionTypeBottom | Label | To input with values for submission |
| SpliceDetail | Label | To input with values for submission |

Column (Rectangular)

| | | | | |
|------------------------------|---------------------------------------|---|-------------------------------------|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Structural Columns | Concrete Column |
| PredefinedType | COLUMN | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Concrete <i>Sample Value(s):</i> Aluminum Timber Steel | | |
| IFC4 UserDefined PropertySet | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | C32/40 | |
| | SGPset_SteelElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SteelGrade | Label | To input with values for submission | |
| | SGPset_Column | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReinforcementSteelGrade | Label | fyk 500 N/mm2 Class B | |
| ConstructionMethod | Label | Cast Insitu <i>Sample Value(s):</i> Precast | | |
| SectionFabricationMethod | Label | To input with values for submission | | |

SGPset_ColumnStructuralLoad

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| WorkingLoad (kN) | Label | 1234 |

SGPset_ColumnReinforcement

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|--|
| CornerRebar | Label | 4H32 |
| OuterStirrups | Label | 1H16-250 |
| OuterStirrupsType | Label | Close Link Sample Value(s): Double U Link |
| BreadthInnerStirrups | Label | 3H16-250 |
| BreadthInnerStirrupsType | Label | U Link Sample Value(s): C Link |
| WidthInnerStirrups | Label | 21H16-250 |
| WidthInnerStirrupsType | Label | U Link Sample Value(s): C Link |
| AsRequiredBreadth (mm2) | Label | 324 |
| AsRequiredWidth (mm2) | Label | 324 |
| AsRequiredStirrups | Label | 543 |
| ColumnCage | Boolean | TRUE FALSE |

SGPset_ColumnDimension

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|-------------------------------------|
| Mark | Label | C1 Sample Value(s): TC1 |
| Width (mm) | Length | 600 |
| Breadth (mm) | Length | 300 |
| Height | Length | 8000 |
| StartingStorey | Label | To input with values for submission |
| EndStorey | Label | To input with values for submission |

SGPset_SteelConnection

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|-------------------------------------|
| ConnectionDetailsTop | Label | To input with values for submission |
| ConnectionTypeTop | Label | To input with values for submission |
| ConnectionDetailsBottom | Label | To input with values for submission |
| ConnectionTypeBottom | Label | To input with values for submission |
| SpliceDetail | Label | To input with values for submission |

Concrete Column

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Structural Columns | Concrete Column |
| PredefinedType | COLUMN | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ColumnStructuralLoad | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | WorkingLoad (kN) | Label | 1234 | |
| | SGPset_Column | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReinforcementSteelGrade | Label | 500 | |
| | SGPset_ColumnDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Breadth (mm) | Length | N.A | |
| | Width (mm) | Length | N.A | |

Concrete Column (Circular)

| | |
|-------------|-----------|
| Ifc4 Entity | IfcColumn |
|-------------|-----------|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|-----------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Structural Columns | Concrete Column |
| PredefinedType | COLUMN | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ColumnReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AsRequiredMainRebar (mm2) | Label | 324 | |
| | MainRebar | Label | 4H32 | |
| | OuterStirrups | Label | 1H16-250 | |

Concrete Column (Rectangular)

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Structural Columns | Concrete Column |
| PredefinedType | COLUMN | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_ColumnReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AsRequiredBreadth (mm2) | Label | 324 | |
| | AsRequiredWidth (mm2) | Label | 324 | |
| | CornerRebar | Label | 4H32 | |
| | OuterStirrups | Label | 1H16-250 | |
| | BreadthInnerStirrups | Label | 3H16-250 | |
| | WidthInnerStirrups | Label | 21H16-250 | |

Multi-tier Column

| | | | | |
|------------------------------|---|----------------------|-------------------------------|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Columns | Concrete Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PrecastConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ArrangementType | Label | Multi-tier Column | |
| | SGPset_Column | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| ConstructionMethod | Label | Precast | | |

Pier

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|-----------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Columns | Concrete Column |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PIER | | | |

Steel Column

| | | | | |
|-----------------------------|-------------------|----------------------|--------------------------------|--------------|
| Ifc4 Entity | IfcColumn | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Column | Column | Columns | Steel Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Steel | |

IfcFooting

Footing

| | | | | |
|-----------------------------|-------------------|----------------------|---|------------------|
| Ifc4 Entity | IfcFooting | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Footing | Footing | Structural Foundations | Concrete Footing |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | Concrete Sample Value(s): Timber Composite | |

Ifc4 UserDefined PropertySet

SGPset_Footing

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|-------------------------|
| RequiredBearingCapacity (kPa) | Label | 100 |
| DA1-1_BearingCapacity (kPa) | Label | 100 |
| SoilVerificationTest | Boolean | TRUE FALSE |
| ReinforcementSteelGrade | Label | fyk 500 N/mm2 Class B |
| DA1-2_BearingCapacity (kPa) | Label | 100 |

SGPset_ConcreteElementGeneral

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| StrengthClass | Label | C32/40 |

SGPset_FoundationStructuralLoad

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|------------------------|
| WorkingLoad (kN) | Label | 4321 |

SGPset_FootingReinforcement

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|------------------------------------|-----------|-------------------------------------|
| TopMain | Label | T25-150 |
| TopDistribution | Label | T16-150 |
| BottomMain | Label | T32-150 |
| BottomDistribution | Label | T20-150 |
| Stirrups | Label | 1H10-150-300 |
| StirrupsType | Label | U Type Sample Value(s): C/L Type |
| SideBar | Label | 1H13-250 |
| AsRequiredTopMain (mm2) | Label | 321 |
| AsRequiredTopDistribution (mm2) | Label | 213 |
| AsRequiredBottomMain (mm2) | Label | 321 |
| AsRequiredBottomDistribution (mm2) | Label | 213 |
| AsRequiredStirrupsMain | Label | 321 |
| AsRequiredStirrupsDistribution | Label | 321 |

SGPset_FootingDimension

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|---|
| Mark | Label | F1 Sample Value(s): PC1 PC2 PC4_1 F2 |

| | | |
|--------------|--------|-------------|
| Breadth (mm) | Length | 8400 6200 |
| Depth (mm) | Length | 300 |

Pad Footing

| Ifc4 Entity | IfcFooting | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|---------------------------------|--|----------------------------------|--------------------------------|-----------|------------------------|---------|-------|-----|-----------------|-------|-----|------------|-------|-----|--------------------|-------|-----|
| Proposed BIM Representation | ArchiCad N.A | OpenBuildings Footing | Revit Structural Foundations | Tekla Concrete Footing | | | | | | | | | | | | | | | |
| PredefinedType | PAD_FOOTING | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_FootingReinforcement <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>TopMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>TopDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BottomMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BottomDistribution</td> <td>Label</td> <td>N.A</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | TopMain | Label | N.A | TopDistribution | Label | N.A | BottomMain | Label | N.A | BottomDistribution | Label | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | |
| TopMain | Label | N.A | | | | | | | | | | | | | | | | | |
| TopDistribution | Label | N.A | | | | | | | | | | | | | | | | | |
| BottomMain | Label | N.A | | | | | | | | | | | | | | | | | |
| BottomDistribution | Label | N.A | | | | | | | | | | | | | | | | | |

Pile Cap

| Ifc4 Entity | IfcFooting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|-----------------------------|--|----------------------------------|--------------------------------|-----------|------------------------|-------------------------|-------|-----|---------------------------------|-------|-----|----------------------------|-------|-----|------------------------------------|-------|-----|---------|-------|---------|-----------------|-------|---------|------------|-------|---------|--------------------|-------|---------|--------------------------------|-----------|------------------------|---------------|-------|--------|--------------------------------|-----------|------------------------|-------------------------|-------|-----|
| Proposed BIM Representation | ArchiCad N.A | OpenBuildings N.A | Revit Structural Foundations | Tekla Concrete Footing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | PILE_CAP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_FootingReinforcement <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AsRequiredTopMain (mm2)</td> <td>Label</td> <td>321</td> </tr> <tr> <td>AsRequiredTopDistribution (mm2)</td> <td>Label</td> <td>213</td> </tr> <tr> <td>AsRequiredBottomMain (mm2)</td> <td>Label</td> <td>321</td> </tr> <tr> <td>AsRequiredBottomDistribution (mm2)</td> <td>Label</td> <td>213</td> </tr> <tr> <td>TopMain</td> <td>Label</td> <td>T25-150</td> </tr> <tr> <td>TopDistribution</td> <td>Label</td> <td>T16-150</td> </tr> <tr> <td>BottomMain</td> <td>Label</td> <td>T32-150</td> </tr> <tr> <td>BottomDistribution</td> <td>Label</td> <td>T20-150</td> </tr> </tbody> </table> SGPset_ConcreteElementGeneral <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>StrengthClass</td> <td>Label</td> <td>C32/40</td> </tr> </tbody> </table> SGPset_Footing <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ReinforcementSteelGrade</td> <td>Label</td> <td>500</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | AsRequiredTopMain (mm2) | Label | 321 | AsRequiredTopDistribution (mm2) | Label | 213 | AsRequiredBottomMain (mm2) | Label | 321 | AsRequiredBottomDistribution (mm2) | Label | 213 | TopMain | Label | T25-150 | TopDistribution | Label | T16-150 | BottomMain | Label | T32-150 | BottomDistribution | Label | T20-150 | IFC4 UserDefined Property Name | Data Type | Sample Property Values | StrengthClass | Label | C32/40 | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ReinforcementSteelGrade | Label | 500 |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredTopMain (mm2) | Label | 321 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredTopDistribution (mm2) | Label | 213 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredBottomMain (mm2) | Label | 321 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredBottomDistribution (mm2) | Label | 213 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TopMain | Label | T25-150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TopDistribution | Label | T16-150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BottomMain | Label | T32-150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BottomDistribution | Label | T20-150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| StrengthClass | Label | C32/40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ReinforcementSteelGrade | Label | 500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Strip Footing

| Ifc4 Entity | IfcFooting | | | | | | | | | | | | |
|--------------------------------|--|---------------------------------|--|----------------------------------|--------------------------------|-----------|------------------------|------------|--------|-----|--------------|--------|-----|
| Proposed BIM Representation | ArchiCad N.A | OpenBuildings Footing | Revit Structural Foundations | Tekla Concrete Footing | | | | | | | | | |
| PredefinedType | STRIP_FOOTING | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_FootingDimension <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Depth (mm)</td> <td>Length</td> <td>N.A</td> </tr> <tr> <td>Breadth (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Depth (mm) | Length | N.A | Breadth (mm) | Length | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| Depth (mm) | Length | N.A | | | | | | | | | | | |
| Breadth (mm) | Length | N.A | | | | | | | | | | | |

| | | | |
|--|------------|--------|-----|
| | Width (mm) | Length | N.A |
|--|------------|--------|-----|

IfcPile

Bored Pile

| | | | | |
|------------------------------|--|----------------------|-------------------------------------|-----------------|
| Ifc4 Entity | IfcPile | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Base Plate | Structural Foundations | Concrete Column |
| PredefinedType | BORED | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_Pile | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ULTTestPile | Boolean | TRUE FALSE | |
| | WorkingLoadTestPile | Boolean | TRUE FALSE | |
| | NonDestructiveTestPile | Boolean | TRUE FALSE | |
| | DA1-1_CompressionCapacity (kN) | Label | 100 | |
| | DA1-2_CompressionCapacity (kN) | Label | 100 | |
| | DA1-1_TensionCapacity (kN) | Label | 100 | |
| | DA1-2_TensionCapacity (kN) | Label | 100 | |
| | StructuralCompressionCapacity (kN) | Label | To input with values for submission | |
| | StructuralTensionCapacity (kN) | Label | To input with values for submission | |
| | BoreholeRef | Label | To input with values for submission | |
| | MinEmbedmentIntoBearingLayer_SPT_MoreThan_60N | Label | To input with values for submission | |
| | MinEmbedmentIntoBearingLayer_SPT_MoreThan_100N | Label | To input with values for submission | |
| | SGPset_PileDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Breadth (mm) | Length | N.A | |
| | Diameter (mm) | Length | N.A | |
| | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | C32/40 | |
| | ReinforcementStrengthClass | Label | 500 | |

End Bearing Pile

| | | | | |
|-----------------------------|-----------------|----------------------|------------------------|-----------------|
| Ifc4 Entity | IfcPile | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Base Plate | Structural Foundations | Concrete Column |
| PredefinedType | USERDEFINED | | | |
| ObjectType | END_BEARING | | | |

Friction Pile

| | | | | |
|-----------------------------|-----------------|----------------------|------------------------|-----------------|
| Ifc4 Entity | IfcPile | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Base Plate | Structural Foundations | Concrete Column |
| PredefinedType | FRICTION | | | |
| ObjectType | N.A | | | |

Pile

| Ifc4 Entity | IfcPile | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|-------------------------------------|-----------------|-------|--------------------------------|---------------|------------------------|----------------------------------|-----------------|-------|----------------------------------|-------|-------|------------------------------|-------|-------------------------------------|------------------------------|-------|-------------------------------------|---------------------------|-------|-------|--------------------------------|-----------|------------------------|--------------------------|------|---|---------------------|------|---|-----------------|------|---|-------------|---------|--------------|------------------------|---------|--------------|--------------------|-------|--------|----------------------------|-------|-----|----------------------------|-------|-----|--------------------------------|-----------|------------------------|--------------------------|--------|------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Base Plate</td> <td>Structural Foundations</td> <td>Concrete Column</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Base Plate | Structural Foundations | Concrete Column | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model Element | Base Plate | Structural Foundations | Concrete Column | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_PileStructuralLoad</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>DA1-1_CompressionDesignLoad (kN)</td> <td>Label</td> <td>21321</td> </tr> <tr> <td>DA1-2_CompressionDesignLoad (kN)</td> <td>Label</td> <td>21321</td> </tr> <tr> <td>DA1-1_TensionDesignLoad (kN)</td> <td>Label</td> <td>To input with values for submission</td> </tr> <tr> <td>DA1-2_TensionDesignLoad (kN)</td> <td>Label</td> <td>To input with values for submission</td> </tr> <tr> <td>NegativeSkinFriction (kN)</td> <td>Label</td> <td>21321</td> </tr> </tbody> </table> <p>SGPset_Pile</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>EndBearingR4DesignFactor</td> <td>Real</td> <td>1</td> </tr> <tr> <td>ShaffR4DesignFactor</td> <td>Real</td> <td>1</td> </tr> <tr> <td>PileModelFactor</td> <td>Real</td> <td>1</td> </tr> <tr> <td>ULTTestPile</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>MaintainedLoadTestPile</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Driven</td> </tr> <tr> <td>DA1-1_TensionCapacity (kN)</td> <td>Label</td> <td>100</td> </tr> <tr> <td>DA1-2_TensionCapacity (kN)</td> <td>Label</td> <td>100</td> </tr> </tbody> </table> <p>SGPset_PileReinforcement</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ReinforcementLength (mm)</td> <td>Length</td> <td>1000</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | DA1-1_CompressionDesignLoad (kN) | Label | 21321 | DA1-2_CompressionDesignLoad (kN) | Label | 21321 | DA1-1_TensionDesignLoad (kN) | Label | To input with values for submission | DA1-2_TensionDesignLoad (kN) | Label | To input with values for submission | NegativeSkinFriction (kN) | Label | 21321 | IFC4 UserDefined Property Name | Data Type | Sample Property Values | EndBearingR4DesignFactor | Real | 1 | ShaffR4DesignFactor | Real | 1 | PileModelFactor | Real | 1 | ULTTestPile | Boolean | TRUE FALSE | MaintainedLoadTestPile | Boolean | TRUE FALSE | ConstructionMethod | Label | Driven | DA1-1_TensionCapacity (kN) | Label | 100 | DA1-2_TensionCapacity (kN) | Label | 100 | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ReinforcementLength (mm) | Length | 1000 |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DA1-1_CompressionDesignLoad (kN) | Label | 21321 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DA1-2_CompressionDesignLoad (kN) | Label | 21321 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DA1-1_TensionDesignLoad (kN) | Label | To input with values for submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DA1-2_TensionDesignLoad (kN) | Label | To input with values for submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NegativeSkinFriction (kN) | Label | 21321 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EndBearingR4DesignFactor | Real | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ShaffR4DesignFactor | Real | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PileModelFactor | Real | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ULTTestPile | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MaintainedLoadTestPile | Boolean | TRUE FALSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ConstructionMethod | Label | Driven | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DA1-1_TensionCapacity (kN) | Label | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DA1-2_TensionCapacity (kN) | Label | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ReinforcementLength (mm) | Length | 1000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Pile (Circular)

| Ifc4 Entity | IfcPile | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|------------------------|-----------------|-------|--------------------------------|---------------|------------------------|------------------------|-----------------|-----|-----------|-------|------------|--------------------------------|-----------|------------------------|---------------|--------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Base Plate</td> <td>Structural Foundations</td> <td>Concrete Column</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Base Plate | Structural Foundations | Concrete Column | | | | | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | |
| Model Element | Base Plate | Structural Foundations | Concrete Column | | | | | | | | | | | | | | | | |
| PredefinedType | BORED | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_PileReinforcement</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AsRequiredMain (mm2)</td> <td>Label</td> <td>324</td> </tr> <tr> <td>MainRebar</td> <td>Label</td> <td>10H3210H16</td> </tr> </tbody> </table> <p>SGPset_PileDimension</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Diameter (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | AsRequiredMain (mm2) | Label | 324 | MainRebar | Label | 10H3210H16 | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Diameter (mm) | Length | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | |
| AsRequiredMain (mm2) | Label | 324 | | | | | | | | | | | | | | | | | |
| MainRebar | Label | 10H3210H16 | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | |
| Diameter (mm) | Length | N.A | | | | | | | | | | | | | | | | | |

Pile (Circular)

| Ifc4 Entity | IfcPile | | | | | | | | | | | |
|-----------------------------|--|------------------------|-------------------------|-------|----------|---------------|------------|------------------------|-----------------|--|--|--|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>Model Element</td> <td>Base Plate</td> <td>Structural Foundations</td> <td>Concrete Column</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | Model Element | Base Plate | Structural Foundations | Concrete Column | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | |
| Model Element | Base Plate | Structural Foundations | Concrete Column | | | | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | |
| Material | <table border="1"> <thead> <tr> <th>Attributes</th> <th>Sample Attribute Values</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Concrete</td> </tr> </tbody> </table> | Attributes | Sample Attribute Values | Name | Concrete | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | | |
| Name | Concrete | | | | | | | | | | | |

| | | | | |
|---------------------------------------|---------------------------------------|--|--|--|
| | | Sample Value(s): Aluminum Timber Steel | | |
| IFC4 UserDefined PropertySet | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | C32/40 | |
| | SGPset_SteelElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SteelGrade | Label | To input with values for submission | |
| | SGPset_Pile | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReinforcementSteelGrade | Label | fyk 500 N/mm2 Class B | |
| | ConstructionMethod | Label | Bored Sample Value(s): Driven Jacked In | |
| | SGPset_PileStructuralLoad | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | DA1-1_CompressionDesignLoad (kN) | Label | 21321 | |
| | DA1-2_CompressionDesignLoad (kN) | Label | 4321 | |
| | DA1-1_TensionDesignLoad (kN) | Label | To input with values for submission | |
| | DA1-2_TensionDesignLoad (kN) | Label | To input with values for submission | |
| | SGPset_PileReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PileType | Label | Cast Insitu Sample Value(s): Spun Precast | |
| | MainRebar | Label | 10H3210H16 | |
| | Stirrups | Label | 1H16-250 | |
| AsRequiredMain (mm2) | Label | 324 | | |
| AsRequiredStirrups | Label | 543 | | |
| SGPset_PileDimension | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| Mark | Label | C1 Sample Value(s): TC1 | | |
| Diameter (mm) | Length | 600 | | |
| Breadth (mm) | Length | 40 | | |
| MemberSection | Label | CHS500x3.0 254x254x63 kg/m | | |
| ToeLevel | Label | SHD3.423 m Sample Value(s): SHD-50 m | | |
| HeadLevel | Label | SHD3.423 m Sample Value(s): SHD-50 m | | |

Pile (Rectangular)

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|-----------------|
| Ifc4 Entity | IfcPile | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Base Plate | Structural Foundations | Concrete Column |
| PredefinedType | DRIVEN | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_PileReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AsRequiredBreadth (mm2) | Label | 324 | |
| | AsRequiredWidth (mm2) | Label | 324 | |
| | CornerRebar | Label | 4H25 | |
| DistributionRebar | Label | 4H16 | | |

Pile (Rectangular)

| | | | | |
|-------------|---------|--|--|--|
| Ifc4 Entity | IfcPile | | | |
|-------------|---------|--|--|--|

| | | | | |
|---------------------------------------|---------------------------------------|---|--------------------------------------|-----------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Base Plate | Structural Foundations | Concrete Column |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Concrete Sample Value(s): Timber Steel | | |
| IFC4 UserDefined PropertySet | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | C32/40 | |
| | SGPset_SteelElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SteelGrade | Label | To input with values for submission | |
| | SGPset_Pile | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReinforcementSteelGrade | Label | fyk 500 N/mm2 Class B | |
| | ConstructionMethod | Label | Jacked In Sample Value(s): Driven | |
| | RapidLoadTestPile | Boolean | TRUE FALSE | |
| | SGPset_PileStructuralLoad | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | DA1-1_CompressionDesignLoad (kN) | Label | 21321 | |
| | DA1-2_CompressionDesignLoad (kN) | Label | 4321 | |
| | DA1-1_TensionDesignLoad (kN) | Label | To input with values for submission | |
| | DA1-2_TensionDesignLoad (kN) | Label | To input with values for submission | |
| | SGPset_PileReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | PileType | Label | Precast Sample Value(s): Spun | |
| | CornerRebar | Label | 4H25 | |
| | DistributionRebar | Label | 4H16 | |
| | Stirrups | Label | 1H16-250 | |
| | AsRequiredBreadth (mm2) | Label | 324 | |
| | AsRequiredWidth (mm2) | Label | 324 | |
| | AsRequiredStirrups | Label | 543 | |
| | SGPset_PileDimension | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| Mark | Label | C1 Sample Value(s): TC1 | | |
| Width (mm) | Length | 600 | | |
| Breadth (mm) | Length | 300 40 | | |
| MemberSection | Label | RHS600x30x4 CHS500x3.0 | | |
| ToeLevel | Label | N.A | | |
| HeadLevel | Label | N.A | | |

IfcRailing

Handrail

| | | | | |
|-----------------------------|-----------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcRailing | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | Railing |
| PredefinedType | HANDRAIL | | | |
| ObjectType | N.A | | | |

| Ifc4 UserDefined PropertySet | SGPset_RailingStructuralLoad | | |
|------------------------------|-------------------------------------|-----------|------------------------|
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | LateralLoad (kN/m) | Label | 1.5 |

Railing

| Ifc4 Entity | IfcRailing | | | |
|------------------------------|-------------------------------------|---------------|-------------------------|-----------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Railing | Railing | Railings | Component |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | | Sample Attribute Values | |
| | Name | | N.A | |
| Ifc4 UserDefined PropertySet | SGPset_RailingStructuralLoad | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | LateralLoad (kN/m) | Label | N.A | |

IfcReinforcingBar

Rebar

| Ifc4 Entity | IfcReinforcingBar | | | |
|-----------------------------|-------------------|---------------|------------------|-------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Model Element | Object | Structural Rebar | Rebar |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

IfcSlab

Concrete Slab

| Ifc4 Entity | IfcSlab | | | |
|------------------------------|---------------------------------|---------------|------------------------|---------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Concrete Slab |
| PredefinedType | FLOOR | | | |
| ObjectType | N.A | | | |
| Ifc4 UserDefined PropertySet | SGPset_SlabReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TopMain | Label | H32-150H20-300 | |
| | TopDistribution | Label | H25-150H16-300 | |
| | BottomMain | Label | H25-150H16-300 | |
| | BottomDistribution | Label | H25-150H16-300 | |
| | AsRequiredTopX (mm2/m) | Label | 432 | |
| | AsRequiredTopY (mm2/m) | Label | 324 | |
| | AsRequiredBottomX (mm2/m) | Label | 324 | |
| | AsRequiredBottomY (mm2/m) | Label | 543 | |
| | SGPset_Slab | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SlabType | Label | One-Way Two-Way | |
| | ReinforcementSteelGrade | Label | 500 | |

| | | |
|---------------------------------------|------------------|-------------------------------|
| CategoryOfLoadedArea | Label | A1 |
| SGPset_ConcreteElementGeneral | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| StrengthClass | Label | C32/40 |
| SGPset_SlabDimension | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| Thickness (mm) | Length | N.A |
| Length (mm) | Length | N.A |
| Width (mm) | Length | N.A |
| SGPset_SlabStructuralLoad | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| ImposedLiveLoad (kPa) | Label | 1.5 |
| SGPset_Deflection | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| Deflection (mm) | Label | 16 |

Floor

| | | | | | | | | | |
|---------------------------------------|---|---------------------------------------|----------------------|-------------------------------|-----------------------|-------|-----|--------|---------------|
| Ifc4 Entity | IfcSlab | | | | | | | | |
| Proposed BIM Representation | <table border="1"> <tr> <td>ArchiCad</td> <td>OpenBuildings</td> <td>Revit</td> <td>Tekla</td> </tr> <tr> <td>N.A</td> <td>N.A</td> <td>Floors</td> <td>Concrete Slab</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | N.A | N.A | Floors | Concrete Slab |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| N.A | N.A | Floors | Concrete Slab | | | | | | |
| PredefinedType | FLOOR | | | | | | | | |
| ObjectType | N.A | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_SlabStructuralLoad <table border="1"> <tr> <td>IFC4 UserDefined Property Name</td> <td>Data Type</td> <td>Sample Property Values</td> </tr> <tr> <td>ImposedLiveLoad (kPa)</td> <td>Label</td> <td>1.5</td> </tr> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ImposedLiveLoad (kPa) | Label | 1.5 | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ImposedLiveLoad (kPa) | Label | 1.5 | | | | | | | |

Raft Slab

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|--|---------------------------------------|--------------------------------|-------------------------------|--------------|--------|-----|---------------------------------------|------------------|-------------------------------|------|-------|-------------------------------------|------------------------------|-------|-----|----------------------|-------|-----|---------------------------|-------|-----|-------------------|-------|-----|--------------------|-------|-----|------------|-------|-----|-----------------|-------|-----|---------|-------|-----|
| Ifc4 Entity | IfcSlab | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Proposed BIM Representation | <table border="1"> <tr> <td>ArchiCad</td> <td>OpenBuildings</td> <td>Revit</td> <td>Tekla</td> </tr> <tr> <td>N.A</td> <td>N.A</td> <td>Floors</td> <td>Concrete Slab</td> </tr> </table> | ArchiCad | OpenBuildings | Revit | Tekla | N.A | N.A | Floors | Concrete Slab | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N.A | N.A | Floors | Concrete Slab | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | RAFTSLAB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Material | <table border="1"> <tr> <td>Attributes</td> <td>Sample Attribute Values</td> </tr> <tr> <td>Name</td> <td>N.A</td> </tr> </table> | Attributes | Sample Attribute Values | Name | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Attributes | Sample Attribute Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Name | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_SlabDimension <table border="1"> <tr> <td>IFC4 UserDefined Property Name</td> <td>Data Type</td> <td>Sample Property Values</td> </tr> <tr> <td>Length (mm)</td> <td>Length</td> <td>N.A</td> </tr> </table> SGPset_SlabReinforcement <table border="1"> <tr> <td>IFC4 UserDefined Property Name</td> <td>Data Type</td> <td>Sample Property Values</td> </tr> <tr> <td>Mark</td> <td>Label</td> <td>To input with values for submission</td> </tr> <tr> <td>AsRequiredBottomDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>AsRequiredBottomMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>AsRequiredTopDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>AsRequiredTopMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BottomDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>BottomMain</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>TopDistribution</td> <td>Label</td> <td>N.A</td> </tr> <tr> <td>TopMain</td> <td>Label</td> <td>N.A</td> </tr> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Length (mm) | Length | N.A | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Mark | Label | To input with values for submission | AsRequiredBottomDistribution | Label | N.A | AsRequiredBottomMain | Label | N.A | AsRequiredTopDistribution | Label | N.A | AsRequiredTopMain | Label | N.A | BottomDistribution | Label | N.A | BottomMain | Label | N.A | TopDistribution | Label | N.A | TopMain | Label | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Length (mm) | Length | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mark | Label | To input with values for submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredBottomDistribution | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredBottomMain | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredTopDistribution | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredTopMain | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BottomDistribution | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BottomMain | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TopDistribution | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TopMain | Label | N.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Roof Slab

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|---------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Concrete Slab |
| PredefinedType | ROOF | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_SlabStructuralLoad | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ImposedLiveLoad (kPa) | Label | 1.5 | |

Slab

| | | | | |
|---------------------------------------|---------------------------------------|---|---|---------------|
| Ifc4 Entity | IfcSlab | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Slab | Slab | Floors | Concrete Slab |
| PredefinedType | FLOOR | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Concrete Sample Value(s): Timber Composite | | |
| IFC4 UserDefined PropertySet | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | C32/40 | |
| | SGPset_Slab | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReinforcementSteelGrade | Label | fyk 500 N/mm2 Class B | |
| | ConstructionMethod | Label | Cast Insitu Sample Value(s): Precast PT Beam | |
| | ShelterUsage | Boolean | TRUE FALSE | |
| | SGPset_SlabStructuralLoad | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ImposedLoad (kPa) | Label | 5 | |
| | SGPset_SlabReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TopMain | Label | H32-150H20-300 | |
| | TopDistribution | Label | H25-150H16-300 | |
| | BottomMain | Label | H25-150H16-300 | |
| | BottomDistribution | Label | H25-150H16-300 | |
| | Stirrups | Label | 1H10-150-300 | |
| | StirrupsType | Label | U Type Sample Value(s): C/L Type | |
| | AsRequiredTopX (mm2/m) | Label | 432 | |
| AsRequiredTopY (mm2/m) | Label | 324 | | |
| AsRequiredBottomX (mm2/m) | Label | 324 | | |
| AsRequiredBottomY (mm2/m) | Label | 543 | | |
| AsRequiredStirrups | Label | 132 | | |
| SGPset_SlabDimension | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | |
| Mark | Label | S1 Sample Value(s): S01 | | |
| Width (mm) | Length | 8400 6200 | | |
| Thickness (mm) | Length | 300 | | |

Stair

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | N.A | Stairs | Component |
| PredefinedType | STRAIGHT_RUN_STAIR | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_StairStructuralLoad | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ImposedLiveLoad (kPa) | Label | 1.5 | |

Staircase

| | | | | |
|------------------------------------|---------------------------------------|--------------------------------|-------------------------------------|--------------|
| Ifc4 Entity | IfcStair | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Stair | N.A | Stairs | Component |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | N.A | | |
| IFC4 UserDefined PropertySet | SGPset_StairReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | AsRequiredBottomX (mm2/m) | Label | N.A | |
| | AsRequiredBottomY (mm2/m) | Label | N.A | |
| | AsRequiredStirrups | Label | N.A | |
| | AsRequiredTopX (mm2/m) | Label | N.A | |
| | AsRequiredTopY (mm2/m) | Label | N.A | |
| | BottomMain | Label | N.A | |
| | BottomDistribution | Label | N.A | |
| | ConstructionMethod | Label | N.A | |
| | ImposedLoad (kPa) | Label | N.A | |
| | StirrupsType | Label | To input with values for submission | |
| | TopMain | Label | N.A | |
| | TopDistribution | Label | N.A | |
| | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | N.A | |
| | SGPset_SteelElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SteelGrade | Label | To input with values for submission | |
| | SGPset_Stair | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReinforcementSteelGrade | Label | N.A | |
| | SectionFabricationMethod | Label | To input with values for submission | |
| | BarrierFreeAccessibility | Boolean | TRUE FALSE | |
| | SGPset_StairDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| Width (mm) | Length | N.A | | |
| Thickness (mm) | Length | N.A | | |
| SGPset_StairSteelConnection | | | | |

| IFC4 UserDefined Property Name | Data Type | Sample Property Values |
|--------------------------------|-----------|-------------------------------------|
| ConnectionDetailsTop | Label | To input with values for submission |
| ConnectionTypeTop | Label | To input with values for submission |
| ConnectionDetailsBottom | Label | To input with values for submission |
| ConnectionTypeBottom | Label | To input with values for submission |

IfcWall

Concrete Wall

| Ifc4 Entity | IfcWall | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|--------------------------|--------------|----------------|--------------------------------|-----------|------------------------|----------------------------|-------|------------|------------------------------|-------|-----------|---------------|-------|--------------------------|-----------------|-------|---------|--------------------------------|-----------|------------------------|----------------|--------|-----|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | | | | | | | | | | | | |
| | Wall | N.A | Walls | Concrete Panel | | | | | | | | | | | | | | | | | | | | | |
| PredefinedType | STANDARD | | | | | | | | | | | | | | | | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_WallReinforcement <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>AsRequiredVertical (mm2/m)</td> <td>Label</td> <td>1232 213</td> </tr> <tr> <td>AsRequiredHorizontal (mm2/m)</td> <td>Label</td> <td>431 333</td> </tr> <tr> <td>VerticalRebar</td> <td>Label</td> <td>H32-150H25-150 H25-150</td> </tr> <tr> <td>HorizontalRebar</td> <td>Label</td> <td>H20-150</td> </tr> </tbody> </table> SGPset_WallDimension <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>Thickness (mm)</td> <td>Length</td> <td>N.A</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | AsRequiredVertical (mm2/m) | Label | 1232 213 | AsRequiredHorizontal (mm2/m) | Label | 431 333 | VerticalRebar | Label | H32-150H25-150 H25-150 | HorizontalRebar | Label | H20-150 | IFC4 UserDefined Property Name | Data Type | Sample Property Values | Thickness (mm) | Length | N.A |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredVertical (mm2/m) | Label | 1232 213 | | | | | | | | | | | | | | | | | | | | | | | |
| AsRequiredHorizontal (mm2/m) | Label | 431 333 | | | | | | | | | | | | | | | | | | | | | | | |
| VerticalRebar | Label | H32-150H25-150 H25-150 | | | | | | | | | | | | | | | | | | | | | | | |
| HorizontalRebar | Label | H20-150 | | | | | | | | | | | | | | | | | | | | | | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | | | | | | | | | | | | | |
| Thickness (mm) | Length | N.A | | | | | | | | | | | | | | | | | | | | | | | |

Double Bay Facade Wall

| Ifc4 Entity | IfcWall | | | | | | | | | |
|--------------------------------|--|------------------------|--------------|----------------|--------------------------------|-----------|------------------------|-----------------|-------|------------------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| | Wall | Wall | Walls | Concrete Panel | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_PrecastConcreteElementGeneral <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ArrangementType</td> <td>Label</td> <td>Double Bay Facade Wall</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ArrangementType | Label | Double Bay Facade Wall |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| ArrangementType | Label | Double Bay Facade Wall | | | | | | | | |

Multi-tier Wall

| Ifc4 Entity | IfcWall | | | | | | | | | |
|--------------------------------|---|------------------------|--------------|----------------|--------------------------------|-----------|------------------------|-----------------|-------|-----------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| | Wall | Wall | Walls | Concrete Panel | | | | | | |
| PredefinedType | Need not specify | | | | | | | | | |
| ObjectType | N.A | | | | | | | | | |
| IFC4 UserDefined PropertySet | SGPset_PrecastConcreteElementGeneral <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ArrangementType</td> <td>Label</td> <td>Multi-tier Wall</td> </tr> </tbody> </table> | | | | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ArrangementType | Label | Multi-tier Wall |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| ArrangementType | Label | Multi-tier Wall | | | | | | | | |

Wall

| | | | | |
|------------------------------|---------------------------------------|--------------------------------|--|----------------|
| Ifc4 Entity | IfcWall | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Wall | Wall | Walls | Concrete Panel |
| PredefinedType | STANDARD | | | |
| ObjectType | N.A | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Concrete | | |
| Ifc4 UserDefined PropertySet | SGPset_ConcreteElementGeneral | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | StrengthClass | Label | C32/40 | |
| | SGPset_Wall | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ReinforcementSteelGrade | Label | fyk 500 N/mm2 Class B | |
| | ConstructionMethod | Label | Cast Insitu <i>Sample Value(s):</i> Precast | |
| | ShelterUsage | Boolean | TRUE FALSE | |
| | SGPset_WallReinforcement | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | VerticalRebar | Label | H32-150H25-150 | |
| | HorizontalRebar | Label | H20-150 | |
| | Stirrups | Label | T10-150-300 | |
| | StirrupsType | Label | To input with values for submission | |
| | AsRequiredVertical (mm2/m) | Label | 1232 | |
| | AsRequiredHorizontal (mm2/m) | Label | 333 | |
| | AsRequiredStirrups (mm2/m) | Label | 213 | |
| | SGPset_WallDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Mark | Label | W1 <i>Sample Value(s):</i> W2 | |
| | TypeMark | Label | W1 <i>Sample Value(s):</i> W2 | |
| | Length (mm) | Length | 6000 | |
| | Thickness (mm) | Length | 300 | |
| | Height | Length | 8000 | |

List of Identified Systems

IfcBuildingSystem

Air Speed Measuring Device

| | | | | |
|-----------------------------|-------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRSPEEDMEASURINGDEVICE | | | |

Beam-Facade Wall

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | BEAMFACADEWALL | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Precast | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Beam | IfcBeam | | |

Capsule Pod

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CAPSULEPOD | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Wall | IfcWall | | |
| | Floor | IfcSlab | | |
| | Door | IfcDoor | | |
| | Ceiling | IfcCovering | | |
| | Access Opening | IfcOpeningElement | | |

Ceiling Support

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FRAMING | | | |

| | | | |
|------------------------------|---------------------------------------|------------------|-------------------------------|
| Ifc4 UserDefined PropertySet | SGPset_BuildingSystem | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values |
| | Combustible | Boolean | FALSE |

Diaphragm Wall System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DIAPHRAGMWALLSYSTEM | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Wall | IfcWall | | |

Duct Framing

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FRAMING | | | |
| Ifc4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | TensileStress | Label | Sample Value(s): 10N/mm2 | |

Energy Storage System

| | | | | |
|-----------------------------|-----------------------------|------------------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ENERGYSTORAGE | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Battery | IfcElectricFlowStorageDevice | | |
| | Switchboard | IfcElectricDistributionBoard | | |

Fire Alarm System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Fire Alarm Devices | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREALARM | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Smoke Detector | IfcSensor | | |
| | Siren Alarm | IfcAlarm | | |
| | Visual Alarm | IfcAlarm | | |

| | | |
|--|------------------|--------------------------|
| | Heat Detector | IfcSensor |
| | Fire Sensor | IfcSensor |
| | Fire Alarm Panel | IfcUnitaryControlElement |
| | Sound Alarm | IfcAlarm |

Gondola

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GONDOLA | | | |

Lift Drive System

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | TRANSPORT | | | |
| ObjectType | N.A | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | SelfSustaining | Boolean | TRUE FALSE | |
| | LoadSideBrake | Boolean | TRUE FALSE | |
| | BeltOrChainCount | Integer | N.A | |
| | ElectromechanicalFrictionBrake | Boolean | TRUE FALSE | |
| EmergencyControlDevice | Boolean | TRUE FALSE | | |

Maintenance Platform

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MAINTENANCE | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Beam | IfcBeam | | |
| | Slab | IfcSlab | | |

Master Antenna Television System

| | | | | |
|-----------------------------|-------------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MASTERANTENNATELEVISIONSYSTEM | | | |

Mechanized Car Parking

| | | | | |
|-------------|-------------------|--|--|--|
| Ifc4 Entity | IfcBuildingSystem | | | |
|-------------|-------------------|--|--|--|

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MECHANIZEDCARPARKING | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | MechanizedCarParking_Type | Label | Fully automated system Stack type | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Car Parking Deck | | IfcBuildingElementProxy | |
| | Supporting Structure | | IfcMember | |

Outfall Structure

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | Group | Group | Model Groups | N.A |
| PredefinedType | FOUNDATION | | | |
| ObjectType | N.A | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Box Culvert | | IfcPipeSegment | |

Oxygen-reduction System

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OXYGENREDUCTION | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Water Mist | | IfcFireSuppressionTerminal | |
| | Fire Extinguisher | | IfcBuildingElementProxy | |

PPVC Module

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PPVCMODULE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | PPVC | |
| | Accreditation_PAS | Boolean | TRUE FALSE | |
| | Accreditation_MAS | Boolean | TRUE FALSE | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Wall | | IfcWall | |

| | | |
|--|---------|--------------|
| | Floor | IfcSlab |
| | Door | IfcDoor |
| | Ceiling | IfcCovering |
| | Cabinet | IfcFurniture |

PWCS Main Control System

| | | | | |
|------------------------------|---------------------------------------|----------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PWCSMAINCONTROL | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | CommunicationSystem | Boolean | TRUE FALSE | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Network Appliance | IfcCommunicationsAppliance | | |
| | Control Panel | IfcUnitaryControlElement | | |
| | Computer | IfcCommunicationsAppliance | | |

Pneumatic Recyclables Chute Conveyance System

| | | | | |
|-----------------------------|---|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PNEUMATICRECYCLABLESCHUTECONVEYANCESYSTEM | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Recycling Bin | IfcFurniture | | |
| | Recyclables Container | IfcFurniture | | |
| | Recyclables Compactor | IfcFurniture | | |

Pneumatic Waste Conveyance System

| | | | | |
|-----------------------------|---------------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PNEUMATICWASTECONVEYANCESYSTEM | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Temporary Storage Section | IfcPipeSegment | | |
| | Refuse Outdoor Throw Point | IfcWasteTerminal | | |
| | Refuse Chute Hopper | IfcDoor | | |
| | Refuse Chute | IfcWall | | |
| | Recyclables Outdoor Throw Point | IfcWasteTerminal | | |
| | Recyclables Refuse Chute Hopper | IfcDoor | | |
| | Recyclables Refuse Chute | IfcWall | | |
| | Discharge Valve | IfcValve | | |
| | Conveyance Pipe | IfcPipeSegment | | |
| | Chute Interface | IfcWasteTerminal | | |
| | Air Intake Valve | IfcValve | | |
| Waste-air Separator | IfcFilter | | | |

| | | |
|--|-------------------------|--------------------------|
| | Waste Flow Diverter | IfcWasteTerminal |
| | Vacuum Exhauster | IfcPump |
| | Refuse Container | IfcFurniture |
| | Refuse Compactor | IfcFurniture |
| | Recyclables Container | IfcFurniture |
| | Recyclables Compactor | IfcFurniture |
| | Odour Filtration System | IfcFilter |
| | Dust Filtration System | IfcFilter |
| | Operator Panel | IfcUnitaryControlElement |
| | Control Panel | IfcUnitaryControlElement |

Precast Household Shelter

| Ifc4 Entity | IfcBuildingSystem | | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|--------------------|-----------------|---------|-------------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>IFC Assignments</td><td>System</td><td>Model Groups</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | IFC Assignments | System | Model Groups | N.A | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| IFC Assignments | System | Model Groups | N.A | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | |
| ObjectType | HOUSEHOLDSHELTER | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_BuildingSystem</p> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>ConstructionMethod</td><td>Label</td><td>Precast</td></tr> <tr><td>Accreditation_PAS</td><td>Boolean</td><td>TRUE FALSE</td></tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Precast | Accreditation_PAS | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| ConstructionMethod | Label | Precast | | | | | | | | |
| Accreditation_PAS | Boolean | TRUE FALSE | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr><th>Identified Component</th><th>IFC4 Entity</th></tr> </thead> <tbody> <tr><td>Wall</td><td>IfcWall</td></tr> <tr><td>Slab</td><td>IfcSlab</td></tr> </tbody> </table> | Identified Component | IFC4 Entity | Wall | IfcWall | Slab | IfcSlab | | | |
| Identified Component | IFC4 Entity | | | | | | | | | |
| Wall | IfcWall | | | | | | | | | |
| Slab | IfcSlab | | | | | | | | | |

Precast Refuse Chute

| Ifc4 Entity | IfcBuildingSystem | | | | | | | | | |
|--------------------------------|---|--------------------------------|---------------|------------------------|--------------------|-----------------|---------|-------------------|---------|--------------|
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| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | |
| IFC Assignments | System | Model Groups | N.A | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | |
| ObjectType | REFUSECHUTE | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_BuildingSystem</p> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>ConstructionMethod</td><td>Label</td><td>Precast</td></tr> <tr><td>Accreditation_PAS</td><td>Boolean</td><td>TRUE FALSE</td></tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Precast | Accreditation_PAS | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | |
| ConstructionMethod | Label | Precast | | | | | | | | |
| Accreditation_PAS | Boolean | TRUE FALSE | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr><th>Identified Component</th><th>IFC4 Entity</th></tr> </thead> <tbody> <tr><td>Wall</td><td>IfcWall</td></tr> </tbody> </table> | Identified Component | IFC4 Entity | Wall | IfcWall | | | | | |
| Identified Component | IFC4 Entity | | | | | | | | | |
| Wall | IfcWall | | | | | | | | | |

Prefabricated And Prefinished Ceiling with MEP Services

| Ifc4 Entity | IfcBuildingSystem | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|--------------------|-----------------|-------------------------------|--------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>IFC Assignments</td><td>System</td><td>Model Groups</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | IFC Assignments | System | Model Groups | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| IFC Assignments | System | Model Groups | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | PREFABRICATEDANDPREFINISHEDCEILING | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_BuildingSystem</p> <table border="1"> <thead> <tr><th>IFC4 UserDefined Property Name</th><th>Data Type</th><th>Sample Property Values</th></tr> </thead> <tbody> <tr><td>ConstructionMethod</td><td>Label</td><td>Prefabricated and Prefinished</td></tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Prefabricated and Prefinished | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ConstructionMethod | Label | Prefabricated and Prefinished | | | | | | | |

| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Ceiling</td> <td>IfcCovering</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Ceiling | IfcCovering |
|-------------------------|--|----------------------|-------------|---------|-------------|
| Identified Component | IFC4 Entity | | | | |
| Ceiling | IfcCovering | | | | |

Prefabricated And Prefinished Floor with MEP Services

| Ifc4 Entity | IfcBuildingSystem | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|--------------------|-----------------|-------------------------------|--------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>IFC Assignments</td> <td>System</td> <td>Model Groups</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | IFC Assignments | System | Model Groups | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| IFC Assignments | System | Model Groups | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | PREFABRICATEDANDPREFINISHEDFLOOR | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_BuildingSystem</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated and Prefinished</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Prefabricated and Prefinished | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ConstructionMethod | Label | Prefabricated and Prefinished | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Floor</td> <td>IfcSlab</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Floor | IfcSlab | | | | |
| Identified Component | IFC4 Entity | | | | | | | | |
| Floor | IfcSlab | | | | | | | | |

Prefabricated And Prefinished Wall with MEP Services

| Ifc4 Entity | IfcBuildingSystem | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|--------------------|-----------------|-------------------------------|--------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>IFC Assignments</td> <td>System</td> <td>Model Groups</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | IFC Assignments | System | Model Groups | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| IFC Assignments | System | Model Groups | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | PREFABRICATEDANDPREFINISHEDWALL | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_BuildingSystem</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated and Prefinished</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Prefabricated and Prefinished | | |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | |
| ConstructionMethod | Label | Prefabricated and Prefinished | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>IfcWall</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Wall | IfcWall | | | | |
| Identified Component | IFC4 Entity | | | | | | | | |
| Wall | IfcWall | | | | | | | | |

Prefabricated Bathroom Unit

| Ifc4 Entity | IfcBuildingSystem | | | | | | | | | | | | |
|--------------------------------|--|--------------------------------|---------------|------------------------|--------------------|-----------------|---------------|-------------------|---------|--------------|-------------------|---------|--------------|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>IFC Assignments</td> <td>System</td> <td>Model Groups</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | IFC Assignments | System | Model Groups | N.A | | | | |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | | | | | |
| IFC Assignments | System | Model Groups | N.A | | | | | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | | | | | |
| ObjectType | PREFABRICATEDBATHROOMUNIT | | | | | | | | | | | | |
| IFC4 UserDefined PropertySet | <p>SGPset_BuildingSystem</p> <table border="1"> <thead> <tr> <th>IFC4 UserDefined Property Name</th> <th>Data Type</th> <th>Sample Property Values</th> </tr> </thead> <tbody> <tr> <td>ConstructionMethod</td> <td>Label</td> <td>Prefabricated</td> </tr> <tr> <td>Accreditation_PAS</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> <tr> <td>Accreditation_MAS</td> <td>Boolean</td> <td>TRUE FALSE</td> </tr> </tbody> </table> | IFC4 UserDefined Property Name | Data Type | Sample Property Values | ConstructionMethod | Label | Prefabricated | Accreditation_PAS | Boolean | TRUE FALSE | Accreditation_MAS | Boolean | TRUE FALSE |
| IFC4 UserDefined Property Name | Data Type | Sample Property Values | | | | | | | | | | | |
| ConstructionMethod | Label | Prefabricated | | | | | | | | | | | |
| Accreditation_PAS | Boolean | TRUE FALSE | | | | | | | | | | | |
| Accreditation_MAS | Boolean | TRUE FALSE | | | | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>IfcWall</td> </tr> <tr> <td>Slab</td> <td>IfcSlab</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Wall | IfcWall | Slab | IfcSlab | | | | | | |
| Identified Component | IFC4 Entity | | | | | | | | | | | | |
| Wall | IfcWall | | | | | | | | | | | | |
| Slab | IfcSlab | | | | | | | | | | | | |

Prefabricated MEP Horizontal Module

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PREFABRICATEDMEPHORIZONTALMODULE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |
| | MechanicalConnectionType | Label | N.A | |
| Accreditation_MAS | Boolean | TRUE FALSE | | |

Prefabricated MEP Plant Module

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PREFABRICATEDMEPLANTMODULE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |
| | MechanicalConnectionType | Label | N.A | |
| Accreditation_MAS | Boolean | TRUE FALSE | | |

Prefabricated MEP Vertical Module

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PREFABRICATEDMEPVERTICALMODULE | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | ConstructionMethod | Label | Prefabricated | |
| | MechanicalConnectionType | Label | N.A | |
| Accreditation_MAS | Boolean | TRUE FALSE | | |

Prefabricated Pump Skid

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PREFABRICATEDPUMPSKID | | | |
| IFC4 UserDefined PropertySet | SGPset_BuildingSystem | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |

| | | | |
|-------------------------|-----------------------------|--------------------------|---------------|
| | ConstructionMethod | Label | Prefabricated |
| Components of the group | Identified Component | IFC4 Entity | |
| | Pump | IfcPump | |
| | Motor | IfcMotorConnection | |
| | Control Panel | IfcUnitaryControlElement | |

Public Address System

| | | | | |
|-----------------------------|---------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PUBLICADDRESSSYSTEM | | | |

Roof Structure

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ROOFSTRUCTURE | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | Timber | | |

Solar PV System

| | | | | |
|-----------------------------|-----------------------------|------------------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SOLARPV | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Solar Panel | IfcSolarDevice | | |
| | Solar Panel | IfcPlate | | |
| | Cable Segment | IfcCableSegment | | |
| | Switchboard | IfcElectricDistributionBoard | | |
| | Emergency Stop | IfcSwitchingDevice | | |
| | Control Panel | IfcUnitaryControlElement | | |

Truss

| | | | | |
|-----------------------------|-------------------|--------------------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | TRUSS | | | |
| Material | Attributes | Sample Attribute Values | | |
| | Name | MET Timber Steel | | |

Unit

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | UNIT | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Wall | IfcWall | | |
| | Floor | IfcSlab | | |
| | Door | IfcDoor | | |
| | Ceiling | IfcCovering | | |

Working Platform

| | | | | |
|-----------------------------|-------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcBuildingSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | IFC Assignments | System | Model Groups | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | MAINTENANCE | | | |

IfcDistributionSystem

ACMV System

| | | | | |
|-----------------------------|-----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Air Conditioning System

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | AIRCONDITIONING | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Prefabricated Duct Segment | IfcDuctSegment | | |
| | Prefabricated Duct Fitting | IfcDuctFitting | | |

Cabling

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |

| | |
|----------------|-------------|
| PredefinedType | USERDEFINED |
| ObjectType | CABLING |

Chemical System

| | | | | |
|-----------------------------|-----------------------------|-------------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CHEMICAL | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Water Filter | | IfcFilter | |
| | Strainer | | IfcFilter | |
| | Sanitary Fixture | | IfcSanitaryTerminal | |
| | Sanitary Fixture | | IfcWasteTerminal | |
| | Oil Filter | | IfcFilter | |
| | Sampling Tank | | IfcTank | |
| | Sampling Sump | | IfcDistributionChamberElement | |
| | Pipe Segment | | IfcPipeSegment | |
| | Inspection Chamber | | IfcDistributionChamberElement | |
| | Pipe Fitting | | IfcPipeFitting | |
| Autosampler | | IfcBuildingElementProxy | | |

Chilled Water System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | CHILLEDWATER | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Pipe Segment | | IfcPipeSegment | |
| | Pipe Fitting | | IfcPipeFitting | |

Cold Water System

| | | | | |
|------------------------------|---------------------------------------|----------------------|--------------------|-------------------------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DOMESTICCOLDWATER | | | |
| IFC4 UserDefined PropertySet | SGPset_SystemDimension | | | |
| | IFC4 UserDefined Property Name | | Data Type | Sample Property Values |
| | Length (mm) | | Length | N.A |
| | Diameter (mm) | | Length | N.A |
| Material | | Label | N.A | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Flexible Pipe | | IfcPipeSegment | |
| | Infill Point | | IfcValve | |
| | Pipe Segment | | IfcPipeSegment | |
| | Water Tank (Potable Water) | | IfcTank | |

| | |
|-------------------------|----------------|
| Water Meter | IfcFlowMeter |
| Pipe Fitting | IfcPipeFitting |
| Water Tank | IfcTank |
| Stop Valve | IfcValve |
| Valve | IfcValve |
| Pump | IfcPump |
| Pressure Reducing Valve | IfcValve |
| Warning pipe | IfcPipeSegment |
| Draw-off Valve | IfcValve |
| Sampling Tap | IfcValve |
| Overflow Pipe | IfcPipeSegment |
| Outlet Pipe | IfcPipeSegment |
| Isolating valve | IfcValve |
| Inlet Pipe | IfcPipeSegment |
| Draining Valve | IfcValve |
| Water Tank (Sectional) | IfcTank |
| Washout Pipe | IfcPipeSegment |
| Stopcock | IfcValve |
| Hose | IfcPipeSegment |
| Float Valve | IfcValve |
| Double Check Valve | IfcValve |
| Check Valve | IfcValve |
| Short Pipe | IfcPipeSegment |
| Gate valve | IfcValve |
| Drain-out Test Cock | IfcValve |
| Water Tap | IfcValve |

Compressed Air System

| Ifc4 Entity | IfcDistributionSystem | | | | | | | | |
|-----------------------------|---|--------------------------|---------------|-------|-------|------------|--------|--------------------------|-----|
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| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| MEP System | System | MEP Fabrication Pipework | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | COMPRESSED AIR | | | | | | | | |

Condensate System

| Ifc4 Entity | IfcDistributionSystem | | | | | | | | |
|-----------------------------|---|----------------------|---------------|--------------|----------------|------------|--------|----------------|-----|
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| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| MEP System | System | Piping Systems | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | CONDENSER WATER | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr><th>Identified Component</th><th>IFC4 Entity</th></tr> </thead> <tbody> <tr><td>Pipe Segment</td><td>IfcPipeSegment</td></tr> </tbody> </table> | Identified Component | IFC4 Entity | Pipe Segment | IfcPipeSegment | | | | |
| Identified Component | IFC4 Entity | | | | | | | | |
| Pipe Segment | IfcPipeSegment | | | | | | | | |

Deep Tunnel Sewerage System

| Ifc4 Entity | IfcDistributionSystem | | | | | | | | |
|-----------------------------|---|----------------------|---------------|--------------|----------------|------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr><th>ArchiCad</th><th>OpenBuildings</th><th>Revit</th><th>Tekla</th></tr> </thead> <tbody> <tr><td>MEP System</td><td>System</td><td>Piping Systems</td><td>N.A</td></tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | MEP System | System | Piping Systems | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| MEP System | System | Piping Systems | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | DEEPTUNNELSEWERAGE | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr><th>Identified Component</th><th>IFC4 Entity</th></tr> </thead> <tbody> <tr><td>Pipe Segment</td><td>IfcPipeSegment</td></tr> </tbody> </table> | Identified Component | IFC4 Entity | Pipe Segment | IfcPipeSegment | | | | |
| Identified Component | IFC4 Entity | | | | | | | | |
| Pipe Segment | IfcPipeSegment | | | | | | | | |

Drainage System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRAINAGE | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Pipe Segment | | IfcPipeSegment | |
| | Gutter | | IfcPipeSegment | |
| | Sump Pump | | IfcPump | |

Dry Riser System

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DRYRISER | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Breeching Inlet | | IfcFireSuppressionTerminal | |
| | Pipe Segment | | IfcPipeSegment | |
| | Landing Valve | | IfcValve | |

Electrical System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ELECTRICAL | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Cable Segment | | IfcCableSegment | |
| | Cable Fitting | | IfcCableFitting | |
| | Control Panel | | IfcUnitaryControlElement | |
| | Metal Conduit | | IfcCableCarrierSegment | |
| | Conduit | | IfcCableCarrierSegment | |
| | Cable Tray | | IfcCableCarrierSegment | |

Exhaust Air System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EXHAUSTAIR | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Exhaust Air Fan | | IfcFan | |
| | Exhaust Air Grille | | IfcAirTerminal | |
| | Duct Fitting | | IfcDuctFitting | |

| | | |
|--|--------------------|----------------|
| | Duct Segment | IfcDuctSegment |
| | Exhaust Air Louvre | IfcAirTerminal |
| | Exhaust Air Outlet | IfcFan |
| | Air Terminal | IfcAirTerminal |

Fire Protection System

| | | | | |
|-----------------------------|-----------------------------|----------------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREPROTECTION | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Pump | IfcPump | | |
| | Pipe Segment | IfcPipeSegment | | |
| | Fire Hydrant | IfcFireSuppressionTerminal | | |
| | Sprinkler | IfcFireSuppressionTerminal | | |
| | Hydrant Tank | IfcTank | | |
| | Jockey Pump | IfcPump | | |

Firefighting System

| | | | | |
|-----------------------------|-----------------------------|----------------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FIREFIGHTING | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Water Tank | IfcTank | | |
| | Sprinkler | IfcFireSuppressionTerminal | | |
| | Pipe Segment | IfcPipeSegment | | |
| | Hose Reel | IfcFireSuppressionTerminal | | |
| | Fire Hydrant | IfcFireSuppressionTerminal | | |
| | Drain-out Test Cock | IfcValve | | |
| | Check Valve | IfcValve | | |
| Pipe Fitting | IfcPipeFitting | | | |

Fresh Air System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FRESHAIR | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Fresh Air Fan | IfcFan | | |
| | Duct Segment | IfcDuctSegment | | |

Fuel System

| | | | | |
|-------------|-----------------------|--|--|--|
| Ifc4 Entity | IfcDistributionSystem | | | |
|-------------|-----------------------|--|--|--|

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------|--------------|
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FUEL | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Infill Point | IfcValve | | |
| | Pipe Fitting | IfcPipeFitting | | |
| | Pipe Segment | IfcPipeSegment | | |
| | Diesel Generator | IfcElectricGenerator | | |

Gas System

| | | | | |
|-----------------------------|-----------------------------|-------------------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GAS | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Gas Tap Valve | IfcValve | | |
| | Knock-out Pot | IfcDistributionChamberElement | | |
| | Change-over Valve | IfcValve | | |
| | Vaporiser | IfcHeatExchanger | | |
| | Gas Regulating Valve | IfcValve | | |
| | Gas Detector | IfcSensor | | |
| | Pressure Reducing Valve | IfcValve | | |
| | Hydrostatic Relief Valve | IfcValve | | |
| | Isolating Valve | IfcValve | | |
| | Emergency Shut-off Valve | IfcValve | | |
| | Pressure Gauge | IfcFlowInstrument | | |
| | Gas Meter | IfcFlowMeter | | |
| | Gas Tank | IfcTank | | |
| Pipe Segment | IfcPipeSegment | | | |

Grey Water System

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | GREYWATER | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Pipe Segment | IfcPipeSegment | | |

Hot Water System

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DOMESTICHOTWATER | | | |
| Components of the group | | | | |

| | Identified Component | IFC4 Entity |
|--|----------------------|----------------------|
| | Terminal Draw Off | IfcValve |
| | Pipe Fitting | IfcPipeFitting |
| | Pipe Segment | IfcPipeSegment |
| | Water Heater | IfcElectricAppliance |
| | Mixing Valve | IfcValve |
| | Solar Water Heater | IfcSolarDevice |

Hydronic System

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HYDRONIC | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Water Tank | IfcTank | | |

Industrial Waste

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | INDUSTRIALWASTE | | | |

Industrial Water System

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | INDUSTRIALWATER | | | |

Irrigation System

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | IRRIGATION | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Pipe Segment | IfcPipeSegment | | |

Jet Fan System

| | | | | |
|-----------------------------|-----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |

| PredefinedType | USERDEFINED | | | | | | | | |
|-------------------------|---|----------------------|-------------|---------|--------|---------------|--------|-----------------|--------|
| ObjectType | JETFAN | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Jet Fan</td> <td>IfcFan</td> </tr> <tr> <td>Fresh Air Fan</td> <td>IfcFan</td> </tr> <tr> <td>Exhaust Air Fan</td> <td>IfcFan</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Jet Fan | IfcFan | Fresh Air Fan | IfcFan | Exhaust Air Fan | IfcFan |
| Identified Component | IFC4 Entity | | | | | | | | |
| Jet Fan | IfcFan | | | | | | | | |
| Fresh Air Fan | IfcFan | | | | | | | | |
| Exhaust Air Fan | IfcFan | | | | | | | | |

Kitchen Fire Suppression System

| Ifc4 Entity | IfcDistributionSystem | | | | | | | | |
|-----------------------------|---|----------------------|---------------|--------------|----------------|------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>MEP System</td> <td>System</td> <td>Piping Systems</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | MEP System | System | Piping Systems | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| MEP System | System | Piping Systems | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | KITCHENFIRESUPPRESSION | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Pipe Segment</td> <td>IfcPipeSegment</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Pipe Segment | IfcPipeSegment | | | | |
| Identified Component | IFC4 Entity | | | | | | | | |
| Pipe Segment | IfcPipeSegment | | | | | | | | |

Lightning Protection System

| Ifc4 Entity | IfcDistributionSystem | | | | | | | | |
|-----------------------------|---|----------------------|---------------|----------------|-----------------|------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>MEP System</td> <td>System</td> <td>Piping Systems</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | MEP System | System | Piping Systems | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| MEP System | System | Piping Systems | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | LIGHTNINGPROTECTION | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Down Conductor</td> <td>IfcCableSegment</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Down Conductor | IfcCableSegment | | | | |
| Identified Component | IFC4 Entity | | | | | | | | |
| Down Conductor | IfcCableSegment | | | | | | | | |

Municipal Solid Waste System

| Ifc4 Entity | IfcDistributionSystem | | | | | | | | |
|-----------------------------|---|----------------------|---------------|--------------|---------|------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>MEP System</td> <td>System</td> <td>Piping Systems</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | MEP System | System | Piping Systems | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| MEP System | System | Piping Systems | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | MUNICIPALSOLIDWASTE | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Refuse Chute</td> <td>IfcWall</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Refuse Chute | IfcWall | | | | |
| Identified Component | IFC4 Entity | | | | | | | | |
| Refuse Chute | IfcWall | | | | | | | | |

NEWater System

| Ifc4 Entity | IfcDistributionSystem | | | | | | | | |
|-----------------------------|---|----------------------|---------------|--------------|----------------|------------|--------|----------------|-----|
| Proposed BIM Representation | <table border="1"> <thead> <tr> <th>ArchiCad</th> <th>OpenBuildings</th> <th>Revit</th> <th>Tekla</th> </tr> </thead> <tbody> <tr> <td>MEP System</td> <td>System</td> <td>Piping Systems</td> <td>N.A</td> </tr> </tbody> </table> | ArchiCad | OpenBuildings | Revit | Tekla | MEP System | System | Piping Systems | N.A |
| ArchiCad | OpenBuildings | Revit | Tekla | | | | | | |
| MEP System | System | Piping Systems | N.A | | | | | | |
| PredefinedType | USERDEFINED | | | | | | | | |
| ObjectType | NEWATER | | | | | | | | |
| Components of the group | <table border="1"> <thead> <tr> <th>Identified Component</th> <th>IFC4 Entity</th> </tr> </thead> <tbody> <tr> <td>Pipe Fitting</td> <td>IfcPipeFitting</td> </tr> </tbody> </table> | Identified Component | IFC4 Entity | Pipe Fitting | IfcPipeFitting | | | | |
| Identified Component | IFC4 Entity | | | | | | | | |
| Pipe Fitting | IfcPipeFitting | | | | | | | | |

| | | |
|--|--------------|----------------|
| | Pipe Segment | IfcPipeSegment |
|--|--------------|----------------|

Non-domestic Cold Water System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | NONDOMESTICCOLDWATER | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Pipe Segment | | IfcPipeSegment | |

Oil System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | OIL | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Oil Tank | | IfcTank | |
| | Pipe Fitting | | IfcPipeFitting | |
| | Pipe Segment | | IfcPipeSegment | |

Plumbing System

| | | | | |
|-----------------------------|-----------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | System | System | Piping Systems | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |

Pumping Main

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | PUMPINGMAIN | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Pipe Segment | | IfcPipeSegment | |
| | Pump | | IfcPump | |

Pumping System

| | | | | |
|-----------------------------|-----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | | | | |

| | | | | |
|-------------------------|-----------------------------|--------|-------------------------|-----|
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | FUEL | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Dispensing Unit | | IfcBuildingElementProxy | |

Rainwater System

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RAINWATER | | | |
| IFC4 UserDefined PropertySet | SGPset_SystemDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Diameter (mm) | Length | N.A | |
| | Gradient | Label | N.A | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Pipe Segment | | IfcPipeSegment | |

Recycled Water System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RECYCLEDWATER | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Water Tank | | IfcTank | |

Return Air System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | RETURNAIR | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Duct Segment | | IfcDuctSegment | |
| | Exhaust Air Fan | | IfcFan | |
| | Exhaust Air Grille | | IfcAirTerminal | |

SPPG

| | | | | |
|-----------------------------|-----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |

| | | | | |
|----------------|-------------|--------|----------------|-----|
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | ELECTRICAL | | | |

Sanitary System

| | | | | |
|------------------------------|---------------------------------------|----------------------|-------------------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SANITARY | | | |
| IFC4 UserDefined PropertySet | SGPset_SystemDimension | | | |
| | IFC4 UserDefined Property Name | Data Type | Sample Property Values | |
| | Gradient | Label | N.A | |
| | Length (mm) | Length | N.A | |
| | Diameter (mm) | Length | N.A | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Sanitary Fixture | IfcSanitaryTerminal | | |
| | Floor Waste | IfcWasteTerminal | | |
| | Bidet | IfcSanitaryTerminal | | |
| | Water Closet | IfcSanitaryTerminal | | |
| | Floor Trap | IfcWasteTerminal | | |
| | Pipe Segment | IfcPipeSegment | | |
| Inspection Chamber | IfcDistributionChamberElement | | | |

Service System

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | System | System | Piping Systems | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Pipe Segment | IfcPipeSegment | | |
| | Duct Segment | IfcDuctSegment | | |
| | Cable Segment | IfcCableSegment | | |

Sewerage System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | MEP Fabrication Pipework | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SEWAGE | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Pipe Segment | IfcPipeSegment | | |
| | Junction | IfcPipeFitting | | |
| | Existing Sewerage | IfcPipeSegment | | |
| | New Sewerage | IfcPipeSegment | | |
| | Abandoned Pipe | IfcPipeSegment | | |

| | | |
|--|-------------------|-------------------------------|
| | Chamber | IfcDistributionChamberElement |
| | Manhole | IfcDistributionChamberElement |
| | Spigot and Socket | IfcPipeFitting |

Smoke Engineering Air

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SMOKEENGINEERINGAIR | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Ventilation Duct | | IfcDuctSegment | |
| | Fire Damper | | IfcDamper | |
| | Motorized Fire Damper | | IfcDamper | |

Steam System

| | | | | |
|-----------------------------|-----------------------|----------------------|--------------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | MEP Fabrication Pipework | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | HEATING | | | |

Supply Air System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SUPPLYAIR | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Supply Air Fan | | IfcFan | |
| | Duct Segment | | IfcDuctSegment | |

System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | System | System | Piping Systems | N.A |
| PredefinedType | Need not specify | | | |
| ObjectType | N.A | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Pipe Fitting | | IfcPipeFitting | |
| | Pipe Segment | | IfcPipeSegment | |

Telecommunication System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | COMMUNICATION | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Cable Segment | | IfcCableSegment | |

Underground Services

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SEWAGE | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Pipe Segment | | IfcPipeSegment | |

Vapour Recovery System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VENT | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Pipe Segment | | IfcPipeSegment | |

Vent Exhaust System

| | | | | |
|-----------------------------|-----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | EXHAUSTAIR | | | |

Vent Supply System

| | | | | |
|-----------------------------|-----------------------|----------------------|--------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | SUPPLYAIR | | | |

Vent System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VENT | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Entry Cap | | IfcPipeFitting | |
| | Pipe Segment | | IfcPipeSegment | |
| | Cowl | | IfcStackTerminal | |
| | Air Terminal | | IfcAirTerminal | |
| | Smoke Vent | | IfcAirTerminal | |

Ventilation System

| | | | | |
|-----------------------------|-----------------------------|----------------------|--------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Duct Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | VENTILATION | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Opening | | IfcOpeningElement | |
| | Fan | | IfcFan | |
| | Fire Damper | | IfcDamper | |
| | Duct Segment | | IfcDuctSegment | |
| | Mechanical Ventilation | | IfcAirTerminal | |

Water System

| | | | | |
|-----------------------------|-----------------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WATERSUPPLY | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Sprinkler | | IfcSanitaryTerminal | |
| | Water Tank | | IfcTank | |
| | Pump | | IfcPump | |

Watering System Pipe

| | | | | |
|-----------------------------|-----------------------------|----------------------|---------------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | DOMESTICCOLDWATER | | | |
| Components of the group | Identified Component | | IFC4 Entity | |
| | Male Adapter | | IfcPipeFitting | |
| | Breaching Inlet | | IfcSanitaryTerminal | |

Wet Riser System

| | | | | |
|-----------------------------|-----------------------------|----------------------|----------------|--------------|
| Ifc4 Entity | IfcDistributionSystem | | | |
| Proposed BIM Representation | ArchiCad | OpenBuildings | Revit | Tekla |
| | MEP System | System | Piping Systems | N.A |
| PredefinedType | USERDEFINED | | | |
| ObjectType | WETRISER | | | |
| Components of the group | Identified Component | IFC4 Entity | | |
| | Water Tank | IfcTank | | |
| | Pump | IfcPump | | |
| | Landing Valve | IfcValve | | |
| | Pipe Segment | IfcPipeSegment | | |