Schema cobielite.xsd

|  |  |
| --- | --- |
| schema location: | [..\cobielite.xsd](file:./../cobielite.xsd) |
| attributeFormDefault: | unqualified |
| elementFormDefault: | unqualified |
| blockDefault: |  |
| finalDefault: |  |
| targetNamespace: | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |

| Elements | Complex types |
| --- | --- |
| [AssemblyAssignment](#Link1)  [Asset](#Link14)  [AssetType](#Link2B)  [Attribute](#Link52)  [Connection](#Link5E)  [Contact](#Link6B)  [Document](#Link7F)  [Facility](#Link89)  [Floor](#LinkA8)  [Issue](#LinkB5)  [Job](#LinkC1)  [Resource](#LinkD3)  [Space](#LinkDC)  [Spare](#LinkEB)  [System](#LinkF7)  [Zone](#Link100) | [AssemblyType](#Link2)  [AssetInfoType](#Link15)  [AssetTypeInfoType](#Link2C)  [AttributeType](#Link53)  [ConnectionType](#Link5F)  [ContactType](#Link6C)  [DocumentType](#Link80)  [FacilityType](#Link8A)  [FloorType](#LinkA9)  [IssueType](#LinkB6)  [JobType](#LinkC2)  [ResourceType](#LinkD4)  [SpaceType](#LinkDD)  [SpareType](#LinkEC)  [SystemType](#LinkF8)  [ZoneType](#Link101) |

|  |  |
| --- | --- |
| schema location: | [..\core.xsd](file:./../core.xsd) |
| attributeFormDefault: | unqualified |
| elementFormDefault: | unqualified |
| blockDefault: |  |
| finalDefault: |  |
| targetNamespace: | http://docs.buildingsmartalliance.org/nbims03/cobie/core |

| Elements | Complex types | Simple types | Attributes |
| --- | --- | --- | --- |
| [AllowedValues](#Link119)  [AssemblyAssignment](#Link10)  [AssemblyAssignments](#Link25)  [AssemblyAttributes](#LinkA)  [AssemblyCategory](#Link8)  [AssemblyDescription](#Link9)  [AssemblyDocuments](#LinkC)  [AssemblyIssues](#LinkE)  [AssemblyName](#Link6)  [AssemblyParentName](#Link7)  [Asset](#Link2A)  [AssetAttributes](#Link27)  [AssetBarCode](#Link20)  [AssetDescription](#Link19)  [AssetDocuments](#Link28)  [AssetIdentifier](#Link21)  [AssetInstallationDate](#Link1B)  [AssetInstalledModelNumber](#Link1C)  [AssetIssues](#Link29)  [AssetLocationDescription](#Link22)  [AssetName](#Link16)  [Assets](#Link44)  [AssetSerialNumber](#Link1A)  [AssetSpaceAssignments](#Link17)  [AssetStartDate](#Link1E)  [AssetSystemAssignments](#Link23)  [AssetTagNumber](#Link1F)  [AssetType](#Link51)  [AssetTypeAccessibilityText](#Link39)  [AssetTypeAccountingCategory](#Link30)  [AssetTypeAssignment](#Link129)  [AssetTypeAttributes](#Link4E)  [AssetTypeCategory](#Link2E)  [AssetTypeCodePerformance](#Link3A)  [AssetTypeColorCode](#Link3B)  [AssetTypeConstituentsDescription](#Link3C)  [AssetTypeDescription](#Link2F)  [AssetTypeDocuments](#Link4F)  [AssetTypeExpectedLifeValue](#Link34)  [AssetTypeFeaturesDescription](#Link3D)  [AssetTypeFinishDescription](#Link3E)  [AssetTypeGradeDescription](#Link3F)  [AssetTypeIssues](#Link50)  [AssetTypeManufacturerContactAssignments](#Link46)  [AssetTypeMaterialDescription](#Link40)  [AssetTypeModelNumber](#Link31)  [AssetTypeName](#Link2D)  [AssetTypeNominalHeight](#Link38)  [AssetTypeNominalLength](#Link36)  [AssetTypeNominalWidth](#Link37)  [AssetTypeReplacementCostValue](#Link32)  [AssetTypes](#Link9C)  [AssetTypeShapeDescription](#Link41)  [AssetTypeSizeDescription](#Link42)  [AssetTypeSustainabilityPerformanceDescription](#Link43)  [AssetWarrantyStartDate](#Link1D)  [Attribute](#Link5C)  [AttributeAllowedValue](#Link11B)  [AttributeBooleanValue](#Link131)  [AttributeCategory](#Link57)  [AttributeDateTimeValue](#Link136)  [AttributeDateValue](#Link137)  [AttributeDecimalValue](#Link138)  [AttributeDescription](#Link58)  [AttributeDocuments](#Link13C)  [AttributeIntegerValue](#Link13D)  [AttributeIssues](#Link5B)  [AttributeMonetaryValue](#Link141)  [AttributeName](#Link56)  [Attributes](#Link145)  [AttributeStringValue](#Link147)  [AttributeTimeValue](#Link149)  [AttributeValue](#Link59)  [BooleanValue](#Link133)  [Connection](#Link6A)  [ConnectionAsset1Name](#Link62)  [ConnectionAsset1PortName](#Link63)  [ConnectionAsset2Name](#Link64)  [ConnectionAsset2PortName](#Link65)  [ConnectionAttributes](#Link67)  [ConnectionCategory](#Link61)  [ConnectionDescription](#Link66)  [ConnectionDocuments](#Link68)  [ConnectionIssues](#Link69)  [ConnectionName](#Link60)  [Connections](#LinkA0)  [Contact](#Link7E)  [ContactAssignment](#LinkBD)  [ContactAttributes](#Link7B)  [ContactCategory](#Link6E)  [ContactCompanyName](#Link6F)  [ContactCountryName](#Link78)  [ContactDepartmentName](#Link71)  [ContactDocuments](#Link7C)  [ContactEmail](#Link6D)  [ContactEmailReference](#Link14C)  [ContactFamilyName](#Link73)  [ContactGivenName](#Link72)  [ContactIssues](#Link7D)  [ContactPhoneNumber](#Link70)  [ContactPostalBoxNumber](#Link75)  [ContactPostalCode](#Link79)  [ContactRegionCode](#Link77)  [Contacts](#LinkA2)  [ContactStreet](#Link74)  [ContactTownName](#Link76)  [ContactURL](#Link7A)  [DecimalValue](#Link12F)  [Document](#Link88)  [DocumentAttributes](#Link86)  [DocumentCategory](#Link82)  [DocumentDescription](#Link83)  [DocumentIssues](#Link87)  [DocumentName](#Link81)  [DocumentReferenceURI](#Link85)  [Documents](#Link151)  [DocumentURI](#Link84)  [Facility](#LinkA7)  [FacilityAttributes](#LinkA4)  [FacilityCategory](#Link8C)  [FacilityDefaultAreaUnit](#Link92)  [FacilityDefaultCurrencyUnit](#Link94)  [FacilityDefaultLinearUnit](#Link91)  [FacilityDefaultMeasurementStandard](#Link95)  [FacilityDefaultVolumeUnit](#Link93)  [FacilityDeliverablePhaseName](#Link97)  [FacilityDescription](#Link96)  [FacilityDocuments](#LinkA5)  [FacilityIssues](#LinkA6)  [FacilityName](#Link8B)  [Floor](#LinkB4)  [FloorAttributes](#LinkB1)  [FloorCategory](#LinkAB)  [FloorDescription](#LinkAC)  [FloorDocuments](#LinkB2)  [FloorElevationValue](#LinkAD)  [FloorHeightValue](#LinkAE)  [FloorIssues](#LinkB3)  [FloorName](#LinkAA)  [Floors](#Link98)  [IntegerValue](#Link12D)  [Issue](#LinkC0)  [IssueAttributes](#Link15C)  [IssueCategory](#LinkB8)  [IssueDescription](#LinkBC)  [IssueDocuments](#Link15F)  [IssueImpactText](#LinkBB)  [IssueMitigationDescription](#LinkBF)  [IssueName](#LinkB7)  [IssueRiskText](#LinkB9)  [Issues](#Link160)  [IssueSeverityText](#LinkBA)  [Job](#LinkD2)  [JobAttributes](#LinkCF)  [JobCategory](#LinkC5)  [JobDescription](#LinkC7)  [JobDocuments](#LinkD0)  [JobDuration](#LinkC8)  [JobFrequencyValue](#LinkCB)  [JobIssues](#LinkD1)  [JobName](#LinkC3)  [JobPriorTaskID](#LinkCC)  [Jobs](#Link4C)  [JobStartConditionDescription](#LinkCA)  [JobStartDate](#LinkC9)  [JobStatus](#LinkC6)  [JobTaskID](#LinkC4)  [MaxValueDecimal](#Link13B)  [MaxValueInteger](#Link140)  [MinValueDecimal](#Link13A)  [MinValueInteger](#Link13F)  [MonetaryUnit](#Link144)  [MonetaryValue](#Link143)  [ProjectAssignment](#Link8D)  [ProjectDescription](#Link167)  [ProjectName](#Link166)  [Resource](#LinkDB)  [ResourceAttributes](#LinkD8)  [ResourceCategory](#LinkD6)  [ResourceDescription](#LinkD7)  [ResourceDocuments](#LinkD9)  [ResourceIssues](#LinkDA)  [ResourceName](#LinkD5)  [Resources](#LinkCD)  [SiteAssignment](#Link8F)  [SiteDescription](#Link16C)  [SiteName](#Link16B)  [Space](#LinkEA)  [SpaceAssignment](#Link123)  [SpaceAttributes](#LinkE7)  [SpaceCategory](#LinkDF)  [SpaceDescription](#LinkE0)  [SpaceDocuments](#LinkE8)  [SpaceGrossAreaValue](#LinkE3)  [SpaceIssues](#LinkE9)  [SpaceName](#LinkDE)  [SpaceNetAreaValue](#LinkE4)  [Spaces](#LinkAF)  [SpaceSignageName](#LinkE1)  [SpaceUsableHeightValue](#LinkE2)  [SpaceZoneAssignments](#LinkE5)  [Spare](#LinkF6)  [SpareAttributes](#LinkF3)  [SpareCategory](#LinkEE)  [SpareDescription](#LinkEF)  [SpareDocuments](#LinkF4)  [SpareIssues](#LinkF5)  [SpareName](#LinkED)  [SparePartNumber](#LinkF1)  [Spares](#Link4A)  [SpareSetNumber](#LinkF0)  [SpareSupplierContactAssignments](#LinkF2)  [StringValue](#Link148)  [System](#LinkFF)  [SystemAssignment](#Link125)  [SystemAttributes](#LinkFC)  [SystemCategory](#LinkFA)  [SystemDescription](#LinkFB)  [SystemDocuments](#LinkFD)  [SystemIssues](#LinkFE)  [SystemName](#LinkF9)  [Systems](#Link9E)  [UnitName](#Link12C)  [Warranties](#Link48)  [Warranty](#Link17B)  [WarrantyAttributes](#Link182)  [WarrantyCategory](#Link17F)  [WarrantyDocuments](#Link183)  [WarrantyDuration](#Link180)  [WarrantyGaurantorContactAssignments](#Link181)  [WarrantyIssues](#Link184)  [WarrantyName](#Link17E)  [Zone](#Link108)  [ZoneAssignment](#Link16F)  [ZoneAttributes](#Link105)  [ZoneCategory](#Link103)  [ZoneDescription](#Link104)  [ZoneDocuments](#Link106)  [ZoneIssues](#Link107)  [ZoneName](#Link102)  [Zones](#Link9A) | [AllowedValueCollectionType](#Link11A)  [AssemblyAssignmentCollectionType](#Link26)  [AssemblyKeyType](#Link11F)  [AssemblyType](#Link109)  [AssetCollectionType](#Link45)  [AssetInfoType](#Link10A)  [AssetKeyType](#Link122)  [AssetTypeCollectionType](#Link9D)  [AssetTypeInfoType](#Link10B)  [AssetTypeKeyType](#Link12A)  [AttributeCollectionType](#LinkB)  [AttributeDecimalValueType](#Link139)  [AttributeIntegerValueType](#Link13E)  [AttributeKeyType](#Link135)  [AttributeMonetaryValueType](#Link142)  [AttributeStringValueType](#Link11C)  [AttributeType](#Link10C)  [AttributeValueType](#Link5A)  [BooleanValueType](#Link132)  [CobieBaseType](#Link18F)  [CobieComplexObjectType](#Link18A)  [CobieKeyType](#Link18C)  [CobieRowAssignmentsType](#Link18B)  [CobieRowType](#Link18D)  [CobieWorksheetType](#Link18E)  [ConnectionCollectionType](#LinkA1)  [ConnectionType](#Link10D)  [ContactAssignmentCollectionType](#Link47)  [ContactCollectionType](#LinkA3)  [ContactKeyType](#LinkBE)  [ContactType](#Link10E)  [DecimalValueType](#Link33)  [DocumentCollectionType](#LinkD)  [DocumentKeyType](#Link150)  [DocumentType](#Link10F)  [FacilityKeyType](#Link158)  [FacilityType](#Link110)  [FloorCollectionType](#Link99)  [FloorKeyType](#Link15A)  [FloorType](#Link111)  [IntegerValueType](#Link35)  [IssueCollectionType](#LinkF)  [IssueKeyType](#Link15E)  [IssueType](#Link112)  [JobCollectionType](#Link4D)  [JobKeyType](#Link163)  [JobType](#Link113)  [ProjectType](#Link8E)  [ResourceCollectionType](#LinkCE)  [ResourceKeyType](#Link169)  [ResourceType](#Link114)  [SiteType](#Link90)  [SpaceAssignmentCollectionType](#Link18)  [SpaceCollectionType](#LinkB0)  [SpaceKeyType](#Link124)  [SpaceType](#Link115)  [SpareCollectionType](#Link4B)  [SpareKeyType](#Link173)  [SpareType](#Link116)  [StringValueType](#Link176)  [SystemAssignmentCollectionType](#Link24)  [SystemCollectionType](#Link9F)  [SystemKeyType](#Link126)  [SystemType](#Link117)  [ValueBaseType](#Link17A)  [WarrantyCollectionType](#Link49)  [WarrantyKeyType](#Link186)  [WarrantyType](#Link17C)  [ZoneAssignmentCollectionType](#LinkE6)  [ZoneCollectionType](#Link9B)  [ZoneKeyType](#Link170)  [ZoneType](#Link118) | [AreaUnitSimpleType](#Link154)  [AssemblyCategorySimpleType](#Link11E)  [AssemblyExternalEntityNameSimpleType](#Link190)  [AssetCategorySimpleType](#Link12B)  [AssetExternalEntityNameSimpleType](#Link191)  [AssetPortabilitySimpleType](#Link128)  [AssetTypeExternalEntityNameSimpleType](#Link192)  [AttributeCategorySimpleType](#Link134)  [AttributeExternalEntityNameSimpleType](#Link193)  [CobieCategorySimpleType](#Link14D)  [CobieDescriptionSimpleType](#Link120)  [CobieNameSimpleType](#Link121)  [CobieTextSimpleType](#Link13)  [ConnectionCategorySimpleType](#Link14A)  [ConnectionExternalEntityNameSimpleType](#Link194)  [CurrencyUnitSimpleType](#Link155)  [DocumentCategorySimpleType](#Link14F)  [ExternalEntityNameSimpleType](#Link11)  [ExternalIdentifierSimpleType](#Link12)  [FacilityCategorySimpleType](#Link153)  [FacilityExternalEntityNameSimpleType](#Link195)  [FloorCategorySimpleType](#Link159)  [FloorExternalEntityNameSimpleType](#Link196)  [IssueCategorySimpleType](#Link15D)  [IssueExternalEntityNameSimpleType](#Link197)  [JobCategorySimpleType](#Link162)  [JobExternalEntityNameSimpleType](#Link198)  [LinearUnitSimpleType](#Link156)  [MonetaryValueSimpleType](#Link165)  [PropertySetNameSimpleType](#Link5D)  [ResourceCategorySimpleType](#Link168)  [ResourceExternalEntityNameSimpleType](#Link199)  [SpaceCategorySimpleType](#Link16D)  [SpaceExternalEntityNameSimpleType](#Link19A)  [SpareCategorySimpleType](#Link172)  [SpareExternalEntityNameSimpleType](#Link19B)  [SystemCategorySimpleType](#Link178)  [SystemExternalEntityNameSimpleType](#Link19C)  [VolumeUnitSimpleType](#Link157)  [WarrantyCategorySimpleType](#Link185)  [ZoneCategorySimpleType](#Link188)  [ZoneExternallEntityNameSimpleType](#Link19D) | [externalEntityName](#Link3)  [externalID](#Link4)  [externalIDReference](#Link177)  [externalSystemName](#Link5)  [propertySetExternalIdentifier](#Link55)  [propertySetName](#Link54) |

element AssemblyAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:AssemblyType](#Link2) |
| substitution group | [core:AssemblyAssignment](#Link10) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [AssemblyName](#Link6)  [AssemblyParentName](#Link7)  [AssemblyCategory](#Link8)  [AssemblyDescription](#Link9)  [AssemblyAttributes](#LinkA)  [AssemblyDocuments](#LinkC)  [AssemblyIssues](#LinkE) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | The assignment of an Asset or AssetType to an assembly | |

element Asset

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:AssetInfoType](#Link15) |
| substitution group | [core:Asset](#Link2A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [AssetName](#Link16)  [AssetSpaceAssignments](#Link17)  [AssetDescription](#Link19)  [AssetSerialNumber](#Link1A)  [AssetInstallationDate](#Link1B)  [AssetInstalledModelNumber](#Link1C)  [AssetWarrantyStartDate](#Link1D)  [AssetStartDate](#Link1E)  [AssetTagNumber](#Link1F)  [AssetBarCode](#Link20)  [AssetIdentifier](#Link21)  [AssetLocationDescription](#Link22)  [AssetSystemAssignments](#Link23)  [AssemblyAssignments](#Link25)  [AssetAttributes](#Link27)  [AssetDocuments](#Link28)  [AssetIssues](#Link29) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Component record is required for all COBie deliverables related to equpment Component information. | |

element AssetType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:AssetTypeInfoType](#Link2C) |
| substitution group | [core:AssetType](#Link51) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [AssetTypeName](#Link2D)  [AssetTypeCategory](#Link2E)  [AssetTypeDescription](#Link2F)  [AssetTypeAccountingCategory](#Link30)  [AssetTypeModelNumber](#Link31)  [AssetTypeReplacementCostValue](#Link32)  [AssetTypeExpectedLifeValue](#Link34)  [AssetTypeNominalLength](#Link36)  [AssetTypeNominalWidth](#Link37)  [AssetTypeNominalHeight](#Link38)  [AssetTypeAccessibilityText](#Link39)  [AssetTypeCodePerformance](#Link3A)  [AssetTypeColorCode](#Link3B)  [AssetTypeConstituentsDescription](#Link3C)  [AssetTypeFeaturesDescription](#Link3D)  [AssetTypeFinishDescription](#Link3E)  [AssetTypeGradeDescription](#Link3F)  [AssetTypeMaterialDescription](#Link40)  [AssetTypeShapeDescription](#Link41)  [AssetTypeSizeDescription](#Link42)  [AssetTypeSustainabilityPerformanceDescription](#Link43)  [Assets](#Link44)  [AssetTypeManufacturerContactAssignments](#Link46)  [Warranties](#Link48)  [Spares](#Link4A)  [Jobs](#Link4C)  [AssemblyAssignments](#Link25)  [AssetTypeAttributes](#Link4E)  [AssetTypeDocuments](#Link4F)  [AssetTypeIssues](#Link50) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one AssetType record is required for all COBie deliverables related to equipment Type information. AssetType is associated with one or more Assets. | |

element Attribute

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:AttributeType](#Link53) |
| substitution group | [core:Attribute](#Link5C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [AttributeName](#Link56)  [AttributeCategory](#Link57)  [AttributeDescription](#Link58)  [AttributeValue](#Link59)  [AttributeIssues](#Link5B) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | | [propertySetName](#Link54) |  | PropertySetNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of a logically grouped set of properties Value: IfcPropertySet ISO16739Mapping: Pset\_SpaceCommon|Pset\_ElectricalDeviceCommon|Pset\_BaseQuantities COBie2.4Header: Attribute.ExtObject (When originating from an IFC file) COBie2.4Column: J | | [propertySetExternalIdentifier](#Link55) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The unique identifier of the data structure Object that contains the specified property. Most commonly PropertySetName corresponds to the GlobalId attribute of an IfcPropertySet Object. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcPropertySet.GloballyUniqueId COBie2.4Header: Attribute.ExtIdentifier (If originating from an IFC file) COBie2.4Column: K | |
| annotation | |  | | --- | | documentation | | Information about a specific Attribute. | |

element Connection

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:ConnectionType](#Link5F) |
| substitution group | [core:Connection](#Link6A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [ConnectionName](#Link60)  [ConnectionCategory](#Link61)  [ConnectionAsset1Name](#Link62)  [ConnectionAsset1PortName](#Link63)  [ConnectionAsset2Name](#Link64)  [ConnectionAsset2PortName](#Link65)  [ConnectionDescription](#Link66)  [ConnectionAttributes](#Link67)  [ConnectionDocuments](#Link68)  [ConnectionIssues](#Link69) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Connection information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific requirements. | |

element Contact

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:ContactType](#Link6C) |
| substitution group | [core:Contact](#Link7E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [ContactEmail](#Link6D)  [ContactCategory](#Link6E)  [ContactCompanyName](#Link6F)  [ContactPhoneNumber](#Link70)  [ContactDepartmentName](#Link71)  [ContactGivenName](#Link72)  [ContactFamilyName](#Link73)  [ContactStreet](#Link74)  [ContactPostalBoxNumber](#Link75)  [ContactTownName](#Link76)  [ContactRegionCode](#Link77)  [ContactCountryName](#Link78)  [ContactPostalCode](#Link79)  [ContactURL](#Link7A)  [ContactAttributes](#Link7B)  [ContactDocuments](#Link7C)  [ContactIssues](#Link7D) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific manufacturer or supplier associated with an AssetType. | |

element Document

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:DocumentType](#Link80) |
| substitution group | [core:Document](#Link88) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [DocumentName](#Link81)  [DocumentCategory](#Link82)  [DocumentDescription](#Link83)  [DocumentURI](#Link84)  [DocumentReferenceURI](#Link85)  [DocumentAttributes](#Link86)  [DocumentIssues](#Link87) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific Document. | |

element Facility

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:FacilityType](#Link8A) |
| substitution group | [core:Facility](#LinkA7) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [FacilityName](#Link8B)  [FacilityCategory](#Link8C)  [ProjectAssignment](#Link8D)  [SiteAssignment](#Link8F)  [FacilityDefaultLinearUnit](#Link91)  [FacilityDefaultAreaUnit](#Link92)  [FacilityDefaultVolumeUnit](#Link93)  [FacilityDefaultCurrencyUnit](#Link94)  [FacilityDefaultMeasurementStandard](#Link95)  [FacilityDescription](#Link96)  [FacilityDeliverablePhaseName](#Link97)  [Floors](#Link98)  [Zones](#Link9A)  [AssetTypes](#Link9C)  [Systems](#Link9E)  [Connections](#LinkA0)  [Contacts](#LinkA2)  [FacilityAttributes](#LinkA4)  [FacilityDocuments](#LinkA5)  [FacilityIssues](#LinkA6) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Facility contains information about the facility being exchanged during a given COBie deliverable. Since COBie deliverables may be exchanged during planning, design, construction, handover, or operation phases there may be differences in facility designations. COBie files will typically contain a single facility. | |

element Floor

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:FloorType](#LinkA9) |
| substitution group | [core:Floor](#LinkB4) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [FloorName](#LinkAA)  [FloorCategory](#LinkAB)  [FloorDescription](#LinkAC)  [FloorElevationValue](#LinkAD)  [FloorHeightValue](#LinkAE)  [Spaces](#LinkAF)  [FloorAttributes](#LinkB1)  [FloorDocuments](#LinkB2)  [FloorIssues](#LinkB3) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Floor record is required for all COBie deliverables containing spatial information. | |

element Issue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:IssueType](#LinkB6) |
| substitution group | [core:Issue](#LinkC0) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [IssueName](#LinkB7)  [IssueCategory](#LinkB8)  [IssueRiskText](#LinkB9)  [IssueSeverityText](#LinkBA)  [IssueImpactText](#LinkBB)  [IssueDescription](#LinkBC)  [ContactAssignment](#LinkBD)  [IssueMitigationDescription](#LinkBF) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A specific Issue within this set of Issues. | |

element Job

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:JobType](#LinkC2) |
| substitution group | [core:Job](#LinkD2) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [JobName](#LinkC3)  [JobTaskID](#LinkC4)  [JobCategory](#LinkC5)  [JobStatus](#LinkC6)  [JobDescription](#LinkC7)  [JobDuration](#LinkC8)  [JobStartDate](#LinkC9)  [JobStartConditionDescription](#LinkCA)  [JobFrequencyValue](#LinkCB)  [JobPriorTaskID](#LinkCC)  [Resources](#LinkCD)  [JobAttributes](#LinkCF)  [JobDocuments](#LinkD0)  [JobIssues](#LinkD1) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Job record is required for all relevant COBie.Type objects submitted at the benefical occupancy or facility handover stage. | |

element Resource

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:ResourceType](#LinkD4) |
| substitution group | [core:Resource](#LinkDB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [ResourceName](#LinkD5)  [ResourceCategory](#LinkD6)  [ResourceDescription](#LinkD7)  [ResourceAttributes](#LinkD8)  [ResourceDocuments](#LinkD9)  [ResourceIssues](#LinkDA) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific resource. | |

element Space

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:SpaceType](#LinkDD) |
| substitution group | [core:Space](#LinkEA) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [SpaceName](#LinkDE)  [SpaceCategory](#LinkDF)  [SpaceDescription](#LinkE0)  [SpaceSignageName](#LinkE1)  [SpaceUsableHeightValue](#LinkE2)  [SpaceGrossAreaValue](#LinkE3)  [SpaceNetAreaValue](#LinkE4)  [SpaceZoneAssignments](#LinkE5)  [SpaceAttributes](#LinkE7)  [SpaceDocuments](#LinkE8)  [SpaceIssues](#LinkE9) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Space record is required for all COBie deliverables related to Space information. | |

element Spare

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:SpareType](#LinkEC) |
| substitution group | [core:Spare](#LinkF6) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [SpareName](#LinkED)  [SpareCategory](#LinkEE)  [SpareDescription](#LinkEF)  [SpareSetNumber](#LinkF0)  [SparePartNumber](#LinkF1)  [SpareSupplierContactAssignments](#LinkF2)  [SpareAttributes](#LinkF3)  [SpareDocuments](#LinkF4)  [SpareIssues](#LinkF5) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific Spare. | |

element System

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:SystemType](#LinkF8) |
| substitution group | [core:System](#LinkFF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [SystemName](#LinkF9)  [SystemCategory](#LinkFA)  [SystemDescription](#LinkFB)  [SystemAttributes](#LinkFC)  [SystemDocuments](#LinkFD)  [SystemIssues](#LinkFE) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Definition COBie.System information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific system requirements. | |

element Zone

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | [cobielite:ZoneType](#Link101) |
| substitution group | [core:Zone](#Link108) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [ZoneName](#Link102)  [ZoneCategory](#Link103)  [ZoneDescription](#Link104)  [ZoneAttributes](#Link105)  [ZoneDocuments](#Link106)  [ZoneIssues](#Link107) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | COBie.Zone information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific zoning requirements. | |

complexType AssemblyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [AssemblyType](#Link109) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:AssemblyType | | |
| children | [AssemblyName](#Link6)  [AssemblyParentName](#Link7)  [AssemblyCategory](#Link8)  [AssemblyDescription](#Link9)  [AssemblyAttributes](#LinkA)  [AssemblyDocuments](#LinkC)  [AssemblyIssues](#LinkE) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyAssignment](#Link1) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | The Assembly to which this Asset belongs | |

complexType AssetInfoType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [AssetInfoType](#Link10A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:AssetInfoType | | |
| children | [AssetName](#Link16)  [AssetSpaceAssignments](#Link17)  [AssetDescription](#Link19)  [AssetSerialNumber](#Link1A)  [AssetInstallationDate](#Link1B)  [AssetInstalledModelNumber](#Link1C)  [AssetWarrantyStartDate](#Link1D)  [AssetStartDate](#Link1E)  [AssetTagNumber](#Link1F)  [AssetBarCode](#Link20)  [AssetIdentifier](#Link21)  [AssetLocationDescription](#Link22)  [AssetSystemAssignments](#Link23)  [AssemblyAssignments](#Link25)  [AssetAttributes](#Link27)  [AssetDocuments](#Link28)  [AssetIssues](#Link29) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Asset](#Link14) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Asset record is required for all COBie deliverables related to equpment Asset information. | |

complexType AssetTypeInfoType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [AssetTypeInfoType](#Link10B) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:AssetTypeInfoType | | |
| children | [AssetTypeName](#Link2D)  [AssetTypeCategory](#Link2E)  [AssetTypeDescription](#Link2F)  [AssetTypeAccountingCategory](#Link30)  [AssetTypeModelNumber](#Link31)  [AssetTypeReplacementCostValue](#Link32)  [AssetTypeExpectedLifeValue](#Link34)  [AssetTypeNominalLength](#Link36)  [AssetTypeNominalWidth](#Link37)  [AssetTypeNominalHeight](#Link38)  [AssetTypeAccessibilityText](#Link39)  [AssetTypeCodePerformance](#Link3A)  [AssetTypeColorCode](#Link3B)  [AssetTypeConstituentsDescription](#Link3C)  [AssetTypeFeaturesDescription](#Link3D)  [AssetTypeFinishDescription](#Link3E)  [AssetTypeGradeDescription](#Link3F)  [AssetTypeMaterialDescription](#Link40)  [AssetTypeShapeDescription](#Link41)  [AssetTypeSizeDescription](#Link42)  [AssetTypeSustainabilityPerformanceDescription](#Link43)  [Assets](#Link44)  [AssetTypeManufacturerContactAssignments](#Link46)  [Warranties](#Link48)  [Spares](#Link4A)  [Jobs](#Link4C)  [AssemblyAssignments](#Link25)  [AssetTypeAttributes](#Link4E)  [AssetTypeDocuments](#Link4F)  [AssetTypeIssues](#Link50) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetType](#Link2B) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Type record is required for all COBie deliverables related to equipment Type information. | |

complexType AttributeType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [AttributeType](#Link10C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:AttributeType | | |
| children | [AttributeName](#Link56)  [AttributeCategory](#Link57)  [AttributeDescription](#Link58)  [AttributeValue](#Link59)  [AttributeIssues](#Link5B) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Attribute](#Link52) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | | [propertySetName](#Link54) |  | PropertySetNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of a logically grouped set of properties Value: IfcPropertySet ISO16739Mapping: Pset\_SpaceCommon|Pset\_ElectricalDeviceCommon|Pset\_BaseQuantities COBie2.4Header: Attribute.ExtObject (When originating from an IFC file) COBie2.4Column: J | | [propertySetExternalIdentifier](#Link55) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The unique identifier of the data structure Object that contains the specified property. Most commonly PropertySetName corresponds to the GlobalId attribute of an IfcPropertySet Object. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcPropertySet.GloballyUniqueId COBie2.4Header: Attribute.ExtIdentifier (If originating from an IFC file) COBie2.4Column: K | |
| annotation | |  | | --- | | documentation | | Information about a specific Attribute. | |

complexType ConnectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [ConnectionType](#Link10D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:ConnectionType | | |
| children | [ConnectionName](#Link60)  [ConnectionCategory](#Link61)  [ConnectionAsset1Name](#Link62)  [ConnectionAsset1PortName](#Link63)  [ConnectionAsset2Name](#Link64)  [ConnectionAsset2PortName](#Link65)  [ConnectionDescription](#Link66)  [ConnectionAttributes](#Link67)  [ConnectionDocuments](#Link68)  [ConnectionIssues](#Link69) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Connection](#Link5E) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A type for representing Connection Information. | |

complexType ContactType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [ContactType](#Link10E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:ContactType | | |
| children | [ContactEmail](#Link6D)  [ContactCategory](#Link6E)  [ContactCompanyName](#Link6F)  [ContactPhoneNumber](#Link70)  [ContactDepartmentName](#Link71)  [ContactGivenName](#Link72)  [ContactFamilyName](#Link73)  [ContactStreet](#Link74)  [ContactPostalBoxNumber](#Link75)  [ContactTownName](#Link76)  [ContactRegionCode](#Link77)  [ContactCountryName](#Link78)  [ContactPostalCode](#Link79)  [ContactURL](#Link7A)  [ContactAttributes](#Link7B)  [ContactDocuments](#Link7C)  [ContactIssues](#Link7D) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Contact](#Link6B) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific company who can provide the type of equipment. | |

complexType DocumentType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [DocumentType](#Link10F) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:DocumentType | | |
| children | [DocumentName](#Link81)  [DocumentCategory](#Link82)  [DocumentDescription](#Link83)  [DocumentURI](#Link84)  [DocumentReferenceURI](#Link85)  [DocumentAttributes](#Link86)  [DocumentIssues](#Link87) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Document](#Link7F) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific Document. | |

complexType FacilityType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [FacilityType](#Link110) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:FacilityType | | |
| children | [FacilityName](#Link8B)  [FacilityCategory](#Link8C)  [ProjectAssignment](#Link8D)  [SiteAssignment](#Link8F)  [FacilityDefaultLinearUnit](#Link91)  [FacilityDefaultAreaUnit](#Link92)  [FacilityDefaultVolumeUnit](#Link93)  [FacilityDefaultCurrencyUnit](#Link94)  [FacilityDefaultMeasurementStandard](#Link95)  [FacilityDescription](#Link96)  [FacilityDeliverablePhaseName](#Link97)  [Floors](#Link98)  [Zones](#Link9A)  [AssetTypes](#Link9C)  [Systems](#Link9E)  [Connections](#LinkA0)  [Contacts](#LinkA2)  [FacilityAttributes](#LinkA4)  [FacilityDocuments](#LinkA5)  [FacilityIssues](#LinkA6) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Facility](#Link89) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A type for the Facility element that is the root of a COBie document | |

complexType FloorType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [FloorType](#Link111) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:FloorType | | |
| children | [FloorName](#LinkAA)  [FloorCategory](#LinkAB)  [FloorDescription](#LinkAC)  [FloorElevationValue](#LinkAD)  [FloorHeightValue](#LinkAE)  [Spaces](#LinkAF)  [FloorAttributes](#LinkB1)  [FloorDocuments](#LinkB2)  [FloorIssues](#LinkB3) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Floor](#LinkA8) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Floor record is required for all COBie deliverables containing spatial information. | |

complexType IssueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [IssueType](#Link112) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:IssueType | | |
| children | [IssueName](#LinkB7)  [IssueCategory](#LinkB8)  [IssueRiskText](#LinkB9)  [IssueSeverityText](#LinkBA)  [IssueImpactText](#LinkBB)  [IssueDescription](#LinkBC)  [ContactAssignment](#LinkBD)  [IssueMitigationDescription](#LinkBF) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Issue](#LinkB5) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A specific Issue within this set of Issues. | |

complexType JobType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [JobType](#Link113) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:JobType | | |
| children | [JobName](#LinkC3)  [JobTaskID](#LinkC4)  [JobCategory](#LinkC5)  [JobStatus](#LinkC6)  [JobDescription](#LinkC7)  [JobDuration](#LinkC8)  [JobStartDate](#LinkC9)  [JobStartConditionDescription](#LinkCA)  [JobFrequencyValue](#LinkCB)  [JobPriorTaskID](#LinkCC)  [Resources](#LinkCD)  [JobAttributes](#LinkCF)  [JobDocuments](#LinkD0)  [JobIssues](#LinkD1) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Job](#LinkC1) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Job record is required for all relevant COBie.Type objects submitted at the benefical occupancy or facility handover stage. | |

complexType ResourceType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [ResourceType](#Link114) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:ResourceType | | |
| children | [ResourceName](#LinkD5)  [ResourceCategory](#LinkD6)  [ResourceDescription](#LinkD7)  [ResourceAttributes](#LinkD8)  [ResourceDocuments](#LinkD9)  [ResourceIssues](#LinkDA) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Resource](#LinkD3) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific resource. | |

complexType SpaceType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [SpaceType](#Link115) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:SpaceType | | |
| children | [SpaceName](#LinkDE)  [SpaceCategory](#LinkDF)  [SpaceDescription](#LinkE0)  [SpaceSignageName](#LinkE1)  [SpaceUsableHeightValue](#LinkE2)  [SpaceGrossAreaValue](#LinkE3)  [SpaceNetAreaValue](#LinkE4)  [SpaceZoneAssignments](#LinkE5)  [SpaceAttributes](#LinkE7)  [SpaceDocuments](#LinkE8)  [SpaceIssues](#LinkE9) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Space](#LinkDC) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Space record is required for all COBie deliverables related to Space information. | |

complexType SpareType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [SpareType](#Link116) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:SpareType | | |
| children | [SpareName](#LinkED)  [SpareCategory](#LinkEE)  [SpareDescription](#LinkEF)  [SpareSetNumber](#LinkF0)  [SparePartNumber](#LinkF1)  [SpareSupplierContactAssignments](#LinkF2)  [SpareAttributes](#LinkF3)  [SpareDocuments](#LinkF4)  [SpareIssues](#LinkF5) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Spare](#LinkEB) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific Spare. | |

complexType SystemType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [SystemType](#Link117) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:SystemType | | |
| children | [SystemName](#LinkF9)  [SystemCategory](#LinkFA)  [SystemDescription](#LinkFB)  [SystemAttributes](#LinkFC)  [SystemDocuments](#LinkFD)  [SystemIssues](#LinkFE) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [System](#LinkF7) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | COBie.System information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific system requirements. | |

complexType ZoneType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite |
| type | extension of [ZoneType](#Link118) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | core:ZoneType | | |
| children | [ZoneName](#Link102)  [ZoneCategory](#Link103)  [ZoneDescription](#Link104)  [ZoneAttributes](#Link105)  [ZoneDocuments](#Link106)  [ZoneIssues](#Link107) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Zone](#Link100) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | COBie.Zone information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific zoning requirements. | |

element AllowedValues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AllowedValueCollectionType](#Link11A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [AttributeAllowedValue](#Link11B) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeStringValueType](#Link11C) | | |
| annotation | |  | | --- | | appinfo | | AttributeAllowedValues allows documentation of the original source of the information identified in this row. If there is a specific list of allowed values, each child element contains one list item. | | appinfo | | 1|True|75, 100|Red, Yellow, Green|75 - 100|Alpha Beta Value | | appinfo | | IfcPropertyEnumeration.EnumerationValues | | appinfo | | Attribute.AllowedValues | | appinfo | | M | | documentation | | Definition: AttributeAllowedValues allows documentation of the original source of the information identified in this row. If there is a specific list of allowed values, each child element contains one list item. Example Values: 1|True|75, 100|Red, Yellow, Green|75 - 100|Alpha Beta Value ISO16739Mapping: IfcPropertyEnumeration.EnumerationValues COBie2.4Header: Attribute.AllowedValues COBie2.4Column: M | |

element AssemblyAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssemblyType](#Link109) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | |
| children | [AssemblyName](#Link6)  [AssemblyParentName](#Link7) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyAssignmentCollectionType](#Link26) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | The assignment of an Asset or AssetType to an assembly | |

element AssemblyAssignments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssemblyAssignmentCollectionType](#Link26) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [AssemblyAssignment](#Link10) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15)  [AssetTypeInfoType](#Link2C) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | AssemblyAssetKey |  |  |  | AssemblyAssignment |  | AssemblyName  AssemblyParentName |  |  | |
| annotation | |  | | --- | | documentation | | Assignment of Assemblies to an Asset or AssetType. | |

element AssemblyAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyType](#Link2) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Assembly element. | |

element AssemblyCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssemblyCategorySimpleType](#Link11E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyKeyType](#Link11F)  [AssemblyType](#Link2) | | |
| annotation | |  | | --- | | appinfo | | AssemblyCategory identifies the way in which the current component is combined into the Assembly. | | appinfo | | Fixed|Optional|Included|Excluded|Layer|Patch|Mix | | appinfo | | IfcClassification.Name | | appinfo | | Assembly.AssemblyType | | appinfo | | G | | documentation | | Definition: AssemblyCategory identifies the way in which the current component is combined into the Assembly. Value: Fixed|Optional|Included|Excluded|Layer|Patch|Mix ISO16739Mapping: IfcClassification.Name COBie2.4Header: Assembly.AssemblyType COBie2.4Column: G | |

element AssemblyDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyType](#Link2) | | |
| annotation | |  | | --- | | appinfo | | AssemblyDescription provides descriptive information about how this component is connected to, or the function of the component within the Assembly. | | appinfo | | Circut-PB1-01|Primary Circulating Pump|Exterior Facing Brick Pattern | | appinfo | | IfcRelAggregates.Description | | appinfo | | Assembly.Description | | appinfo | | K | | documentation | | Definition: AssemblyDescription provides descriptive information about how this component is connected to, or the function of the component within the Assembly. Value: Circut-PB1-01|Primary Circulating Pump|Exterior Facing Brick Pattern ISO16739Mapping: IfcRelAggregates.Description COBie2.4Header: Assembly.Description COBie2.4Column: K | |

element AssemblyDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyType](#Link2) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Assembly element. | |

element AssemblyIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyType](#Link2) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Assembly element. | |

element AssemblyName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyKeyType](#Link11F)  [AssemblyType](#Link109) | | |
| annotation | |  | | --- | | appinfo | | AssemblyName identifies the name of the Assembly. | | appinfo | | Panel Board 1|Chiller-01|Wall Type 3 | | appinfo | | IfcRelAggreagtes.Name | | appinfo | | Assembly.Name | | appinfo | | A | | documentation | | Definition: AssemblyName identifies the name of the Assembly Value: Panel Board 1|Chiller-01|Wall Type 3 ISO16739Mapping: IfcRelAggreagtes.Name COBie2.4Header: Assembly.Name COBie2.4Column: A | |

element AssemblyParentName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyType](#Link109) | | |
| annotation | |  | | --- | | appinfo | | AssemblyParentName identifies the name of the parent Asset or AssetType that decomposes the Assembly. | | appinfo | | Panel Board 1|Chiller-01|Wall Type 3 | | appinfo | | IfcRelAggreagtes.Name | | appinfo | | Assembly.Name | | appinfo | | A | | documentation | | Definition: AssemblyParentName identifies the name of the parent Asset or AssetType that decomposes the Assembly. Value: Panel Board 1|Chiller-01|Wall Type 3 ISO16739Mapping: IfcRelAggreagtes.Name COBie2.4Header: Assembly.Name COBie2.4Column: A | |

element Asset

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssetInfoType](#Link10A) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | |
| children | [AssetName](#Link16)  [AssetSpaceAssignments](#Link17) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetCollectionType](#Link45) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Component record is required for all COBie deliverables related to equpment Component information. | |

element AssetAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Asset element. | |

element AssetBarCode

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5907 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | documentation | | AssetBarCode contains the barcode number for the Asset as found on the individual asset nameplate or other associated documentation. 1234793408|12345-67890 IfcProdcut IfcPropertySingleValue with name containing "BarCode" COBie.Asset.BarCode N | |

element AssetDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | ComponentDescription contains a human description of the specific component. A default value for this description would be the Type.Description plus any component-specific annotations. | | appinfo | | AC Unit|Air Handling Unit - Split System|Backflow Preventer - 15-50 mm|Centrifugal Fan- Roof Mounted|M\_Duplex Receptacle:GFCI:GFCI:868750|M\_Troffer Light - Parabolic:0600x0600mm(2 Lamp) | | appinfo | | IfcProduct.Description | | appinfo | | Component.Description | | appinfo | | F | | documentation | | Definition: ComponentDescription contains a human description of the specific component. A default value for this description would be the Type.Description plus any component-specific annotations. Value: AC Unit|Air Handling Unit - Split System|Backflow Preventer - 15-50 mm|Centrifugal Fan- Roof Mounted|M\_Duplex Receptacle:GFCI:GFCI:868750|M\_Troffer Light - Parabolic:0600x0600mm(2 Lamp) ISO16739Mapping: IfcProduct.Description COBie2.4Header: Component.Description COBie2.4Column: F | |

element AssetDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Asset element. | |

element AssetIdentifier

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5934 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | AssetAssetIdentifier contains an identifier for the asset that can be used by the facility manager to group COBie Assets prior to importing COBie data into computerized maintenance management systems. | | appinfo | | 1234793408|12345-67890|4106144f-c9d3-49a6-8c35-e122d1fab8ac | | appinfo | | IfcPropertySet with Name "COBie\_Component," IfcProperty with name "AssetIdentifier" | | appinfo | | Asset.AssetIdentifier | | appinfo | | O | | documentation | | Definition: AssetAssetIdentifier contains an identifier for the asset that can be used by the facility manager to group COBie Assets prior to importing COBie data into computerized maintenance management systems. Value: 1234793408|12345-67890|4106144f-c9d3-49a6-8c35-e122d1fab8ac ISO16739Mapping: IfcPropertySet with Name "COBie\_Component," IfcProperty with name "AssetIdentifier" COBie2.4Header: Asset.AssetIdentifier COBie2.4Column: O | |

element AssetInstallationDate

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:date |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5829 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | AssetInstallationDate date contains the installation date of the equipment identified in this row. This is provided during construction or updated during facility operations. | | appinfo | | 1066-10-14T22:01:00|1944-12-15T12:49:00|2011-09-14T16:57:53|2011-09-14T16:57:59|2012-12-14T08:00:00|2012-09-14T10:00:00|2019-06-27T15:37:00 | | appinfo | | IfcPropertySet with Name "COBie\_Component," IfcProperty with name "InstallationDate" | | appinfo | | Asset.InstallationDate | | appinfo | | K | | documentation | | Definition: AssetInstallationDate date contains the installation date of the equipment identified in this row. This is provided during construction or updated during facility operations. Value: 1066-10-14T22:01:00|1944-12-15T12:49:00|2011-09-14T16:57:53|2011-09-14T16:57:59|2012-12-14T08:00:00|2012-09-14T10:00:00|2019-06-27T15:37:00 ISO16739Mapping: IfcPropertySet with Name "COBie\_Component," IfcProperty with name "InstallationDate" COBie2.4Header: COBie2.4Column: | |

element AssetInstalledModelNumber

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | f35829 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | AssetInstalledModel number represents the model number as indicated on the installed piece of equipment - note that this model number can be slightly different than the AssetType model number even in the same product line, e.g. color identifiers appended to model numbers | | appinfo | | 1020 MAS (SUPPLY) B|2VT8 3 32 ADP MVOLT 1/3 GEB10-SIS LP830 EL14R|Axiom Multix M-2|LF8N 2/26TRT F8B4W-L 277|LH1720C-B |Generator Quick Connect Switchboard c|K-4904-ET-R10|Series 416b | | appinfo | | IfcPropertySet with Name "COBie\_Component," IfcProperty with name "InstalledModelNumber" | | appinfo | | Attribute with Name=InstalledModelNumber and SheetName=Component | | appinfo | | n/a | | documentation | | Definition: AssetInstalledModel number represents the model number as indicated on the installed piece of equipment - note that this model number can be slightly different than the AssetType model number even in the same product line, e.g. color identifiers appended to model numbers Value: 1020 MAS (SUPPLY) B|2VT8 3 32 ADP MVOLT 1/3 GEB10-SIS LP830 EL14R|Axiom Multix M-2|LF8N 2/26TRT F8B4W-L 277|LH1720C-B |Generator Quick Connect Switchboard c|K-4904-ET-R10|Series 416b ISO16739Mapping: IfcPropertySet with Name "COBie\_Component," IfcProperty with name "InstalledModelNumber" COBie2.4Header: Attribute with Name=InstalledModelNumber and SheetName=Component COBie2.4Column: n/a | |

element AssetIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Asset element. | |

element AssetLocationDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5750 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | AssetLocationDescription contains the the description of where in the space this Asset is located. | | appinfo | | Ceiling|Space|Under Floor|Wall Chase | | appinfo | | IfcPropertySet with Name "COBie\_Component," IfcProperty with name "LocationDescription" | | appinfo | | Attribute for Asset.Name | | appinfo | | Attribute.Name=LocationDescription | | documentation | | Definition: AssetLocationDescription contains the the description of where in the space this Asset is located. Value: Ceiling|Space|Under Floor|Wall Chase ISO16739Mapping: IfcPropertySet with Name "COBie\_Component," IfcProperty with name "LocationDescription" COBie2.4Header: Attribute for Asset.Name COBie2.4Column: Attribute.Name=LocationDescription | |

element AssetName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link10A)  [AssetKeyType](#Link122) | | |
| annotation | |  | | --- | | appinfo | | AssetName contains the name of each instance of all managed equipment found in the facility. Typically AssetName is identified within equipment and product schedules and related design drawing notes. AssetName is the Primary Key for the Component worksheet and it is referenced in subsequent COBie worksheets. Component.Name values must be unique. Information about similar Component"s is identified by the referenced COBie.Attribute.Type. | | appinfo | | ACCU-5|ADA shower Seat:17" Depth x 18 1/2"|Ball Valve 100 mm - Space 201-01|Boiler B-1|Centrifugal Fan- Air Foil- RAF-1|FireSprinkler-131|Light Fixture X1-01 | | appinfo | | IfcProduct.name | | appinfo | | Component.Name | | appinfo | | A | | documentation | | Definition: ComponentName contains the name of each instance of all managed equipment found in the facility. Typically Component.Name is identified within equipment and product schedules and related design drawing notes. Component.Name is the Primary Key for the Component worksheet and it is referenced in subsequent COBie worksheets. Component.Name values must be unique. Information about similar Component"s is identified by the referenced COBie.Attribute.Type. Value: ACCU-5|ADA shower Seat:17" Depth x 18 1/2"|Ball Valve 100 mm - Space 201-01|Boiler B-1|Centrifugal Fan- Air Foil- RAF-1|FireSprinkler-131|Light Fixture X1-01 ISO16739Mapping: IfcProduct.name COBie2.4Header: Component.Name COBie2.4Column: A | |

element Assets

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssetCollectionType](#Link45) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Asset](#Link2A) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | documentation | | A set of managed assets found in a specific Facility. These are typically manufactured and purchased products in a space that are marked with serial number and barcode identification. | |

element AssetSerialNumber

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5803 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | AssetSerialNumber contains the final serial number of the equipment that has been installed in the facility. This is provided during construction or updated during facility operations. | | appinfo | | 2823873|4985VGJ.J7234|AH 250 PXL 3|AH 250 PXL 4|KONA-380060|SALM 642680|QPM890 | | appinfo | | IfcPropertySet with Name "Pset\_ManufacturerOccurence," IfcProperty with name "SerialNumber" | | appinfo | | Component.SerialNumber | | appinfo | | J | | documentation | | Definition: AssetSerialNumber contains the final serial number of the equipment that has been installed in the facility. This is provided during construction or updated during facility operations. Value: 2823873|4985VGJ.J7234|AH 250 PXL 3|AH 250 PXL 4|KONA-380060|SALM 642680|QPM890 ISO16739Mapping: IfcPropertySet with Name "Pset\_ManufacturerOccurence," IfcProperty with name "SerialNumber" COBie2.4Header: SerialNumber COBie2.4Column: J | |

element AssetSpaceAssignments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SpaceAssignmentCollectionType](#Link18) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [SpaceAssignment](#Link123) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link10A)  [AssetKeyType](#Link122) | | |
| annotation | |  | | --- | | documentation | | The assignment of a COBie Asset element to Spaces (i.e. rooms). | |

element AssetStartDate

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | AssetStartDate date contains the Start date of the equipment identified in this row. This is provided during construction or updated during facility operations. | | appinfo | | 1066-10-14T22:01:00|1944-12-15T12:49:00|2011-09-14T16:57:53|2011-09-14T16:57:59|2012-12-14T08:00:00|2012-09-14T10:00:00|2019-06-27T15:37:00 | | appinfo | | IfcPropertySet with Name "COBie\_Component," IfcProperty with name "StartDate" | | appinfo | | n/a | | appinfo | | n/a | | documentation | | Definition: AssetInstallationDate date contains the installation date of the equipment identified in this row. This is provided during construction or updated during facility operations. Value: 1066-10-14T22:01:00|1944-12-15T12:49:00|2011-09-14T16:57:53|2011-09-14T16:57:59|2012-12-14T08:00:00|2012-09-14T10:00:00|2019-06-27T15:37:00 ISO16739Mapping: IfcPropertySet with Name "COBie\_Component," IfcProperty with name "StartDate" COBie2.4Header: COBie2.4Column: | |

element AssetSystemAssignments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SystemAssignmentCollectionType](#Link24) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [SystemAssignment](#Link125) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | SystemAssignmentKey |  |  |  | SystemAssignment |  | SystemName  SystemCategory |  | documentation The Key used when Name and Category are used as the SystemKey | |
| annotation | |  | | --- | | documentation | | The assignment of a COBie element to Systems. | |

element AssetTagNumber

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5881 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | AssetTagNumber contains the number for the Asset from any tags required to be installed during construction. | | appinfo | | 101|A305|AHU-2|B2|P-5 |XIBHEP | | appinfo | | IfcPropertySet with Name "COBie\_Component," IfcProperty with name "TagNumber" | | appinfo | | Component.TagNumber | | appinfo | | M | | documentation | | Definition: AssetTagNumber contains the number for the Asset from any tags required to be installed during construction. Value: 101|A305|AHU-2|B2|P-5 |XIBHEP ISO16739Mapping: IfcPropertySet with Name "COBie\_Component," IfcProperty with name "TagNumber" COBie2.4Header: Component.TagNumber COBie2.4Column: M | |

element AssetType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssetTypeInfoType](#Link10B) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | |
| children | [AssetTypeName](#Link2D) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeCollectionType](#Link9D) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one AssetType record is required for all COBie deliverables related to equipment Type information. AssetType is associated with one or more Assets. | |

element AssetTypeAccessibilityText

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2550 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.AccessibilityText contains a description of the finish of the AccessibilityPerformanceDescription as found on the manufacturer's product data sheet. | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "AccessibilityPerformance" | | appinfo | | 14 CFR part 240|2120-AA66 2401|2105-AB73 2255|25.2075|compatible with most of designed billet, etc.|World Usability 2012 User | | appinfo | | Type.AccessibilityPerformance | | appinfo | | AG | | documentation | | Definition: AssetType.AccessibilityText contains a description of the finish of the AccessibilityPerformanceDescription as found on the manufacturer's product data sheet. Value: 14 CFR part 240|2120-AA66 2401|2105-AB73 2255|25.2075|compatible with most of designed billet, etc.|World Usability 2012 User ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "AccessibilityPerformance" COBie2.4Header: Type.AccessibilityPerformance COBie2.4Column: AG | |

element AssetTypeAccountingCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssetPortabilitySimpleType](#Link128) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2111 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | Fixed |  |  | | enumeration |  | Moveable |  |  | | enumeration |  |  |  |  | |
| annotation | |  | | --- | | appinfo | | Type.AssetType provides the asset type classification of the information provided in this row of data. | | appinfo | | Fixed|Moveable | | appinfo | | IfcTypeObject Ifc Propertyset with name "COBie\_Asset", IfcProperty with Name "AssetType" or Pset\_Asset.AssetAccountingType of IfcAsset if the corresponding IfcTypeObject is assigned to an IfcAsset through IfcRelAssignsToGroup | | appinfo | | Type.AssetType | | appinfo | | F | | documentation | | Definition: Type.AssetType provides the asset type classification of the information provided in this row of data. Value: Fixed|Moveable ISO16739Mapping: IfcTypeObject Ifc Propertyset with name "COBie\_Asset", IfcProperty with Name "AssetType" or Pset\_Asset.AssetAccountingType of IfcAsset if the corresponding IfcTypeObject is assigned to an IfcAsset through IfcRelAssignsToGroup COBie2.4Header: Type.AssetType COBie2.4Column: F | |

element AssetTypeAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssetTypeKeyType](#Link12A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [AssetTypeName](#Link2D) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetKeyType](#Link122) | | |
| annotation | |  | | --- | | documentation | | The primary key information for a referenced AssetType | |

element AssetTypeAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an AssetType element. | |

element AssetTypeCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssetCategorySimpleType](#Link12B) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2085 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. | | appinfo | | 23.30.10.00: Doors|23.30-20-17-11: Fixed Windows|23-40 70 11 14 11 17:Patient Care Equipment|23.45.05.21.11.11:Water Operated Water Closets|23.65 35 11 11: Storage Water Heaters|23.65.55.14.17: Valves for Liquid Services|23.80.50.11.17: Ground Fault Receptacles | | appinfo | | IfcClassification.Name | | appinfo | | Type.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. Value: 23.30.10.00: Doors|23.30-20-17-11: Fixed Windows|23-40 70 11 14 11 17:Patient Care Equipment|23.45.05.21.11.11:Water Operated Water Closets|23.65 35 11 11: Storage Water Heaters|23.65.55.14.17: Valves for Liquid Services|23.80.50.11.17: Ground Fault Receptacles ISO16739Mapping: IfcClassification.Name COBie2.4Header: Type.Category COBie2.4Column: D | |

element AssetTypeCodePerformance

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2576 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.CodePerformance contains a description of the CodePerformance of an AssetType as found on the manufacturer's product data sheet. | | appinfo | | 2006 International Fuel Gas Code|ASTM C645 ;amp C754|British Standards Institute|ESR-3307|NFPA|NFRC 708.01 - NFRC CMA | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "CodePerformance" | | appinfo | | Type.CodePerformance | | appinfo | | AH | | documentation | | Definition: AssetType.CodePerformance contains a description of the CodePerformance of an AssetType as found on the manufacturer's product data sheet. Value: 2006 International Fuel Gas Code|ASTM C645 ;amp C754|British Standards Institute|ESR-3307|NFPA|NFRC 708.01 - NFRC CMA ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "CodePerformance" COBie2.4Header: Type.CodePerformance COBie2.4Column: AH | |

element AssetTypeColorCode

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2393 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.ColorCode contains a description of the ColorDescription of the AssetType as found on the manufacturer's product data sheet. | | appinfo | | #5252C0|222-184-135|Any colors available or customers colors|deb887|Green|Light Salmon |White, Black, Beige | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Color" and/or "Colour" | | appinfo | | Type.Color | | appinfo | | AA | | documentation | | Definition: AssetType.ColorCode contains a description of the ColorDescription of the AssetType as found on the manufacturer's product data sheet. Value: #5252C0|222-184-135|Any colors available or customers colors|deb887|Green|Light Salmon |White, Black, Beige ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Color" and/or "Colour" COBie2.4Header: Type.Color COBie2.4Column: AA | |

element AssetTypeConstituentsDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2498 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.ConstituentsDescription contains a description of the ConstituentsDescription of the Type as found on the manufacturer's product data sheet. | | appinfo | | Aggregate|Cement|Concrete|Benzol|Gypsum | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Constituents" | | appinfo | | Type.Constituents | | appinfo | | AE | | documentation | | Definition: AssetType.ConstituentsDescription contains a description of the ConstituentsDescription of the Type as found on the manufacturer's product data sheet. Value: Aggregate|Cement|Concrete|Benzol|Gypsum ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Constituents" COBie2.4Header: Type.Constituents COBie2.4Column: AE | |

element AssetTypeDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | documentation | | AssetTypeDescription contains a human description of the specific product type. | |

element AssetTypeDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an AssetType element. | |

element AssetTypeExpectedLifeValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IntegerValueType](#Link35) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2240 | | |
| children | [UnitName](#Link12C)  [IntegerValue](#Link12D) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | Type.ExpectedLifeValue identifies the expected service life of the type of equipment identified in this row. Service life information should reflect the intensity of service in which this type of equipment is to be used in the specific project. A service life table may be provided under the Attribute worksheet. Type.DurationUnit defines the unit for this value. | | appinfo | | 1|2|5|100|10,000 | | appinfo | | For Ifc2x3tc1, IfcTypeObject IfcPropertySet with Name "COBie\_ServiceLife," IfcProperty with name "ServiceLifeDuration" or Pset\_ServiceLife.ServiceLifeDuration in Ifc2x4 if corresponding type is a subclass of IfcElementType | | appinfo | | Type.ExpectedLife | | appinfo | | R | | documentation | | Definition: Type.ExpectedLifeValue identifies the expected service life of the type of equipment identified in this row. Service life information should reflect the intensity of service in which this type of equipment is to be used in the specific project. A service life table may be provided under the Attribute worksheet. Type.DurationUnit defines the unit for this value. Value: 1|2|5|100|10,000 ISO16739Mapping: For Ifc2x3tc1, IfcTypeObject IfcPropertySet with Name "COBie\_ServiceLife," IfcProperty with name "ServiceLifeDuration" or Pset\_ServiceLife.ServiceLifeDuration in Ifc2x4 if corresponding type is a subclass of IfcElementType COBie2.4Header: Type.ExpectedLife COBie2.4Column: R | |

element AssetTypeFeaturesDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2524 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.FeaturesDescription is a description of the FeaturesDescription of the Type as found on the manufacturer's product data sheet. | | appinfo | | 100% Biodegradable|55 gallon; 12 bags per roll|Attic Energy Barrier, etc.|Cornerboards, Skirtboards, etc.|Personalized presidential technicians, etc.|other reef-building invertebrates|Terra-cotta, a molded fired clay, etc. | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Features" | | appinfo | | Type.Features | | appinfo | | AF | | documentation | | Definition: AssetType.FeaturesDescription is a description of the FeaturesDescription of the Type as found on the manufacturer's product data sheet. Value: 100% Biodegradable|55 gallon; 12 bags per roll|Attic Energy Barrier, etc.|Cornerboards, Skirtboards, etc.|Personalized presidential technicians, etc.|other reef-building invertebrates|Terra-cotta, a molded fired clay, etc. ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Features" COBie2.4Header: Type.Features COBie2.4Column: AF | |

element AssetTypeFinishDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2419 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.FinishDescriptioncontains a description of the FinishDescription of the Type as found on the manufacturer's product data sheet. | | appinfo | | Anodized (Dk. Gray)|GOLD FLASH over Nickel Flash|PASSIVATE - MIL-F-14072-C|Paint|QQN290-A Class 1, GradeDescription F (Thickness -.0004-SB)|Titanium zirconium|Zinc Plate | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Finish" | | appinfo | | Type.Finish | | appinfo | | AB | | documentation | | Definition: AssetType.FinishDescriptioncontains a description of the FinishDescription of the Type as found on the manufacturer's product data sheet. Value: Anodized (Dk. Gray)|GOLD FLASH over Nickel Flash|PASSIVATE - MIL-F-14072-C|Paint|QQN290-A Class 1, GradeDescription F (Thickness -.0004-SB)|Titanium zirconium|Zinc Plate ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Finish" COBie2.4Header: Type.Finish COBie2.4Column: AB | |

element AssetTypeGradeDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2446 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.GradeDescription contains a description of the GradeDescription of the Type as found on the manufacturer's product data sheet. | | appinfo | | 409|Chromium-vanadium steels|Heart B|LDPE|S40900 | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Grade" | | appinfo | | Type.Grade | | appinfo | | AC | | documentation | | Definition: AssetType.GradeDescription contains a description of the GradeDescription of the Type as found on the manufacturer's product data sheet. Value: 409|Chromium-vanadium steels|Heart B|LDPE|S40900 ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Grade" COBie2.4Header: Type.Grade COBie2.4Column: AC | |

element AssetTypeIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an AssetType element. | |

element AssetTypeManufacturerContactAssignments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ContactAssignmentCollectionType](#Link47) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2629 | | |
| children | [ContactAssignment](#LinkBD) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | AssetTypeContactAssignmentKey |  |  |  | ContactAssignment |  | ContactEmailReference |  |  | |
| annotation | |  | | --- | | appinfo | | AssetTypeManufacturerContactAssignments is a list of Contact elements that reprsent the manufactrer of the AssetType. | | appinfo | | mariangelica.carrasquillo@usace.army.mil|sales@panelfold.com|info@modernfold.com|info@hufcor.com|karpensteel@karpensteel.com|contact@securalldoors.com|sales@marvin.com | | appinfo | | IfcTypeObject IfcPropertySet with name "Pset\_ManufacturerTypeInformation," IfcProperty with Name "Manufacturer" | | appinfo | | Type.Manufacturer | | appinfo | | G | | documentation | | Definition: AssetTypeManufacturerContactAssignments is a list of Contact elements that reprsent the manufactrer of the AssetType. Value: mariangelica.carrasquillo@usace.army.mil|sales@panelfold.com|info@modernfold.com|info@hufcor.com|karpensteel@karpensteel.com|contact@securalldoors.com|sales@marvin.com ISO16739Mapping: IfcTypeObject IfcPropertySet with name "Pset\_ManufacturerTypeInformation," IfcProperty with Name "Manufacturer" COBie2.4Header: Type.Manufacturer COBie2.4Column: G | |

element AssetTypeMaterialDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2472 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.MaterialDescription contains a description of the MaterialDescription of the Type as found on the manufacturer's product data sheet. | | appinfo | | 100% Polyester |Bamboo|Fiberglass|Plywood|Water-Resistant Gypsum Backing Board | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Material" | | appinfo | | Type.Material | | appinfo | | AD | | documentation | | Definition: AssetType.MaterialDescription contains a description of the MaterialDescription of the Type as found on the manufacturer's product data sheet. Value: 100% Polyester |Bamboo|Fiberglass|Plywood|Water-Resistant Gypsum Backing Board ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Material" COBie2.4Header: Type.Material COBie2.4Column: AD | |

element AssetTypeModelNumber

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2189 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | Type.ModelNumber contains the manufacturer's model number for this product type. | | appinfo | | 1020 MAS (SUPPLY)|2VT8 3 32 ADP MVOLT 1/3 GEB10IS LP830 EL14|Axiom Multix M|LF8N 2/26TRT F8B4W 277|LH1720C |Generator Quick Connect Switchboard|K-4904-ET|Series 416 | | appinfo | | IfcTypeObject IfcPropertySet with name "Pset\_ManufacturerTypeInformation," IfcProperty with Name "ModelLabel" | | appinfo | | Type.ModelNumber | | appinfo | | H | | documentation | | Definition: Type.ModelNumber contains the manufacturer's model number for this product type. Value: 1020 MAS (SUPPLY)|2VT8 3 32 ADP MVOLT 1/3 GEB10IS LP830 EL14|Axiom Multix M|LF8N 2/26TRT F8B4W 277|LH1720C |Generator Quick Connect Switchboard|K-4904-ET|Series 416 ISO16739Mapping: IfcTypeObject IfcPropertySet with name "Pset\_ManufacturerTypeInformation," IfcProperty with Name "ModelLabel" COBie2.4Header: Type.ModelNumber COBie2.4Column: H | |

element AssetTypeName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link10B)  [AssetTypeKeyType](#Link12A) | | |
| annotation | |  | | --- | | appinfo | | TypeName contains the name of each type of managed equipment found in the facility. Typically Type.Name is identified within equipment schedules and related design drawing notes. Type.Name is the Primary Key for the Type worksheet and it is referenced in subsequent COBie worksheets. Type.Name values must be unique. The manufacturer's product data sheet is referenced through the COBie.Document worksheet. | | appinfo | | Air Cooled Condensing Unit- Small|Air Separator|Backflow Preventer|Ball Valve 100 mm|Cabinet Type C|Centrifugal Fan- Air Foil | | appinfo | | IfcTypeObject.Name | | appinfo | | Type.Name | | appinfo | | A | | documentation | | Definition: TypeName contains the name of each type of managed equipment found in the facility. Typically Type.Name is identified within equipment schedules and related design drawing notes. Type.Name is the Primary Key for the Type worksheet and it is referenced in subsequent COBie worksheets. Type.Name values must be unique. The manufacturer's product data sheet is referenced through the COBie.Document worksheet. Value: Air Cooled Condensing Unit- Small|Air Separator|Backflow Preventer|Ball Valve 100 mm|Cabinet Type C|Centrifugal Fan- Air Foil ISO16739Mapping: IfcTypeObject.Name COBie2.4Header: Type.Name COBie2.4Column: A | |

element AssetTypeNominalHeight

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2316 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | Type.NominalHeight contains the height of the bounding box for the Type. Facility.LinearUnit defines the unit for this value. | | appinfo | | 254|3|914.40|15|4572 | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "NominalHeight" | | appinfo | | Type.NominalHeight | | appinfo | | W | | documentation | | Definition: Type.NominalHeight contains the height of the bounding box for the Type. Facility.LinearUnit defines the unit for this value. Value: 254|3|914.40|15|4572 ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "NominalHeight" COBie2.4Header: Type.NominalHeight COBie2.4Column: W | |

element AssetTypeNominalLength

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2265 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | Type.NominalLength contains the length of the bounding box for the Type. Facility.LinearUnit defines the unit for this value. | | appinfo | | 254|3|914.40|15|4572 | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "NominalLength" | | appinfo | | Type.NominalLength | | appinfo | | U | | documentation | | Definition: Type.NominalLength contains the length of the bounding box for the Type. Facility.LinearUnit defines the unit for this value. Value: 254|3|914.40|15|4572 ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "NominalLength" COBie2.4Header: Type.NominalLength COBie2.4Column: U | |

element AssetTypeNominalWidth

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2291 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | Type.NominalWidth contains the width of the bounding box for the Type. Facility.LinearUnit defines the unit for this value. | | appinfo | | 254|3|914.40|15|4572 | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "NominalWidth" | | appinfo | | Type.NominalWidth | | appinfo | | V | | documentation | | Definition: Type.NominalWidth contains the width of the bounding box for the Type. Facility.LinearUnit defines the unit for this value. Value: 254|3|914.40|15|4572 ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "NominalWidth" COBie2.4Header: Type.NominalWidth COBie2.4Column: V | |

element AssetTypeReplacementCostValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2215 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | Type.ReplacementCost contains the manufacturer's suggested retail price, at the time that the equipment was purchased by the contractor or subcontractor. Facility.CurrencyUnit defines the unit for this value. | | appinfo | | 75|1500.00|10,000.00|25000 | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_EconomicImpactValues," IfcProperty with name "ReplacementCost" | | appinfo | | Type.ReplacementCost | | appinfo | | Q | | documentation | | Definition: Type.ReplacementCost contains the manufacturer's suggested retail price, at the time that the equipment was purchased by the contractor or subcontractor. Facility.CurrencyUnit defines the unit for this value. Value: 75|1500.00|10,000.00|25000 ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_EconomicImpactValues," IfcProperty with name "ReplacementCost" COBie2.4Header: Type.ReplacementCost COBie2.4Column: Q | |

element AssetTypes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AssetTypeCollectionType](#Link9D) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2033 | | |
| children | [AssetType](#Link51) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | AssetTypeKey |  |  |  | AssetType |  | AssetTypeName |  |  | |
| annotation | |  | | --- | | documentation | | A set of Types found in a specific Facility. | |

element AssetTypeShapeDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2341 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.ShapeDescription contains a description of the ShapeDescription of the Type as found on the manufacturer's product data sheet. | | appinfo | | Cube|Oblong|Round|Square | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Shape" | | appinfo | | Type.Shape | | appinfo | | Y | | documentation | | Definition: AssetType.ShapeDescription contains a description of the ShapeDescription of the Type as found on the manufacturer's product data sheet. Value: Cube|Oblong|Round|Square ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Shape" COBie2.4Header: Type.Shape COBie2.4Column: Y | |

element AssetTypeSizeDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2367 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.SizeDescription contains a description of the Size of the Type as found on the manufacturer's product data sheet. | | appinfo | | Small|Medium|L|Large | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Size" | | appinfo | | Type.Size | | appinfo | | Z | | documentation | | Definition: AssetType.SizeDescription contains a description of the Size of the Type as found on the manufacturer's product data sheet. Value: Small|Medium|L|Large ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "Size" COBie2.4Header: Type.Size COBie2.4Column: Z | |

element AssetTypeSustainabilityPerformanceDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2603 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| annotation | |  | | --- | | appinfo | | AssetType.SustainabilityPerformanceDescription contains a description of the SustainabilityPerformanceDescription of the Type as found on the manufacturer's product data sheet. | | appinfo | | 3 GHG emissions in absolute terms|CDPH Standard|Electronic Product Environmental Assessment Tool |Modified ASTM D 1037 Procedure|National Environmental Policy Act 1969|post-consumer 53%, pre-consumer 8% | | appinfo | | IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "SustainabilityPerformance" | | appinfo | | Type.SustainabilityPerformance | | appinfo | | AI | | documentation | | Definition: AssetType.SustainabilityPerformanceDescription contains a description of the SustainabilityPerformanceDescription of the Type as found on the manufacturer's product data sheet. Value: 3 GHG emissions in absolute terms|CDPH Standard|Electronic Product Environmental Assessment Tool |Modified ASTM D 1037 Procedure|National Environmental Policy Act 1969|post-consumer 53%, pre-consumer 8% ISO16739Mapping: IfcTypeObject IfcPropertySet with Name "COBie\_Specification," IfcProperty with name "SustainabilityPerformance" COBie2.4Header: Type.SustainabilityPerformance COBie2.4Column: AI | |

element AssetWarrantyStartDate

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:date |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5855 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetInfoType](#Link15) | | |
| annotation | |  | | --- | | appinfo | | AssetWarrantyStartDate contains the date on which the manufacturer's warranty period, described in the related Type worksheet, begins. | | appinfo | | 1066-10-14T22:01:00|1944-12-15T12:49:00|2011-09-14T16:57:53|2011-09-14T16:57:59|2012-12-14T08:00:00|2012-09-14T10:00:00|2019-06-27T15:37:00 | | appinfo | | IfcPropertySet with Name "COBie\_Component," IfcProperty with name "WarrantyStartDate" | | appinfo | | Asset.WarrantyStartDate | | appinfo | | L | | documentation | | Definition: AssetWarrantyStartDate contains the date on which the manufacturer's warranty period, described in the related Type worksheet, begins. Value: 1066-10-14T22:01:00|1944-12-15T12:49:00|2011-09-14T16:57:53|2011-09-14T16:57:59|2012-12-14T08:00:00|2012-09-14T10:00:00|2019-06-27T15:37:00 ISO16739Mapping: IfcPropertySet with Name "COBie\_Component," IfcProperty with name "WarrantyStartDate" COBie2.4Header: Asset.WarrantyStartDate COBie2.4Column: L | |

element Attribute

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeType](#Link10C) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | |
| children | [AttributeName](#Link56)  [AttributeCategory](#Link57) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeCollectionType](#LinkB) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | | [propertySetName](#Link54) |  | PropertySetNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of a logically grouped set of properties Value: IfcPropertySet ISO16739Mapping: Pset\_SpaceCommon|Pset\_ElectricalDeviceCommon|Pset\_BaseQuantities COBie2.4Header: Attribute.ExtObject (When originating from an IFC file) COBie2.4Column: J | | [propertySetExternalIdentifier](#Link55) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The unique identifier of the data structure Object that contains the specified property. Most commonly PropertySetName corresponds to the GlobalId attribute of an IfcPropertySet Object. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcPropertySet.GloballyUniqueId COBie2.4Header: Attribute.ExtIdentifier (If originating from an IFC file) COBie2.4Column: K | |
| annotation | |  | | --- | | documentation | | Information about a specific Attribute. | |

element AttributeAllowedValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AllowedValueCollectionType](#Link11A) | | |
| annotation | |  | | --- | | appinfo | | AttributeAllowedValue allows documentation of the original source of the information identified in this row. If there is a specific list of allowed values, this field represents one allowed value. | | appinfo | | 1|True|100|Red|100|Alpha | | appinfo | | IfcPropertyEnumeration.EnumerationValues | | appinfo | | Attribute.AllowedValues | | appinfo | | M | | documentation | | Definition: AttributeAllowedValue allows documentation of the original source of the information identified in this row. If there is a specific list of allowed values, this field represents one allowed value. Value: 1|True|100|Red|100|Alpha ISO16739Mapping: IfcPropertyEnumeration.EnumerationValues COBie2.4Header: Attribute.AllowedValues COBie2.4Column: M | |

element AttributeBooleanValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [BooleanValueType](#Link132) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [UnitName](#Link12C)  [BooleanValue](#Link133) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeValueType](#Link5A) | | |
| annotation | |  | | --- | | documentation | | Boolean Attribute Value | |

element AttributeCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCategorySimpleType](#Link134) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e7660 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeKeyType](#Link135)  [AttributeType](#Link10C) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. | | appinfo | | As Built|Submitted|Approved|Exact Requirement|Maximum Requirement|Minimum Requirement|Requirement | | appinfo | | "Requirement" | | appinfo | | Attribute.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. Value: As Built|Submitted|Approved|Exact Requirement|Maximum Requirement|Minimum Requirement|Requirement ISO16739Mapping: "Requirement" COBie2.4Header: Attribute.Category COBie2.4Column: D | |

element AttributeDateTimeValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:dateTime |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeValueType](#Link5A) | | |
| annotation | |  | | --- | | documentation | | DateTime Attribute Value | |

element AttributeDateValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:date |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeValueType](#Link5A) | | |
| annotation | |  | | --- | | documentation | | Date Attribute Value | |

element AttributeDecimalValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeDecimalValueType](#Link139) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F)  [MinValueDecimal](#Link13A)  [MaxValueDecimal](#Link13B) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeValueType](#Link5A) | | |
| annotation | |  | | --- | | documentation | | Decimal number Attribute Value | |

element AttributeDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeType](#Link53) | | |
| annotation | |  | | --- | | appinfo | | AttributeDescription allows documentation of information about the nature and characteristics of the attribute identified in this row | | appinfo | | area measurement in square meters|degrees Centigrade|degrees Fahrenheit|linear measure in feet|linear measure in inches|linear measure in millimeters|pounds|percentage|Sound Transmission Coefficient Rating | | appinfo | | IfcProperty.Description | | appinfo | | Attribute.Description | | appinfo | | L | | documentation | | Definition: AttributeDescription allows documentation of information about the nature and characteristics of the attribute identified in this row Value: area measurement in square meters|degrees Centigrade|degrees Fahrenheit|linear measure in feet|linear measure in inches|linear measure in millimeters|pounds|percentage|Sound Transmission Coefficient Rating ISO16739Mapping: IfcProperty.Description COBie2.4Header: Attribute.Description COBie2.4Column: L | |

element AttributeDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Attribute element. | |

element AttributeIntegerValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeIntegerValueType](#Link13E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [UnitName](#Link12C)  [IntegerValue](#Link12D)  [MinValueInteger](#Link13F)  [MaxValueInteger](#Link140) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeValueType](#Link5A) | | |
| annotation | |  | | --- | | documentation | | Integer Attribute Value | |

element AttributeIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeType](#Link53) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Attribute element. | |

element AttributeMonetaryValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeMonetaryValueType](#Link142) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [MonetaryValue](#Link143)  [MonetaryUnit](#Link144) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeValueType](#Link5A) | | |
| annotation | |  | | --- | | documentation | | Attribute with a monetary value | |

element AttributeName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeKeyType](#Link135)  [AttributeType](#Link10C) | | |
| annotation | |  | | --- | | appinfo | | Attribute.Name contains the name of the attribute for the related object. Attribute.Name is part of a combination Primary Key comprised of Attribute.Name, Attribute.SheetName, and Attribute.RowName | | appinfo | | Actual Return Airflow |CoefficientOfPerformanceCurve |FullLoadRatioCurve|GrossWeight|NominalCondensingTemperature|NominalEfficiency|NominalEvaporatingTemperature|Perimeter|Room Cavity Ratio|Wall Reflectance | | appinfo | | IfcProperty.Name | | appinfo | | Attribute.Name | | appinfo | | A | | documentation | | Definition: Attribute.Name contains the name of the attribute for the related object. Attribute.Name is part of a combination Primary Key comprised of Attribute.Name, Attribute.SheetName, and Attribute.RowName Value: Actual Return Airflow |CoefficientOfPerformanceCurve |FullLoadRatioCurve|GrossWeight|NominalCondensingTemperature|NominalEfficiency|NominalEvaporatingTemperature|Perimeter|Room Cavity Ratio|Wall Reflectance ISO16739Mapping: IfcProperty.Name COBie2.4Header: Attribute.Name COBie2.4Column: A | |

element Attributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | AttributesKey |  |  |  | Attribute |  | AttributeName  AttributeCategory |  |  | |
| annotation | |  | | --- | | documentation | | A set of attributes associated with a given COBie element. Attributes provide an extended description of elements using properties that are not included in the built-in COBie elements. | |

element AttributeStringValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeStringValueType](#Link11C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [UnitName](#Link12C)  [StringValue](#Link148)  [AllowedValues](#Link119) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeValueType](#Link5A) | | |
| annotation | |  | | --- | | documentation | | String Attribute Value | |

element AttributeTimeValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:time |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeValueType](#Link5A) | | |
| annotation | |  | | --- | | documentation | | Time Attribute Value | |

element AttributeValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeValueType](#Link5A) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e7685 | | |
| children | [AttributeBooleanValue](#Link131)  [AttributeDateValue](#Link137)  [AttributeDateTimeValue](#Link136)  [AttributeDecimalValue](#Link138)  [AttributeIntegerValue](#Link13D)  [AttributeMonetaryValue](#Link141)  [AttributeStringValue](#Link147)  [AttributeTimeValue](#Link149) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeType](#Link53) | | |
| annotation | |  | | --- | | documentation | | AttributeValue identifies the quantity of the impact that can be expected 0|12.685|ANSI/ASHRAE Standard15, ANSI/NFPA Standard 70, Division 1, ARI Standard 550/590|end grain balsa wood|True|YCAS0150EC46Y IfcPropertySingleValue.NominalValue COBie.Attribute.Value G | |

element BooleanValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:boolean |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [BooleanValueType](#Link132) | | |
| annotation | |  | | --- | | documentation | | A Value represented by a Boolean type. | |

element Connection

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ConnectionType](#Link10D) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e6917 | | |
| children | [ConnectionName](#Link60)  [ConnectionCategory](#Link61) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionCollectionType](#LinkA1) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Connection information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific requirements. | |

element ConnectionAsset1Name

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link5F) | | |
| annotation | |  | | --- | | appinfo | | ConnectionAsset1Name contains the Type or Component Name for the upstream element of a connection. In database terms, this field is a Foreign Key. Value | | appinfo | | Air Cooled Condensing Unit- Small|Air Separator|Backflow Preventer|Ball Valve 100 mm|Cabinet Type C|Centrifugal Fan- Air Foil |101-A|122|1E02|324|B2|All Purpose Room|Parking Lot A | | appinfo | | IfcProduct.name | | appinfo | | Connection.RowName1 | | appinfo | | F | | documentation | | Definition: ConnectionAssetName contains the Type or Component Name for the upstream element of a connection. In database terms, this field is a Foreign Key. Value Value: Air Cooled Condensing Unit- Small|Air Separator|Backflow Preventer|Ball Valve 100 mm|Cabinet Type C|Centrifugal Fan- Air Foil |101-A|122|1E02|324|B2|All Purpose Room|Parking Lot A ISO16739Mapping: IfcProduct.name COBie2.4Header: Connection.RowName1 COBie2.4Column: F | |

element ConnectionAsset1PortName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e6955 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link5F) | | |
| annotation | |  | | --- | | appinfo | | ConnectionAsset1PortName allows documentation of the upstream port on the current Asset that begins this connection. | | appinfo | | Port 1|Port 2| | | appinfo | | IfcDistributionPort.Name | | appinfo | | Connection.PortName1 | | appinfo | | I | | documentation | | Definition: ConnectionAsset1PortName allows documentation of the upstream port on the current Asset that begins this connection. Value: Port 1|Port 2| ISO16739Mapping: IfcDistributionPort.Name COBie2.4Header: Connection.PortName1 COBie2.4Column: I | |

element ConnectionAsset2Name

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link5F) | | |
| annotation | |  | | --- | | appinfo | | ConnectionAsset2Name contains the Type or Component Name for the downstream element of a connection. In database terms, this field is a Foreign Key. Value | | appinfo | | Air Cooled Condensing Unit- Small|Air Separator|Backflow Preventer|Ball Valve 100 mm|Cabinet Type C|Centrifugal Fan- Air Foil |101-A|122|1E02|324|B2|All Purpose Room|Parking Lot A | | appinfo | | IfcProduct.name | | appinfo | | Connection.RowName1 | | appinfo | | G | | documentation | | Definition: ConnectionAssetName contains the Type or Component Name for the upstream element of a connection. In database terms, this field is a Foreign Key. Value Value: Air Cooled Condensing Unit- Small|Air Separator|Backflow Preventer|Ball Valve 100 mm|Cabinet Type C|Centrifugal Fan- Air Foil |101-A|122|1E02|324|B2|All Purpose Room|Parking Lot A ISO16739Mapping: IfcProduct.name COBie2.4Header: Connection.RowName2 COBie2.4Column: G | |

element ConnectionAsset2PortName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e7008 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link5F) | | |
| annotation | |  | | --- | | appinfo | | ConnectionAsset2PortName allows documentation of the port on the downstream Asset that terminates this connection. | | appinfo | | Port 1|Port 2| | | appinfo | | IfcDistributionPort.Name | | appinfo | | Connection.PortName2 | | appinfo | | J | | documentation | | Definition: ConnectionAsset2PortName allows documentation of the port on the downstream Asset that bterminates this connection. Value: Port 1|Port 2| ISO16739Mapping: IfcDistributionPort.Name COBie2.4Header: Connection.PortName2 COBie2.4Column: J | |

element ConnectionAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link5F) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Connection element. | |

element ConnectionCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ConnectionCategorySimpleType](#Link14A) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e6930 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link10D) | | |
| annotation | |  | | --- | | appinfo | | ConnectionCategory provides the classification of the information provided in this row of data. Connection.CategoryType is part of a combination Primary Key comprised of Connection.Name, Connection.RowName1 and Connection.RowName2. | | appinfo | | Control|Flow|Return|Supply|Structural | | appinfo | | IfcRelConnectsElements.Description | | appinfo | | Connection.ConnectionType | | appinfo | | D | | documentation | | Definition: ConnectionCategory provides the classification of the information provided in this row of data. Connection.CategoryType is part of a combination Primary Key comprised of Connection.Name, Connection.RowName1 and Connection.RowName2. Value: Control|Flow|Return|Supply|Structural ISO16739Mapping: IfcRelConnectsElements.Description COBie2.4Header: Connection.ConnectionType COBie2.4Column: D | |

element ConnectionDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link5F) | | |
| annotation | |  | | --- | | appinfo | | ConnectionDescription allows documentation of information about the purpose and design characteristics of that connection. | | appinfo | | Controller|Flow Controller|Air Return|Water Supply|Junction | | appinfo | | IfcRelConnectsElements.Description | | appinfo | | Connection.Description | | appinfo | | N | | documentation | | Definition: ConnectionDescription allows documentation of information about the purpose and design characteristics of that connection. Value: Controller|Flow Controller|Air Return|Water Supply|Junction ISO16739Mapping: IfcRelConnectsElements.Description COBie2.4Header: Connection.Description COBie2.4Column: N | |

element ConnectionDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link5F) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Connection element. | |

element ConnectionIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link5F) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Connection element. | |

element ConnectionName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ConnectionType](#Link10D) | | |
| annotation | |  | | --- | | appinfo | | ConnectionName allows for short-hand documentation of information about the purpose and design characteristics of that connection. | | appinfo | | Controller A to Sensor B|Flow Controller 1 to Flow Terminal 2|Air Supply to Air Return|Water Supply to Water Faucet|Junction 1 to Junction 2 | | appinfo | | IfcRelConnectsElements.Name | | appinfo | | Connection.Name | | appinfo | | A | | documentation | | Definition: ConnectionName allows for short-hand documentation of information about the purpose and design characteristics of that connection. Value: Controller A to Sensor B|Flow Controller 1 to Flow Terminal 2|Air Supply to Air Return|Water Supply to Water Faucet|Junction 1 to Junction 2 ISO16739Mapping: IfcRelConnectsElements.Name COBie2.4Header: Connection.Name COBie2.4Column: A | |

element Connections

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ConnectionCollectionType](#LinkA1) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e6904 | | |
| children | [Connection](#Link6A) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | ConnectionKey |  |  |  | Connection |  | ConnectionName  ConnectionCategory |  |  | |
| annotation | |  | | --- | | documentation | | A set of Connections associated with a specific Asset. | |

element Contact

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ContactType](#Link10E) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | |
| children | [ContactEmail](#Link6D) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactCollectionType](#LinkA3) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific manufacturer or supplier associated with an AssetType. | |

element ContactAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ContactKeyType](#LinkBE) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2642 | | |
| children | [ContactEmailReference](#Link14C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactAssignmentCollectionType](#Link47)  [IssueType](#LinkB6) | | |
| annotation | |  | | --- | | documentation | | The assignment of a Contact to a COBie element. | |

element ContactAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Contact element. | |

element ContactCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieCategorySimpleType](#Link14D) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2g2754 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | ContactCategory is a classification or category describing the role of the contact. | | appinfo | | 34-55 14 11: Consultant|34-31 11: Manufacturer|34-11 11 51: Partner|34-41 11: Facility Manager|34-31 21: Distributor | | appinfo | | IfcActorRole.UserDefinedRole | | appinfo | | Contact.Category | | appinfo | | D | | documentation | | Definition: ContactCategory is a classification or category describing the role of the contact. Value: 34-55 14 11: Consultant|34-31 11: Manufacturer|34-11 11 51: Partner|34-41 11: Facility Manager|34-31 21: Distributor ISO16739Mapping: IfcActorRole.UserDefinedRole COBie2.4Header: Contact.Category COBie2.4Column: D | |

element ContactCompanyName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2734 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | ContactCompanyName is the name of the company associated with the Contact.Email. | | appinfo | | Claush|Domili|Lienaugh|Peen|Swyumtor|Umsay|Vumos | | appinfo | | IfcOrganization.Name | | appinfo | | Contact.Company | | appinfo | | E | | documentation | | Definition: Contact.Company is the name of the company associated with the Contact.Email. Value: Claush|Domili|Lienaugh|Peen|Swyumtor|Umsay|Vumos ISO16739Mapping: IfcOrganization.Name COBie2.4Header: Contact.Company COBie2.4Column: E | |

element ContactCountryName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2914 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | Contact.Country is the country of the organization or person associated with the Contact.Email. | | appinfo | | Brundalona|Ferrenya|Marsopur|Manundand|Sibovus|Theonaso|na|n/a | | appinfo | | IfcPostalAddress.Country | | appinfo | | Contact.Country | | appinfo | | S | | documentation | | Definition: Contact.Country is the country of the organization or person associated with the Contact.Email. Value: Brundalona|Ferrenya|Marsopur|Manundand|Sibovus|Theonaso|na|n/a ISO16739Mapping: IfcPostalAddress.Country COBie2.4Header: Contact.Country COBie2.4Column: S | |

element ContactDepartmentName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2735 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | Contact.DepartmentName is the name of the specific division and/or branch of the office associated with the Contact.Email. | | appinfo | | Design|Engineering DepartmentName|Marketing|Operation Center|Sales | | appinfo | | IfcPostalAddress.InternalLocation | | appinfo | | Contact.Department | | appinfo | | J | | documentation | | Definition: Contact.DepartmentName is the name of the specific division and/or branch of the office associated with the Contact.Email. Value: Design|Engineering DepartmentName|Marketing|Operation Center|Sales ISO16739Mapping: IfcPostalAddress.InternalLocation COBie2.4Header: Contact.Department COBie2.4Column: J | |

element ContactDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Contact element. | |

element ContactEmail

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2655 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link10E) | | |
| annotation | |  | | --- | | appinfo | | Contact.Email is the email address of the people and companies whose documentation is required in a COBie file. Contact.Email is the primary key of the Contact worksheet and it is referenced in all subsequent COBie worksheets. | | appinfo | | mariangelica.carrasquillo@usace.army.mil|sales@panelfold.com|info@modernfold.com|info@hufcor.com|karpensteel@karpensteel.com|contact@securalldoors.com|sales@marvin.com | | appinfo | | IfcTelecomAddress.ElectronicMailAddresses | | appinfo | | Contact.Email | | appinfo | | A | | documentation | | Definition: Contact.Email is the email address of the people and companies whose documentation is required in a COBie file. Contact.Email is the primary key of the Contact worksheet and it is referenced in all subsequent COBie worksheets. Value: mariangelica.carrasquillo@usace.army.mil|sales@panelfold.com|info@modernfold.com|info@hufcor.com|karpensteel@karpensteel.com|contact@securalldoors.com|sales@marvin.com ISO16739Mapping: IfcTelecomAddress.ElectronicMailAddresses COBie2.4Header: Contact.Email COBie2.4Column: A | |

element ContactEmailReference

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2f1783 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactKeyType](#LinkBE) | | |
| annotation | |  | | --- | | appinfo | | Contact.Email is the email address of the people and companies whose documentation is required in a COBie file. Contact.Email is the primary key of the Contact worksheet and it is referenced in all subsequent COBie worksheets. | | appinfo | | mariangelica.carrasquillo@usace.army.mil|sales@panelfold.com|info@modernfold.com|info@hufcor.com|karpensteel@karpensteel.com|contact@securalldoors.com|sales@marvin.com | | appinfo | | IfcTelecomAddress.ElectronicMailAddresses | | appinfo | | Contact.Email | | appinfo | | A | | documentation | | Definition: ContactEmailReference is a reference to an email address (stored in a Contact element) of the people and companies whose documentation is required in a COBie file. Contact.Email is the primary key of the Contact worksheet and it is referenced in all subsequent COBie worksheets. Value: mariangelica.carrasquillo@usace.army.mil|sales@panelfold.com|info@modernfold.com|info@hufcor.com|karpensteel@karpensteel.com|contact@securalldoors.com|sales@marvin.com ISO16739Mapping: IfcTelecomAddress.ElectronicMailAddresses COBie2.4Header: Contact.Email COBie2.4Column: A | |

element ContactFamilyName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2783 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | If the Contact.Email refers to a specific person, then Contact.FamilyName should be provided. | | appinfo | | Claush|Domili|Lienaugh|Peen|Swyumtor|Umsay|Vumos | | appinfo | | IfcPerson.FamilyName | | appinfo | | Contact.FamilyName | | appinfo | | M | | documentation | | Definition: If the Contact.Email refers to a specific person, then Contact.FamilyName should be provided. Value: Claush|Domili|Lienaugh|Peen|Swyumtor|Umsay|Vumos ISO16739Mapping: IfcPerson.FamilyName COBie2.4Header: Contact.FamilyName COBie2.4Column: M | |

element ContactGivenName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2757 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | If the Contact.Email refers to a specific person, then Contact.GivenName should be provided. | | appinfo | | Ackwor|Erves|Lised|Lyefath|Kisep|Rayeb|Traum | | appinfo | | IfcPerson.GivenName | | appinfo | | Contact.GivenName | | appinfo | | L | | documentation | | Definition: If the Contact.Email refers to a specific person, then Contact.GivenName should be provided. Value: Ackwor|Erves|Lised|Lyefath|Kisep|Rayeb|Traum ISO16739Mapping: IfcPerson.GivenName COBie2.4Header: Contact.GivenName COBie2.4Column: L | |

element ContactIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Contact element. | |

element ContactPhoneNumber

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2707 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | Contact.Phone is the telephone number associated with the Contact.Email. | | appinfo | | 888-462-5866|401-942-8000|81-3-3218-2111|714-921-6000|800-456-4537|704-841-6000|21-352-6511 x6710 | | appinfo | | IfcTelecomAddress.TelephoneNumbers | | appinfo | | Contact.Phone | | appinfo | | F | | documentation | | Definition: Contact.Phone is the telephone number associated with the Contact.Email. Value: 888-462-5866|401-942-8000|81-3-3218-2111|714-921-6000|800-456-4537|704-841-6000|21-352-6511 x6710 ISO16739Mapping: IfcTelecomAddress.TelephoneNumbers COBie2.4Header: Contact.Phone COBie2.4Column: F | |

element ContactPostalBoxNumber

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2835 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | Contact.PostalBox is the post office box or address code of the organization or person associated with the Contact.Email. | | appinfo | | Box 433|P.O. Box 51|Post Office Box 651|n/a | | appinfo | | IfcPostalAddress.PostalBox | | appinfo | | Contact.PostalBox | | appinfo | | O | | documentation | | Definition: Contact.PostalBox is the post office box or address code of the organization or person associated with the Contact.Email. Value: Box 433|P.O. Box 51|Post Office Box 651|n/a ISO16739Mapping: IfcPostalAddress.PostalBox COBie2.4Header: Contact.PostalBox COBie2.4Column: O | |

element ContactPostalCode

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2940 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | Contact.PostalCode is the national postal code of the organization or person associated with the Contact.Email. | | appinfo | | 20832|61826|CEDEX|H0H 0H0|LL57 4ND|PO1 4DJ|RG12 7UP | | appinfo | | IfcPostalAddress.PostalCode | | appinfo | | Contact.PostalCode | | appinfo | | R | | documentation | | Definition: Contact.PostalCode is the national postal code of the organization or person associated with the Contact.Email. Value: 20832|61826|CEDEX|H0H 0H0|LL57 4ND|PO1 4DJ|RG12 7UP ISO16739Mapping: IfcPostalAddress.PostalCode COBie2.4Header: Contact.PostalCode" COBie2.4Column: R | |

element ContactRegionCode

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2888 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | Contact.StateRegion is the name of the state or region of the organization or person associated with the Contact.Email. | | appinfo | | Chogoku|Elbe-Weser Triangle|Hordaland|Maryland|Provence-Alpes-Cote d'Azur|Ontario|Sussex | | appinfo | | IfcPostalAddress.Region | | appinfo | | Contact.StateRegion | | appinfo | | Q | | documentation | | Definition: Contact.StateRegion is the name of the state or region of the organization or person associated with the Contact.Email. Value: Chogoku|Elbe-Weser Triangle|Hordaland|Maryland|Provence-Alpes-Cote d'Azur|Ontario|Sussex ISO16739Mapping: IfcPostalAddress.Region COBie2.4Header: Contact.StateRegion COBie2.4Column: Q | |

element Contacts

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ContactCollectionType](#LinkA3) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Contact](#Link7E) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | ContactKey |  |  |  | Contact |  | ContactEmail |  |  | |
| annotation | |  | | --- | | documentation | | Points of contact associated with a COBie element. | |

element ContactStreet

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2809 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | Contact.Street is the street address of the organization or person associated with the Contact.Email. | | appinfo | | 51 Auburn Crow Landing|9600 Cozy Mill View|4333 Golden Round|525 Hidden Sky Villa|868 Tender Nest Swale|651 Turning Branch Trail|2548 Quaking Holly Road | | appinfo | | IfcPostalAddress.AddressLines | | appinfo | | Contact.Street | | appinfo | | N | | documentation | | Definition: Contact.Street is the street address of the organization or person associated with the Contact.Email. Value: 51 Auburn Crow Landing|9600 Cozy Mill View|4333 Golden Round|525 Hidden Sky Villa|868 Tender Nest Swale|651 Turning Branch Trail|2548 Quaking Holly Road ISO16739Mapping: IfcPostalAddress.AddressLines COBie2.4Header: Contact.Street COBie2.4Column: N | |

element ContactTownName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2861 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | Contact.Town is the name of the town or city of the organization or person associated with the Contact.Email. | | appinfo | | Lewisfield|South Caldland Point|Jackway Grove|Grantglen|Hilferry | | appinfo | | IfcPostalAddress.Town | | appinfo | | Contact.Town | | appinfo | | P | | documentation | | Definition: Contact.Town is the name of the town or city of the organization or person associated with the Contact.Email. Value: Lewisfield|South Caldland Point|Jackway Grove|Grantglen|Hilferry ISO16739Mapping: IfcPostalAddress.Town COBie2.4Header: Contact.Town COBie2.4Column: P | |

element ContactURL

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e2966 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ContactType](#Link6C) | | |
| annotation | |  | | --- | | appinfo | | The URL of the Contact's Website. | | appinfo | | http://www.honeywell.com|http://www.Kohler.com | | appinfo | | IfcTelecomAddress.WWWHomePageURL | | appinfo | | n/a (new field) | | appinfo | | n/a (new field) | | documentation | | Definition: The URL of the Contact's Website. Value: http://www.honeywell.com|http://www.Kohler.com ISO16739Mapping: IfcTelecomAddress.WWWHomePageURL COBie2.4Header: n/a (new field) COBie2.4Column: n/a (new field) | |

element DecimalValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:double |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DecimalValueType](#Link33) | | |
| annotation | |  | | --- | | documentation | | A COBie value represented by a decimal type. | |

element Document

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentType](#Link10F) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | |
| children | [DocumentName](#Link81) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DocumentCollectionType](#LinkD) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific Document. | |

element DocumentAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DocumentType](#Link80) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Document element. | |

element DocumentCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCategorySimpleType](#Link14F) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DocumentType](#Link80) | | |
| annotation | |  | | --- | | appinfo | | Category name of the Document. | | appinfo | | Product Data|Warranty Information|Closeout Submittals|Operation and Maintenance | | appinfo | | IfcClassification.Name | | appinfo | | Document.Category | | appinfo | | D | | documentation | | Definition: Category name of the Document Value: Product Data|Warranty Information|Closeout Submittals|Operation and Maintenance ISO16739Mapping: IfcClassification.Name COBie2.4Header: Document.Category COBie2.4Column: D | |

element DocumentDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DocumentType](#Link80) | | |
| annotation | |  | | --- | | appinfo | | DocumentDescription allows documentation of information about the nature and characteristics of the document identified in this row. | | appinfo | | 500 x 500 Face 300 x 300 Connection 2|915 mmx915 mm - Public|Aluminum Window Wall with Fixed Glass Panels|Elevator Hydraulic 2000 lbs |Case for Fire Extinguisher|Conter Tops - 600mm Depth|M\_Curtain Wall Dbl Chain Link | | appinfo | | IfcDocumentInformation.Description | | appinfo | | Document.Description | | appinfo | | N | | documentation | | Definition: DocumentDescription allows documentation of information about the nature and characteristics of the document identified in this row. Value: 500 x 500 Face 300 x 300 Connection 2|915 mmx915 mm - Public|Aluminum Window Wall with Fixed Glass Panels|Elevator Hydraulic 2000 lbs |Case for Fire Extinguisher|Conter Tops - 600mm Depth|M\_Curtain Wall Dbl Chain Link ISO16739Mapping: IfcDocumentInformation.Description COBie2.4Header: Document.Description COBie2.4Column: N | |

element DocumentIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DocumentType](#Link80) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Document element. | |

element DocumentName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DocumentKeyType](#Link150)  [DocumentType](#Link10F) | | |
| annotation | |  | | --- | | appinfo | | DocumentName contains the name of the referenced document. Documents listed here may either be on the same media that delivers the COBie data file, or may be cloud-served or web-based documents. Document.Name is part of a combination Primary Key comprised of Document.Name, Document.SheetName, and Document.RowName | | appinfo | | AHU Product Data|Air Cooled Chiller Product Data|Boiler Operations/Maintenance Manuals|Door Type H Warranty|Duplex Receptacle Product Data|Fire Sprinkler Product Data|Water Heater Product Data | | appinfo | | IfcDocumentInformation.Name | | appinfo | | Document.Name | | appinfo | | A | | documentation | | Definition: DocumentName contains the name of the referenced document. Documents listed here may either be on the same media that delivers the COBie data file, or may be cloud-served or web-based documents. Document.Name is part of a combination Primary Key comprised of Document.Name, Document.SheetName, and Document.RowName Value: AHU Product Data|Air Cooled Chiller Product Data|Boiler Operations/Maintenance Manuals|Door Type H Warranty|Duplex Receptacle Product Data|Fire Sprinkler Product Data|Water Heater Product Data ISO16739Mapping: IfcDocumentInformation.Name COBie2.4Header: Document.Name COBie2.4Column: A | |

element DocumentReferenceURI

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e7553 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DocumentType](#Link80) | | |
| annotation | |  | | --- | | appinfo | | DocumentReferenceURI allows documentation of the original source of the information provided for the document identified in this row. | | appinfo | | Generator Quick Connect Switchboard|http://www.cpmtutor.com/c02/lineofbalance.html|company.uk/~/media/708CDAF885D01AA3B4.ashx|ReferenceDescription Book Page 101-23 | | appinfo | | IfcDocumentInformation.Name | | appinfo | | Document.Reference | | appinfo | | O | | documentation | | Definition: DocumentReferenceURI allows documentation of the original source of the information provided for the document identified in this row. Value: Generator Quick Connect Switchboard|http://www.cpmtutor.com/c02/lineofbalance.html|company.uk/~/media/708CDAF885D01AA3B4.ashx|ReferenceDescription Book Page 101-23 ISO16739Mapping: IfcDocumentInformation.Name COBie2.4Header: Document.Reference COBie2.4Column: O | |

element Documents

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | DocumentsKey |  |  |  | Document |  | DocumentName |  |  | |
| annotation | |  | | --- | | documentation | | A set of documents associated with a given COBie element. | |

element DocumentURI

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e7528 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [DocumentType](#Link80) | | |
| annotation | |  | | --- | | appinfo | | DocumentURI is the path name of the file in which the document is located. If the document is located on the same storage media as the COBie file, then this value shall identify relative path subdirectories for accessing the physical exchange of files. If the document is located on the Web, then this value shall be the full path name of the DirectoryURI in which the file is located. | | appinfo | | ../document/ACCU-Small-ProductData.PDF|C:/|Document|http://www.cpmtutor.com/Door Type F\_ReplacementParts.pdf|Door Type H\_InstallationInstructions.pdf|Pump-ProductData.PDF|SupplyDiffuserSidewallStandard-ProductData.PDF|Shower Seat\_Warranty.pdf|TransformerSwitchboard-ProductData.PDF|Urinal-ProductData.PDF|VAV-ProductData.PDF | | appinfo | | IfcDocumentInformation.Location | | appinfo | | Document.Directory,COBie.Document.FileName | | appinfo | | I,J | | documentation | | Definition: DocumentURI is the path name of the file in which the document is located. If the document is located on the same storage media as the COBie file, then this value shall identify relative path subdirectories for accessing the physical exchange of files. If the document is located on the Web, then this value shall be the full path name of the DirectoryURI in which the file is located. Value: ../document/ACCU-Small-ProductData.PDF|C:/|Document|http://www.cpmtutor.com/Door Type F\_ReplacementParts.pdf|Door Type H\_InstallationInstructions.pdf|Pump-ProductData.PDF|SupplyDiffuserSidewallStandard-ProductData.PDF|Shower Seat\_Warranty.pdf|TransformerSwitchboard-ProductData.PDF|Urinal-ProductData.PDF|VAV-ProductData.PDF ISO16739Mapping: IfcDocumentInformation.Location COBie2.4Header: Document.Directory,COBie.Document.FileName COBie2.4Column: I,J | |

element Facility

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [FacilityType](#Link110) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | |
| children | [FacilityName](#Link8B) |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Facility contains information about the facility being exchanged during a given COBie deliverable. Since COBie deliverables may be exchanged during planning, design, construction, handover, or operation phases there may be differences in facility designations. COBie files will typically contain a single facility. | |

element FacilityAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Facility element. | |

element FacilityCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [FacilityCategorySimpleType](#Link153) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e105 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. | | appinfo | | 11-11 11 21: Training Center|11-12.11.11: Daycare Facility|12 27 21: Computing Research Facility|11-13 11 17: Courthouse|11-13 24 14:Clinic|11-21 11 41: Chemical Manufacturing Facility|11-43 21: Waste Processing Facilities|11-51-11-27: Extra-Atmospheric Aerospace Transportation Terminal | | appinfo | | IfcClassification.Name | | appinfo | | Facility.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. Value: 11-11 11 21: Training Center|11-12.11.11: Daycare Facility|12 27 21: Computing Research Facility|11-13 11 17: Courthouse|11-13 24 14:Clinic|11-21 11 41: Chemical Manufacturing Facility|11-43 21: Waste Processing Facilities|11-51-11-27: Extra-Atmospheric Aerospace Transportation Terminal ISO16739Mapping: IfcClassification.Name COBie2.4Header: Facility.Category COBie2.4Column: D | |

element FacilityDefaultAreaUnit

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AreaUnitSimpleType](#Link154) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e234 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | square centimeters |  |  | | enumeration |  | square feet |  |  | | enumeration |  | square inches |  |  | | enumeration |  | square kilometers |  |  | | enumeration |  | square meters |  |  | | enumeration |  | square miles |  |  | | enumeration |  | square millimeters |  |  | | enumeration |  | square yards |  |  | | enumeration |  |  |  |  | |
| annotation | |  | | --- | | appinfo | | DefaultAreaUnitName is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. | | appinfo | | Square Feet|Square Miles|Square Meters|Square Kilometers | | appinfo | | IfcUnitAssignment.Units | | appinfo | | Facility.AreaUnits | | appinfo | | H | | documentation | | Definition: DefaultAreaUnitName is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. Value: Square Feet|Square Miles|Square Meters|Square Kilometers ISO16739Mapping: IfcUnitAssignment.Units COBie2.4Header: Facility.AreaUnits COBie2.4Column: H | |

element FacilityDefaultCurrencyUnit

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CurrencyUnitSimpleType](#Link155) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e284 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | British Pounds |  |  | | enumeration |  | Dollars |  |  | | enumeration |  | Euros |  |  | | enumeration |  |  |  |  | |
| annotation | |  | | --- | | appinfo | | DefaultCurrencyUnitName is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. | | appinfo | | Dollars|Euros|British Pounds | | appinfo | | IfcMonetaryUnit.Currency | | appinfo | | Facility.CurrencyUnits | | appinfo | | J | | documentation | | Definition: DefaultCurrencyUnitName is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. Value: Dollars|Euros|British Pounds ISO16739Mapping: IfcMonetaryUnit.Currency COBie2.4Header: Facility.CurrencyUnits COBie2.4Column: J | |

element FacilityDefaultLinearUnit

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [LinearUnitSimpleType](#Link156) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e209 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | centimeters |  |  | | enumeration |  | feet |  |  | | enumeration |  | inches |  |  | | enumeration |  | kilometers |  |  | | enumeration |  | meters |  |  | | enumeration |  | miles |  |  | | enumeration |  | millimeters |  |  | | enumeration |  | yards |  |  | |
| annotation | |  | | --- | | appinfo | | DefaultLinearUnitName is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. | | appinfo | | Inches|Feet|Miles|Millimeters|Meters|Kilometers | | appinfo | | IfcUnitAssignment.Units | | appinfo | | Facility.LinearUnits | | appinfo | | G | | documentation | | Definition: DefaultLinearUnitName is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. Value: Inches|Feet|Miles|Millimeters|Meters|Kilometers ISO16739Mapping: IfcUnitAssignment.Units COBie2.4Header: Facility.LinearUnits COBie2.4Column: G | |

element FacilityDefaultMeasurementStandard

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e310 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| annotation | |  | | --- | | appinfo | | DefaultMeasurementStandard is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. | | appinfo | | ANSI/BOMA Z65.1 - 2010|ASTM E1836-08:Building Floor Area Measurement|BSI | | appinfo | | IfcElementQuantity.MethodOfMeasurement | | appinfo | | Facility.AreaMeasurement | | appinfo | | K | | documentation | | Definition: DefaultMeasurementStandard is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. Value: ANSI/BOMA Z65.1 - 2010|ASTM E1836-08:Building Floor Area Measurement|BSI ISO16739Mapping: IfcElementQuantity.MethodOfMeasurement COBie2.4Header: Facility.AreaMeasurement COBie2.4Column: K | |

element FacilityDefaultVolumeUnit

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [VolumeUnitSimpleType](#Link157) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e259 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | cubic centimeters |  |  | | enumeration |  | cubic feet |  |  | | enumeration |  | cubic inches |  |  | | enumeration |  | cubic meters |  |  | | enumeration |  | cubic millimeters |  |  | | enumeration |  | cubic yards |  |  | |
| annotation | |  | | --- | | appinfo | | DefaultVolumeUnitName is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. | | appinfo | | Cubic Feet|Cubic Meters | | appinfo | | IfcUnitAssignment.Units | | appinfo | | Facility.VolumeUnits | | appinfo | | I | | documentation | | Definition: DefaultVolumeUnitName is the name of the basic unit of measure associated with all information found in the COBie file, with the exception of values in the COBie.Attributes table. COBie.Attributes requires explicit identification of unit. Value: Cubic Feet|Cubic Meters ISO16739Mapping: IfcUnitAssignment.Units COBie2.4Header: Facility.VolumeUnits COBie2.4Column: I | |

element FacilityDeliverablePhaseName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e131 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| annotation | |  | | --- | | appinfo | | DeliverablePhaseName designates the specific stage in the facility acquisition process described by the current COBie file. | | appinfo | | As-Built|Beneficial Occupancy|Construction Documents|Planning|Schematic Design | | appinfo | | IfcProject.PhaseName | | appinfo | | Phase | | appinfo | | V | | documentation | | Definition: DeliverablePhaseName designates the specific stage in the facility acquisition process described by the current COBie file. Value: As-Built|Beneficial Occupancy|Construction Documents|Planning|Schematic Design ISO16739Mapping: IfcProject.PhaseName COBie2.4Header: Phase COBie2.4Column: V | |

element FacilityDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| annotation | |  | | --- | | appinfo | | FacilityDescription is a general description of the facility whose data is contained. | | appinfo | | This facility is built predominantly of yellow brick|This facility is defended by spiked walls|This facility is mainly constructed of adobe|This moderately sized facility is sprawling.|This smallish facility is sleepy. | | appinfo | | IfcBuilding.Description | | appinfo | | Facility.Description | | appinfo | | S | | documentation | | Definition: FacilityDescription is a general description of the facility whose data is contained. Value: This facility is built predominantly of yellow brick|This facility is defended by spiked walls|This facility is mainly constructed of adobe|This moderately sized facility is sprawling.|This smallish facility is sleepy. ISO16739Mapping: IfcBuilding.Description COBie2.4Header: Facility.Description COBie2.4Column: S | | documentation | | FacilityDescription is a general description of the facility whose data is contained. | |

element FacilityDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Facility element. | |

element FacilityIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Facility element. | |

element FacilityName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityKeyType](#Link158)  [FacilityType](#Link110) | | |
| annotation | |  | | --- | | documentation | | Definition: FacilityName is the short-hand name of the facility as it relates to a given COBie deliverable during planning, design, construction, handover, or operation. Due to the differences in numberings required for various business processes it is recommended that Facility.Name be set to the contract number that specifies the requirement for each specific COBie deliverable. Value: Anar Tuol Preserved Pavilion|Cam Mang Dynastic Arena|Emperor Eng's Gate|Jel Syan Painted Waterworks|Minar Gol Illustrated Rotunda|Pael Mal Old Labyrinth|Quang Mael Living Park ISO16739Mapping: IfcBuilding.Name COBie2.4Header: Facility.Name COBie2.4Column: A | | appinfo | | FacilityName is the short-hand name of the facility as it relates to a given COBie deliverable during planning, design, construction, handover, or operation. Due to the differences in numberings required for various business processes it is recommended that Facility.Name be set to the contract number that specifies the requirement for each specific COBie deliverable. | | appinfo | | Anar Tuol Preserved Pavilion|Cam Mang Dynastic Arena|Emperor Eng's Gate|Jel Syan Painted Waterworks|Minar Gol Illustrated Rotunda|Pael Mal Old Labyrinth|Quang Mael Living Park | | appinfo | | IfcBuilding.Name | | appinfo | | Facility.Name | | appinfo | | A | |

element Floor

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [FloorType](#Link111) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e427 | | |
| children | [FloorName](#LinkAA) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorCollectionType](#Link99) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Floor record is required for all COBie deliverables containing spatial information. | |

element FloorAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorType](#LinkA9) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Floor element. | |

element FloorCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [FloorCategorySimpleType](#Link159) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e466 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorType](#LinkA9) | | |
| annotation | |  | | --- | | appinfo | | FloorCategory provides the classification of the information provided in this row of data. | | appinfo | | Site|Floor|Roof | | appinfo | | IfcClassification.Name | | appinfo | | Floor.Category | | appinfo | | D | | documentation | | Definition: FloorCategory provides the classification of the information provided in this row of data. Value: Site|Floor|Roof ISO16739Mapping: IfcClassification.Name COBie2.4Header: Floor.Category COBie2.4Column: D | |

element FloorDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorType](#LinkA9) | | |
| annotation | |  | | --- | | appinfo | | FloorDescription provides the opportunity for additional description of each vertical level of the facility. | | appinfo | | First Floor|Foundation|Roof Level 1|Second Floor|Section 101-105|Site|Underground Parking | | appinfo | | IfcBuildingStorey.Description | | appinfo | | Floor.Description | | appinfo | | H | | documentation | | Definition: FloorDescription provides the opportunity for additional description of each vertical level of the facility. Value: First Floor|Foundation|Roof Level 1|Second Floor|Section 101-105|Site|Underground Parking ISO16739Mapping: IfcBuildingStorey.Description COBie2.4Header: Floor.Description COBie2.4Column: H | |

element FloorDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorType](#LinkA9) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Floor element. | |

element FloorElevationValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e519 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorType](#LinkA9) | | |
| annotation | |  | | --- | | documentation | | Floor.ElevationValue defines the elevation from which the facility data contained in the COBie file may be located on the site. Facility.LinearUnit defines the units for this value. If specified, Facility attribute data may provide longitude and latitude for the corner of each vertical level of the facility. | |

element FloorHeightValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e533 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorType](#LinkA9) | | |
| annotation | |  | | --- | | appinfo | | FloorHeight defines the distance from the top of the structure at the bottom of the referenced Floor to the bottom of the structure above the referenced Floor. Facility.LinearUnit defines the units for this value. | | appinfo | | 10.00|3050.00|12|3660.00|8.00|2438.40 | | appinfo | | IfcQuantityLength.LengthValue | | appinfo | | Floor.Height | | appinfo | | J | | documentation | | Definition: FloorHeight defines the distance from the top of the structure at the bottom of the referenced Floor to the bottom of the structure above the referenced Floor. Facility.LinearUnit defines the units for this value. Value: 10.00|3050.00|12|3660.00|8.00|2438.40 ISO16739Mapping: IfcQuantityLength.LengthValue COBie2.4Header: Floor.Height COBie2.4Column: J | |

element FloorIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorType](#LinkA9) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Floor element. | |

element FloorName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorKeyType](#Link15A)  [FloorType](#Link111) | | |
| annotation | |  | | --- | | appinfo | | FloorName contains the unique name of each vertical level of the facility. | | appinfo | | First Floor|Foundation|Roof Level 1|Second Floor|Section 101-105|Site|Underground Parking | | appinfo | | IfcBuildingStorey.Name | | appinfo | | Floor.Name | | appinfo | | A | | documentation | | Definition: FloorName contains the unique name of each vertical level of the facility. Value: First Floor|Foundation|Roof Level 1|Second Floor|Section 101-105|Site|Underground Parking ISO16739Mapping: IfcBuildingStorey.Name COBie2.4Header: Floor.Name COBie2.4Column: A | |

element Floors

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [FloorCollectionType](#Link99) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e414 | | |
| children | [Floor](#LinkB4) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | FloorKey |  |  |  | Floor |  | FloorName |  |  | |
| annotation | |  | | --- | | documentation | | COBie.Floor contains information about the vertical levels within the facility being exchanged during a given COBie deliverable. These levels include floors and roof in vertical construction. These levels also include also regions outside the facility or across a site. | |

element IntegerValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:integer |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IntegerValueType](#Link35) | | |
| annotation | |  | | --- | | documentation | | A COBie value represented by an integer type. | |

element Issue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueType](#Link112) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e1495 | | |
| children | [IssueName](#LinkB7)  [IssueCategory](#LinkB8) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IssueCollectionType](#LinkF) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A specific Issue within this set of Issues. | |

element IssueAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Issue element. | |

element IssueCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCategorySimpleType](#Link15D) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5493 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IssueKeyType](#Link15E)  [IssueType](#Link112) | | |
| annotation | |  | | --- | | appinfo | | IssueCategory identifies the category of issue contained in this record. | | appinfo | | Design Review|Bidder Inquiry|Change|Claim|Coordination|Environmental|Functional|Indoor Air Quality|Installation|Quality Assurance|Quality Control|RFI|Safety|Specification|Deviation | | appinfo | | Pset\_Risk.RiskType (IfcPropertyEnumeratedValue, IfcLabel) | | appinfo | | Issue.Type | | appinfo | | D | | documentation | | Definition: IssueCategory identifies the category of issue contained in this record. Value: Design Review|Bidder Inquiry|Change|Claim|Coordination|Environmental|Functional|Indoor Air Quality|Installation|Quality Assurance|Quality Control|RFI|Safety|Specification|Deviation ISO16739Mapping: Pset\_Risk.RiskType (IfcPropertyEnumeratedValue, IfcLabel) COBie2.4Header: Issue.Type COBie2.4Column: D | |

element IssueDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IssueType](#LinkB6) | | |
| annotation | |  | | --- | | appinfo | | IssueDescription holds the detailes of the issue identified in this record. | | appinfo | | Move roof drain more than 2 foot from parapet wall.|two phase equipment submitted in lieu of 3-phased|Move filter door to North side of duct work to allow access.|Pump Schedule shows 5 examples of Pump 1. Only 3 are found on the drawings. Please Clairify. | | appinfo | | IfcApproval.Description | | appinfo | | Issue.Description | | appinfo | | L | | documentation | | Definition: IssueDescription holds the detailes of the issue identified in this record. Value: Move roof drain more than 2 foot from parapet wall.|two phase equipment submitted in lieu of 3-phased|Move filter door to North side of duct work to allow access.|Pump Schedule shows 5 examples of Pump 1. Only 3 are found on the drawings. Please Clairify. ISO16739Mapping: IfcApproval.Description COBie2.4Header: Issue.Description COBie2.4Column: L | |

element IssueDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Issue element. | |

element IssueImpactText

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5572 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IssueType](#LinkB6) | | |
| annotation | |  | | --- | | appinfo | | ImpactText identifies the extent of the impact felt if this issue is not resolved. | | appinfo | | Certain|Very High|High|Moderate|Low|Unknown | | appinfo | | Pset\_Risk.RiskConsequence (IfcPropertyEnumeratedValue, IfcLabel) | | appinfo | | Issue.Impact | | appinfo | | G | | documentation | | Definition: ImpactText identifies the extent of the impact felt if this issue is not resolved. Value: Certain|Very High|High|Moderate|Low|Unknown ISO16739Mapping: Pset\_Risk.RiskConsequence (IfcPropertyEnumeratedValue, IfcLabel) COBie2.4Header: Issue.Impact COBie2.4Column: G | |

element IssueMitigationDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5644 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IssueType](#LinkB6) | | |
| annotation | |  | | --- | | appinfo | | IssueMitigationDescription provides an explaination of how the issue will be resolved. | | appinfo | | n/a | | appinfo | | Pset\_Risk.PreventiveMeasures | | appinfo | | Issue.Description | | appinfo | | L | | documentation | | Definition: IssueMitigationDescription provides an explaination of how the issue will be resolved. Value: n/a ISO16739Mapping: Pset\_Risk.PreventiveMeasures COBie2.4Header: Issue.Description COBie2.4Column: L | |

element IssueName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IssueKeyType](#Link15E)  [IssueType](#Link112) | | |
| annotation | |  | | --- | | documentation | | IssueName contains the header information about the specific issue contained in this record. | |

element IssueRiskText

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5546 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IssueType](#LinkB6) | | |
| annotation | |  | | --- | | appinfo | | RiskText identifies the probability that the specific issue contained in this record will occur. | | appinfo | | Certain|Very High|High|Moderate|Low|Unknown | | appinfo | | Pset\_Risk.AssessmentOfRisk (IfcPropertyEnumeratedValue, IfcLabel) | | appinfo | | Issue.Chance | | appinfo | | F | | documentation | | Definition: RiskText identifies the probability that the specific issue contained in this record will occur. Value: Certain|Very High|High|Moderate|Low|Unknown ISO16739Mapping: Pset\_Risk.AssessmentOfRisk (IfcPropertyEnumeratedValue, IfcLabel) COBie2.4Header: Issue.Chance COBie2.4Column: F | |

element Issues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e1482 | | |
| children | [Issue](#LinkC0) |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | IssueKey |  |  |  | Issue |  | IssueName |  |  | |
| annotation | |  | | --- | | documentation | | A set of Isssues associated with a specific COBie document element. | |

element IssueSeverityText

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e5519 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [IssueType](#LinkB6) | | |
| annotation | |  | | --- | | appinfo | | SeverityText identifies the category of Risk about the specific issue contained in this record. | | appinfo | | Certain|Very High|High|Moderate|Low|Unknown | | appinfo | | Pset\_Risk.RiskRating (IfcPropertyEnumeratedValue, IfcLabel) | | appinfo | | Issue.Risk | | appinfo | | E | | documentation | | Definition: SeverityText identifies the category of Risk about the specific issue contained in this record. Value: Certain|Very High|High|Moderate|Low|Unknown ISO16739Mapping: Pset\_Risk.RiskRating (IfcPropertyEnumeratedValue, IfcLabel) COBie2.4Header: Issue.Risk COBie2.4Column: E | |

element Job

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [JobType](#Link113) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e4137 | | |
| children | [JobName](#LinkC3)  [JobTaskID](#LinkC4) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobCollectionType](#Link4D) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Job record is required for all relevant COBie.Type objects submitted at the benefical occupancy or facility handover stage. | |

element JobAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Assembly element. | |

element JobCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [JobCategorySimpleType](#Link162) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e4176 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. | | appinfo | | Adjustment|Calibration|Emergency|Inspection|Operation|PM|Safety|ShutDown|StartDateTimeUp|Testing|Trouble | | appinfo | | IfcTask.ObjectType | | appinfo | | Job.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. Value: Adjustment|Calibration|Emergency|Inspection|Operation|PM|Safety|ShutDown|StartDateTimeUp|Testing|Trouble ISO16739Mapping: IfcTask.ObjectType COBie2.4Header: Job.Category COBie2.4Column: D | |

element JobDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | appinfo | | JobDescription allows documentation of information about the purpose and characteristics of the required job. When a Job record refers to an entire set of operations, these operations will be listed here and sequentially numbered in the text. When a Job record refers to activities in a schedule, the first Job.Description, whose TaskNumber will be zero, provides the header description for the tasks and the remaining Job.Description records provide the activity names. | | appinfo | | 1. Turn off power at the control panel.|Boiler Lock Out|Check freezestat for proper temperature|Clean up work area.|Lubricate connections of dampers sparingly.|Remove any insect nests | | appinfo | | IfcTask.Description | | appinfo | | Job.Description | | appinfo | | G | | documentation | | Definition: JobDescription allows documentation of information about the purpose and characteristics of the required job. When a Job record refers to an entire set of operations, these operations will be listed here and sequentially numbered in the text. When a Job record refers to activities in a schedule, the first Job.Description, whose TaskNumber will be zero, provides the header description for the tasks and the remaining Job.Description records provide the activity names. Value: 1. Turn off power at the control panel.|Boiler Lock Out|Check freezestat for proper temperature|Clean up work area.|Lubricate connections of dampers sparingly.|Remove any insect nests ISO16739Mapping: IfcTask.Description COBie2.4Header: Job.Description COBie2.4Column: G | |

element JobDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Assembly element. | |

element JobDuration

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IntegerValueType](#Link35) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [UnitName](#Link12C)  [IntegerValue](#Link12D) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | appinfo | | Job.Duration contains the value for the time required to complete the job referred to in this row. | | appinfo | | 1|2|5|100 | | appinfo | | IfcConversionBasedUnit.Name | | appinfo | | Job.Duration | | appinfo | | H | | documentation | | Definition: Job.Duration contains the value for the time required to complete the job referred to in this row. Value: 1|2|5|100 ISO16739Mapping: IfcConversionBasedUnit.Name COBie2.4Header: Job.Duration COBie2.4Column: H | |

element JobFrequencyValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | appinfo | | JobFrequency identifies the amount of time between instances of jobs that should be periodically repeated. | | appinfo | | 1 |6 |100 |10,000 | | appinfo | | IfcRecurrencePattern.Occurences | | appinfo | | Job.Frequency | | appinfo | | L | | documentation | | Definition: JobFrequency identifies the amount of time between instances of jobs that should be periodically repeated. Value: 1 |6 |100 |10,000 ISO16739Mapping: IfcRecurrencePattern.Occurences COBie2.4Header: Job.Frequency COBie2.4Column: L | |

element JobIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Assembly element. | |

element JobName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobKeyType](#Link163)  [JobType](#Link113) | | |
| annotation | |  | | --- | | appinfo | | JobName is the name of the operation or sequence of operations used to support a specific operations and maintenance task. Job.Name is part of a combination Primary Key comprised of Job.Name and Job.TypeName | | appinfo | | Air Handler Lockout|Boiler Lock Out|AHU Annual Maintenance|Boiler Annual Maintenance|Sprinkler Head Semi-Annual Maintenance | | appinfo | | IfcTask.Name | | appinfo | | Job.Name | | appinfo | | A | | documentation | | Definition: JobName is the name of the operation or sequence of operations used to support a specific operations and maintenance task. Job.Name is part of a combination Primary Key comprised of Job.Name and Job.TypeName Value: Air Handler Lockout|Boiler Lock Out|AHU Annual Maintenance|Boiler Annual Maintenance|Sprinkler Head Semi-Annual Maintenance ISO16739Mapping: IfcTask.Name COBie2.4Header: Job.Name COBie2.4Column: A | |

element JobPriorTaskID

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | appinfo | | JobPriorTaskID identifies the JobTaskID of the task preceeding the current task. | | appinfo | | 1|2|5|100|A1 | | appinfo | | IfcTask.Identification | | appinfo | | Job.TaskNumber | | appinfo | | Q | | documentation | | Definition: JobTaskID is used to uniquely identify sub tasks within the overall task. If the Job record identifies a series of operations with the Job.Description, then this information is not required. If a set of Job records are used to define a precise sequence of operations, then the first Job.TaskNumber in the series of tasks shall be identified with a Job.TaskNumber of zero (0). This task number shall be overall description of that set of operations. Value: 1|2|5|100|A1 ISO16739Mapping: IfcTask.Identification COBie2.4Header: Job.TaskNumber COBie2.4Column: Q | |

element Jobs

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [JobCollectionType](#Link4D) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e4124 | | |
| children | [Job](#LinkD2) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | JobKey |  |  |  | Job |  | JobName  JobTaskID |  |  | |
| annotation | |  | | --- | | documentation | | COBie.Job provides a mechanism through which information about preventative maintenance, safety, testing, operational and emergency procedures may be communicated. COBie.Job may contain a general description of a series of operations or tasks. COBie.Job may also be used to create small Critical Path Method projects where project teams want to explicitly link resources to specific operations within a job. | |

element JobStartConditionDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | appinfo | | JobStartConditionDescription identifies the unit for Job.Duration. | | appinfo | | as required|day|minute|month|quarter|week|year|hours of operation|StartDateTimeup|shutdown | | appinfo | | IfcConversionBasedUnit.Name | | appinfo | | Job.TaskStartUnit | | appinfo | | K | | documentation | | Definition: JobStartConditionDescription identifies the unit for Job.Duration. Value: as required|day|minute|month|quarter|week|year|hours of operation|StartDateTimeup|shutdown ISO16739Mapping: IfcConversionBasedUnit.Name COBie2.4Header: Job.TaskStartUnit COBie2.4Column: K | |

element JobStartDate

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:date |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e4307 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | appinfo | | JobStartDateTime identifies the time after the exchange of this file that the first instance of this job is to be accomplished. | | appinfo | | 1 |6 |100 |10,000 | | appinfo | | IfcTaskTime.ScheduleStartDateTime | | appinfo | | Job.Start | | appinfo | | J | | documentation | | Definition: JobStartDateTime identifies the time after the exchange of this file that the first instance of this job is to be accomplished. Value: 1 |6 |100 |10,000 ISO16739Mapping: IfcTaskTime.ScheduleStartDateTime COBie2.4Header: Job.Start COBie2.4Column: J | |

element JobStatus

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e4202 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| annotation | |  | | --- | | appinfo | | JobStatusCategory identifies the status of the job at the time of COBie information exchange. This is required since some jobs may have been required prior to Beneficial Occupancy of the facility. | | appinfo | | Not Yet StartDateTimeed|StartDateTimeed|Completed | | appinfo | | IfcTask.Status | | appinfo | | Job.Status | | appinfo | | E | | documentation | | Definition: JobStatusCategory identifies the status of the job at the time of COBie information exchange. This is required since some jobs may have been required prior to Beneficial Occupancy of the facility. Value: Not Yet StartDateTimeed|StartDateTimeed|Completed ISO16739Mapping: IfcTask.Status COBie2.4Header: Job.Status COBie2.4Column: E | |

element JobTaskID

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e4412 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobKeyType](#Link163)  [JobType](#Link113) | | |
| annotation | |  | | --- | | appinfo | | JobTaskID is used to uniquely identify sub tasks within the overall task. If the Job record identifies a series of operations with the Job.Description, then this information is not required. If a set of Job records are used to define a precise sequence of operations, then the first Job.TaskNumber in the series of tasks shall be identified with a Job.TaskNumber of zero (0). This task number shall be overall description of that set of operations. | | appinfo | | 1|2|5|100|A1 | | appinfo | | IfcTask.Identification | | appinfo | | Job.TaskNumber | | appinfo | | Q | | documentation | | Definition: JobTaskID is used to uniquely identify sub tasks within the overall task. If the Job record identifies a series of operations with the Job.Description, then this information is not required. If a set of Job records are used to define a precise sequence of operations, then the first Job.TaskNumber in the series of tasks shall be identified with a Job.TaskNumber of zero (0). This task number shall be overall description of that set of operations. Value: 1|2|5|100|A1 ISO16739Mapping: IfcTask.Identification COBie2.4Header: Job.TaskNumber COBie2.4Column: Q | |

element MaxValueDecimal

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:double |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeDecimalValueType](#Link139) | | |
| annotation | |  | | --- | | documentation | | Specifies the maximum value of a decimal number in a bounded decimal value range. | |

element MaxValueInteger

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:integer |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeIntegerValueType](#Link13E) | | |
| annotation | |  | | --- | | documentation | | Specifies the maximum value of an integer in a bounded integer value range. | |

element MinValueDecimal

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:double |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeDecimalValueType](#Link139) | | |
| annotation | |  | | --- | | documentation | | Specifies the minimum value of a decimal number in a bounded decimal value range. | |

element MinValueInteger

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:integer |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeIntegerValueType](#Link13E) | | |
| annotation | |  | | --- | | documentation | | Specifies the minimum value of an integer in a bounded integer value range. | |

element MonetaryUnit

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CurrencyUnitSimpleType](#Link155) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeMonetaryValueType](#Link142) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | British Pounds |  |  | | enumeration |  | Dollars |  |  | | enumeration |  | Euros |  |  | | enumeration |  |  |  |  | |
| annotation | |  | | --- | | documentation | | An occurence of a currency unit. | |

element MonetaryValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [MonetaryValueSimpleType](#Link165) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeMonetaryValueType](#Link142) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | fractionDigits |  | 2 |  |  | |
| annotation | |  | | --- | | documentation | | A COBie value represented by a decimal type constrained to two decimal places. | |

element ProjectAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ProjectType](#Link8E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [ProjectName](#Link166)  [ProjectDescription](#Link167) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | ProjectAssignment contains a reference to an IfcProject object that may exist in an external IFC file. | |

element ProjectDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ProjectType](#Link8E) | | |
| annotation | |  | | --- | | appinfo | | ProjectDescription is a general description of the project whose data is contained. | | appinfo | | nascetur ridiculus mus. |Donec quam felis, ultricies, pellentesque eu, pretium quis, sem. |Nulla consequat massa |quis enim. Donec pede justo, fringilla vel, aliquet nec, |vulputate eget, arcu. | | appinfo | | IfcProject.Descriptio | | appinfo | | Facility.ProjectDescription | | appinfo | | T | | documentation | | Definition: ProjectDescription is a general description of the project whose data is contained. Value: nascetur ridiculus mus. |Donec quam felis, ultricies, pellentesque eu, pretium quis, sem. |Nulla consequat massa |quis enim. Donec pede justo, fringilla vel, aliquet nec, |vulputate eget, arcu. ISO16739Mapping: IfcProject.Descriptio COBie2.4Header: Facility.ProjectDescription COBie2.4Column: T | |

element ProjectName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ProjectType](#Link8E) | | |
| annotation | |  | | --- | | appinfo | | ProjectName is the long name of the facility or project. This name often is associated with the name of a contract. | | appinfo | | Chemical Plant|Interstate Highway 95 Renovation|Luetkemeyer Library and Museum|Marcin Space Port|Region A Hospital and Outpatient Clinic|Roof Repair Building 1106 | | appinfo | | IfcProject.Name | | appinfo | | Facility.ProjectName | | appinfo | | E | | documentation | | Definition: ProjectName is the long name of the facility or project. This name often is associated with the name of a contract. Value: Chemical Plant|Interstate Highway 95 Renovation|Luetkemeyer Library and Museum|Marcin Space Port|Region A Hospital and Outpatient Clinic|Roof Repair Building 1106 ISO16739Mapping: IfcProject.Name COBie2.4Header: COBie.Facility.ProjectName COBie2.4Column: E | |

element Resource

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ResourceType](#Link114) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e4451 | | |
| children | [ResourceName](#LinkD5) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ResourceCollectionType](#LinkCE) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific resource. | |

element ResourceAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ResourceType](#LinkD4) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Resource element. | |

element ResourceCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ResourceCategorySimpleType](#Link168) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e4490 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ResourceType](#LinkD4) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. | | appinfo | | Labor|MaterialDescription|Tools|Training | | appinfo | | IfcConstructionEquipmentResource.ObjectType | | appinfo | | Resource.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. Value: Labor|MaterialDescription|Tools|Training ISO16739Mapping: IfcConstructionEquipmentResource.ObjectType COBie2.4Header: Resource.Category COBie2.4Column: D | |

element ResourceDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ResourceType](#LinkD4) | | |
| annotation | |  | | --- | | appinfo | | ResourceDescription is a human interpretable description of the Resource. | | appinfo | | A ten foot wooden ladder|A pair of welding safety goggles|A pistol grip dremmel tool | | appinfo | | IfcConstructionEquipmentResource.Description | | appinfo | | Resource.Description | | appinfo | | H | | documentation | | Definition: ResourceDescription is a human interpretable description of the Resource. Value: A ten foot wooden ladder|A pair of welding safety goggles|A pistol grip dremmel tool ISO16739Mapping: IfcConstructionEquipmentResource.Description COBie2.4Header: Resource.Description COBie2.4Column: H | |

element ResourceDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ResourceType](#LinkD4) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Resource element. | |

element ResourceIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ResourceType](#LinkD4) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Resource element. | |

element ResourceName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ResourceKeyType](#Link169)  [ResourceType](#Link114) | | |
| annotation | |  | | --- | | appinfo | | Resource.Name is the name of the resource that is to be used to support a specific operations and maintenance task. Resource.Name is the primary key of the Resource worksheet and it is referenced in subsequent COBie worksheets. | | appinfo | | Tachometer|Grease gun and oiler|Pressure washer|Vacuum|Fin comb|Safety goggles|Gloves|Tool Group C|Scrapers|Wire brush|Cleaning materials | | appinfo | | IfcConstructionEquipmentResource.Name | | appinfo | | Resource.Name | | appinfo | | A | | documentation | | Definition: Resource.Name is the name of the resource that is to be used to support a specific operations and maintenance task. Resource.Name is the primary key of the Resource worksheet and it is referenced in subsequent COBie worksheets. Value: Tachometer|Grease gun and oiler|Pressure washer|Vacuum|Fin comb|Safety goggles|Gloves|Tool Group C|Scrapers|Wire brush|Cleaning materials ISO16739Mapping: IfcConstructionEquipmentResource.Name COBie2.4Header: Resource.Name COBie2.4Column:A | |

element Resources

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ResourceCollectionType](#LinkCE) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e4438 | | |
| children | [Resource](#LinkDB) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [JobType](#LinkC2) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | ResourceKey |  |  |  | Resource |  | ResourceName |  |  | |
| annotation | |  | | --- | | documentation | | A set of resources required for a specific Job. | |

element SiteAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SiteType](#Link90) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [SiteName](#Link16B)  [SiteDescription](#Link16C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | SiteAssignment contains a reference to an IfcSite object that may exist in an external IFC file. | |

element SiteDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SiteType](#Link90) | | |
| annotation | |  | | --- | | appinfo | | SiteDescription is a general description of the site in which the facility and project are taking place. | | appinfo | | Duis leo. |Sed fringilla mauris sit amet nibh. |Donec sodales sagittis magna. Sed consequat, leo eget |bibendum sodales, augue velit| cursus nunc | | appinfo | | IfcSite.Description | | appinfo | | Facility.SiteDescription | | appinfo | | U | | documentation | | Definition: SiteDescription is a general description of the site in which the facility and project are taking place. Value: Duis leo. |Sed fringilla mauris sit amet nibh. |Donec sodales sagittis magna. Sed consequat, leo eget |bibendum sodales, augue velit| cursus nunc ISO16739Mapping: IfcSite.Description COBie2.4Header: Facility.SiteDescription COBie2.4Column: U | |

element SiteName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SiteType](#Link90) | | |
| annotation | |  | | --- | | appinfo | | FacilitySiteName is the long name of the site at which the facility or project occurs. This name often is associated with the name of a contract. | | appinfo | | Atlantic Division Headquarters|Elder Ossuary|Far Lodge|Goldmouse Hills|Graywarden Observatory|Mid-State University Campus|Region 11 | | appinfo | | IfcSite.Name | | appinfo | | Facility.SiteName | | documentation | | Definition: FacilitySiteName is the long name of the site at which the facility or project occurs. This name often is associated with the name of a contract. Value: Atlantic Division Headquarters|Elder Ossuary|Far Lodge|Goldmouse Hills|Graywarden Observatory|Mid-State University Campus|Region 11 ISO16739Mapping: IfcSite.Name COBie2.4Header: Facility.SiteName COBie2.4Column: F | |

element Space

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SpaceType](#Link115) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e572 | | |
| children | [SpaceName](#LinkDE) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceCollectionType](#LinkB0) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Space record is required for all COBie deliverables related to Space information. | |

element SpaceAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SpaceKeyType](#Link124) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [FloorName](#LinkAA)  [SpaceName](#LinkDE) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceAssignmentCollectionType](#Link18) | | |
| annotation | |  | | --- | | documentation | | The assignment of a Space to a COBie element. | |

element SpaceAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Space element. | |

element SpaceCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SpaceCategorySimpleType](#Link16D) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e611 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. | | appinfo | | 13-11 11 19: Computer Lab|13-15211127: MaterialDescription Handling Area|13-15 11 34 17: Open Office Space|13-75 41 14:Soiled Storage Room Space|81-11-21: Service Space|13-85.31.27: Air Lock|Parking Lot | | appinfo | | IfcClassification.Name | | appinfo | | Space.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. Value: 13-11 11 19: Computer Lab|13-15211127: MaterialDescription Handling Area|13-15 11 34 17: Open Office Space|13-75 41 14:Soiled Storage Room Space|81-11-21: Service Space|13-85.31.27: Air Lock|Parking Lot ISO16739Mapping: IfcClassification.Name COBie2.4Header: Space.Category COBie2.4Column: D | |

element SpaceDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | appinfo | | SpaceDescription is the human-readable name of the Space. Typically Space.Description is required to match the name of the space found on design and construction drawings. | | appinfo | | SYS. ANALYST|COMPUTER ROOM|MAIN MECHANICAL ROOM|COPY / FILE/ Mail Box Area|SUPER|QA / HRD DIRECTOR|ADMIN OFFICE|SEC. WAIT|CMDR OFFICE | | appinfo | | IfcSpace.Description | | appinfo | | Space.Description | | appinfo | | F | | documentation | | Definition: SpaceDescription is the human-readable name of the Space. Typically Space.Description is required to match the name of the space found on design and construction drawings. Value: SYS. ANALYST|COMPUTER ROOM|MAIN MECHANICAL ROOM|COPY / FILE/ Mail Box Area|SUPER|QA / HRD DIRECTOR|ADMIN OFFICE|SEC. WAIT|CMDR OFFICE ISO16739Mapping: IfcSpace.Description COBie2.4Header: Space.Description COBie2.4Column: F | |

element SpaceDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Space element. | |

element SpaceGrossAreaValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e716 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | appinfo | | Space.GrossAreaValue is generally defined by the area within the perimeter of the walls bounding the space. Facility.AreaMeasure defines the measurement precise definition of space measurement methodology. Facility.AreaUnit defines the units for this value. | | appinfo | | 100|9.29|200|18.58|1000|92.90 | | appinfo | | IfcQuantityArea.AreaValue (from "GrossFloorArea" of Qto\_SpaceBaseQuantities) | | appinfo | | Space.GrossArea | | appinfo | | L | | documentation | | Definition: Space.GrossAreaValue is generally defined by the area within the perimeter of the walls bounding the space. Facility.AreaMeasure defines the measurement precise definition of space measurement methodology. Facility.AreaUnit defines the units for this value. Value: 100|9.29|200|18.58|1000|92.90 ISO16739Mapping: IfcQuantityArea.AreaValue (from "GrossFloorArea" of Qto\_SpaceBaseQuantities) COBie2.4Header: Space.GrossArea COBie2.4Column: L | |

element SpaceIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Space element. | |

element SpaceName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceKeyType](#Link124)  [SpaceType](#Link115) | | |
| annotation | |  | | --- | | appinfo | | Space.Name contains the name of each horizontal area of the facility. Typically Space.Name is required to match the space number found on design and construction drawings. Spaces are organized by Category, thus within a given physical room there could be several Spaces. Space.Name is the primary key of the Floor worksheet and it is referenced in subsequent COBie worksheets. Space.Name values must be unique. | | appinfo | | 101-A|122|1E02|324|B2|All Purpose Room|Parking Lot A | | appinfo | | IfcSpace.Name | | appinfo | | Space.Name | | appinfo | | A | | documentation | | Definition: Space.Name contains the name of each horizontal area of the facility. Typically Space.Name is required to match the space number found on design and construction drawings. Spaces are organized by Category, thus within a given physical room there could be several Spaces. Space.Name is the primary key of the Floor worksheet and it is referenced in subsequent COBie worksheets. Space.Name values must be unique. Value: 101-A|122|1E02|324|B2|All Purpose Room|Parking Lot A ISO16739Mapping: IfcSpace.Name COBie2.4Header: Space.Name COBie2.4Column: A | |

element SpaceNetAreaValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e742 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | appinfo | | Space.NetAreaValue is generally defined by the Space.GrossAreaValue less the area of fixed building Assets that impinge upon the human scale use of that space. Facility.AreaMeasure defines the measurement precise definition of space measurement methodology. Facility.AreaUnit defines the units for this value. | | appinfo | | 100|9.29|200|18.58|1000|92.90 | | appinfo | | IfcQuantityArea.AreaValue (from "NetFloorArea" of Qto\_SpaceBaseQuantities) | | appinfo | | Space.NetArea | | appinfo | | M | | documentation | | Definition: Space.NetAreaValue is generally defined by the Space.GrossAreaValue less the area of fixed building Assets that impinge upon the human scale use of that space. Facility.AreaMeasure defines the measurement precise definition of space measurement methodology. Facility.AreaUnit defines the units for this value. Value: 100|9.29|200|18.58|1000|92.90 ISO16739Mapping: IfcQuantityArea.AreaValue (from "NetFloorArea" of Qto\_SpaceBaseQuantities) COBie2.4Header: Space.NetArea COBie2.4Column: M | |

element Spaces

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SpaceCollectionType](#LinkB0) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e559 | | |
| children | [Space](#LinkEA) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FloorType](#LinkA9) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | SpaceKey |  |  |  | Space |  | SpaceName |  |  | |
| annotation | |  | | --- | | documentation | | COBie.Space contains information about the horizontal organization of space within a given vertical, or Floor, level. | |

element SpaceSignageName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e664 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | appinfo | | SpaceSignageName is the value of the signage placed on or outside the space during construction and operation of the facility. | | appinfo | | 101-A|101A|1E02|3156|Receiving Room|A101|Break Room | | appinfo | | IfcPropertySingleValue.NominalValue (from "RoomTag" property of property set named "COBie\_Space" ) | | appinfo | | Space.RoomTag | | appinfo | | J | | documentation | | Definition: SpaceSignageName is the value of the signage placed on or outside the space during construction and operation of the facility. Value: 101-A|101A|1E02|3156|Receiving Room|A101|Break Room ISO16739Mapping: IfcPropertySingleValue.NominalValue (from "RoomTag" property of property set named "COBie\_Space" ) COBie2.4Header: Space.RoomTag COBie2.4Column: J | |

element SpaceUsableHeightValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DecimalValueType](#Link33) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e690 | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| annotation | |  | | --- | | appinfo | | Space.UsableHeight is the height from the top of the floor below to the bottom of the ceiling above. If there is no ceiling then the UsableHeight would equal that of the Floor. The area between the Space.UsableHeight and the bottom of the floor above is called interstitial space. | | appinfo | | 10.00|3050.00|12|3660.00|8.00|2438.40 | | appinfo | | IfcQuantityLength.LengthValue (from "FinishDescriptionCeilingHeight" of qto\_SpaceBaseQuantities) | | appinfo | | Space.UsableHeight | | appinfo | | K | | documentation | | Definition: Space.UsableHeight is the height from the top of the floor below to the bottom of the ceiling above. If there is no ceiling then the UsableHeight would equal that of the Floor. The area between the Space.UsableHeight and the bottom of the floor above is called interstitial space. Value: 10.00|3050.00|12|3660.00|8.00|2438.40 ISO16739Mapping: IfcQuantityLength.LengthValue (from "FinishDescriptionCeilingHeight" of qto\_SpaceBaseQuantities) COBie2.4Header: Space.UsableHeight COBie2.4Column: K | |

element SpaceZoneAssignments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ZoneAssignmentCollectionType](#LinkE6) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [ZoneAssignment](#Link16F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceType](#LinkDD) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | ZoneAssignmentKey |  |  |  | ZoneAssignment |  | ZoneName  ZoneCategory |  |  | |
| annotation | |  | | --- | | documentation | | The assignment of zones to a COBie Space element. | |

element Spare

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SpareType](#Link116) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e4614 | | |
| children | [SpareName](#LinkED)  [SpareCategory](#LinkEE) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareCollectionType](#Link4B) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific Spare. | |

element SpareAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareType](#LinkEC) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Spare element. | |

element SpareCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SpareCategorySimpleType](#Link172) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e4653 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareType](#Link116) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. | | appinfo | | Filter|Part|PartSet|Lubricant|Other|Spare|SpareSet | | appinfo | | IfcClassification.Name | | appinfo | | Spare.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. Value: Filter|Part|PartSet|Lubricant|Other|Spare|SpareSet ISO16739Mapping: IfcClassification.Name COBie2.4Header: Spare.Category COBie2.4Column: D | |

element SpareDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareType](#LinkEC) | | |
| annotation | |  | | --- | | appinfo | | SpareDescription allows documentation of information about the purpose and design characteristics of that spare, replacement or consumable part. | | appinfo | | Sprinkler Head|GFCI Duplex Receptacles|Single Pole Light Switches|400W Metal Halide Lamp|Lamp Type A|Filter Type Chem Bio 2 | | appinfo | | IfcConstructionProductResource.Description | | appinfo | | Spare.Description | | appinfo | | J | | documentation | | Definition: SpareDescription allows documentation of information about the purpose and design characteristics of that spare, replacement or consumable part. Value: Sprinkler Head|GFCI Duplex Receptacles|Single Pole Light Switches|400W Metal Halide Lamp|Lamp Type A|Filter Type Chem Bio 2 ISO16739Mapping: IfcConstructionProductResource.Description COBie2.4Header: Spare.Description COBie2.4Column: J | |

element SpareDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareType](#LinkEC) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Spare element. | |

element SpareIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareType](#LinkEC) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Spare element. | |

element SpareName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareKeyType](#Link173)  [SpareType](#Link116) | | |
| annotation | |  | | --- | | appinfo | | SpareName is the name of the part whose information must be provided to the facility manager to support effective operations and maintenance activities. Spare.Name is part of a combination Primary Key comprised of Spare.Name, Spare.Category, and Spare.TypeName. | | appinfo | | Sprinkler Head|GFCI Duplex Receptacles|Single Pole Light Switches|400W Metal Halide Lamp|Lamp Type A | | appinfo | | IfcConstructionProductResource.Name | | appinfo | | Spare.Name | | appinfo | | A | | documentation | | Definition: SpareName is the name of the part whose information must be provided to the facility manager to support effective operations and maintenance activities. Spare.Name is part of a combination Primary Key comprised of Spare.Name, Spare.Category, and Spare.TypeName. Value: Sprinkler Head|GFCI Duplex Receptacles|Single Pole Light Switches|400W Metal Halide Lamp|Lamp Type A ISO16739Mapping: IfcConstructionProductResource.Name COBie2.4Header: Spare.Name COBie2.4Column: A | |

element SparePartNumber

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e4732 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareType](#LinkEC) | | |
| annotation | |  | | --- | | appinfo | | SparePartNumber allows documentation of the information about a specific part with a full set of parts. The information provided should be the manufacturer's Set Number as suppliers will typically have proprietary tracking numbers. | | appinfo | | 2.884-214.0|58001, 58002, 58003|ASIN: B004UHFRTI|HPLC screw cap GL 45|M73020 - 5 LED Lighting Set |OEM Number 2402v1143-025/ 2402v1143-02|S107G-09 Gear Set Spare Parts | | appinfo | | IfcPropertySet with Name "COBie\_Spare," IfcProperty with name "PartNumber" | | appinfo | | Spare.PartNumber | | appinfo | | L | | documentation | | Definition: SparePartNumber allows documentation of the information about a specific part with a full set of parts. The information provided should be the manufacturer's Set Number as suppliers will typically have proprietary tracking numbers. Value: 2.884-214.0|58001, 58002, 58003|ASIN: B004UHFRTI|HPLC screw cap GL 45|M73020 - 5 LED Lighting Set |OEM Number 2402v1143-025/ 2402v1143-02|S107G-09 Gear Set Spare Parts ISO16739Mapping: IfcPropertySet with Name "COBie\_Spare," IfcProperty with name "PartNumber" COBie2.4Header: Spare.PartNumber COBie2.4Column: L | |

element Spares

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SpareCollectionType](#Link4B) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e4601 | | |
| children | [Spare](#LinkF6) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | SpareKey |  |  |  | Spare |  | SpareName |  |  | |
| annotation | |  | | --- | | documentation | | The set of Spares, replacement parts, and consumables needed for this specific Type. | |

element SpareSetNumber

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e4706 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareType](#LinkEC) | | |
| annotation | |  | | --- | | appinfo | | SpareSetNumber allows documentation of the information about a set of parts. The information provided should be the manufacturer's Set Number as suppliers will typically have proprietary tracking numbers. | | appinfo | | 2.884-214.0|58001, 58002,58003|ASIN: B004UHFRTI|HPLC screw cap GL 45|M73020 - 5 LED Lighting Set |OEM Number 2402v1143-025/ 2402v1143-02|S107G-09 Gear Set Spare Parts | | appinfo | | IfcPropertySet with Name "COBie\_Spare," IfcProperty with name "SetNumber" | | appinfo | | Spare.SetNumber | | appinfo | | K | | documentation | | Definition: SpareSetNumber allows documentation of the information about a set of parts. The information provided should be the manufacturer's Set Number as suppliers will typically have proprietary tracking numbers. Value: 2.884-214.0|58001, 58002,58003|ASIN: B004UHFRTI|HPLC screw cap GL 45|M73020 - 5 LED Lighting Set |OEM Number 2402v1143-025/ 2402v1143-02|S107G-09 Gear Set Spare Parts ISO16739Mapping: IfcPropertySet with Name "COBie\_Spare," IfcProperty with name "SetNumber" COBie2.4Header: Spare.SetNumber COBie2.4Column: K | |

element SpareSupplierContactAssignments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ContactAssignmentCollectionType](#Link47) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | e2e2629 | | |
| children | [ContactAssignment](#LinkBD) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpareType](#LinkEC) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | SpareContactAssignmentKey |  |  |  | ContactAssignment |  | ContactEmailReference |  |  | |
| annotation | |  | | --- | | appinfo | | SpareSupplierContactAssignments is a list of Contact elements that reprsent the suppliers of the Spare part. | | appinfo | | mariangelica.carrasquillo@usace.army.mil|sales@panelfold.com|info@modernfold.com|info@hufcor.com|karpensteel@karpensteel.com|contact@securalldoors.com|sales@marvin.com | | appinfo | | IfcPropertySet with Name "COBie\_Spare," IfcProperty with name"Suppliers" | | appinfo | | Spare.Suppliers | | appinfo | | F | | documentation | | Definition: AssetTypeManufacturerContactAssignments is a list of Contact elements that reprsent the manufactrer of the AssetType. Value: mariangelica.carrasquillo@usace.army.mil|sales@panelfold.com|info@modernfold.com|info@hufcor.com|karpensteel@karpensteel.com|contact@securalldoors.com|sales@marvin.com ISO16739Mapping: IfcPropertySet with Name "COBie\_Spare," IfcProperty with name"Suppliers" COBie2.4Header: Type.Manufacturer COBie2.4Column: G | |

element StringValue

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [StringValueType](#Link176) | | |
| annotation | |  | | --- | | documentation | | A COBie value represented by a text or string type. | |

element System

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SystemType](#Link117) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e5973 | | |
| children | [SystemName](#LinkF9)  [SystemCategory](#LinkFA) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemCollectionType](#Link9F) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Definition COBie.System information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific system requirements. | |

element SystemAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SystemKeyType](#Link126) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [SystemName](#LinkF9)  [SystemCategory](#LinkFA) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemAssignmentCollectionType](#Link24) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalIDReference](#Link177) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation If SystemName and SystemCategory are not provided then externalIDReference MUST be provided. | |
| annotation | |  | | --- | | documentation | | The assignment of a System to an Asset or AssetType. | |

element SystemAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemType](#LinkF8) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an System element. | |

element SystemCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SystemCategorySimpleType](#Link178) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e6012 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemKeyType](#Link126)  [SystemType](#Link117) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. In a given category of System a Asset should be listed only once. System.Category is part of a combination Primary Key comprised of System.Name, System.Category, and System.AssetNames. | | appinfo | | Access Control Zone|Fire Alarm Zone|Lighting Zone |Design Suite |Ventilation Zone | | appinfo | | IfcClassificationRefrence.Identification | | appinfo | | System.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. In a given category of System a Asset should be listed only once. System.Category is part of a combination Primary Key comprised of System.Name, System.Category, and System.AssetNames. Value: Access Control Zone|Fire Alarm Zone|Lighting Zone |Design Suite |Ventilation Zone ISO16739Mapping: IfcClassificationRefrence.Identification COBie2.4Header: System.Category COBie2.4Column: D | |

element SystemDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemType](#LinkF8) | | |
| annotation | |  | | --- | | appinfo | | A human interpretable description of the purpose of the system. | | appinfo | | Air Distribution System 1 services the east wing of the first floor|Security system for the doors and windows. | | appinfo | | IfcSystem.Description | | appinfo | | System.Description | | appinfo | | I | | documentation | | Definition: A human interpretable description of the purpose of the system. Value: Air Distribution System 1 services the east wing of the first floor|Security system for the doors and windows. ISO16739Mapping: IfcSystem.Description COBie2.4Header: System.Description COBie2.4Column: I | |

element SystemDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemType](#LinkF8) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an System element. | |

element SystemIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemType](#LinkF8) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an System element. | |

element SystemName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemKeyType](#Link126)  [SystemType](#Link117) | | |
| annotation | |  | | --- | | appinfo | | SystemName is the name of the specific system or sub-system in the facility. Logical nesting of systems is accomplished, in COBie, by systematic naming of systems and sub systems. System.Name is part of a combination Primary Key comprised of System.Name, System.Category, and System.ComponentNames. | | appinfo | | Air Distribution- 01|Electrical Distribution|Fire Suppression System|HVAC Heating- Waterside|HVAC Heating- Distribution|Plumbing System | | appinfo | | IfcSystem.Name | | appinfo | | System.Name | | appinfo | | A | | documentation | | Definition: SystemName is the name of the specific system or sub-system in the facility. Logical nesting of systems is accomplished, in COBie, by systematic naming of systems and sub systems. System.Name is part of a combination Primary Key comprised of System.Name, System.Category, and System.ComponentNames. Value: Air Distribution- 01|Electrical Distribution|Fire Suppression System|HVAC Heating- Waterside|HVAC Heating- Distribution|Plumbing System ISO16739Mapping: IfcSystem.Name COBie2.4Header: System.Name COBie2.4Column: A | |

element Systems

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [SystemCollectionType](#Link9F) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e5960 | | |
| children | [System](#LinkFF) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | SystemKey |  |  |  | System |  | SystemName  SystemCategory |  |  | |
| annotation | |  | | --- | | documentation | | COBie.System provides a mechanism through which groups of Assets may be organized into relevant categories that deliver specific building services to the facility | |

element UnitName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ValueBaseType](#Link17A) | | |
| annotation | |  | | --- | | appinfo | | Identifies the unit for a COBie value | | appinfo | | #|%|C|F|Feet|Inches|Kilometers|Meters|Miles|Millimeters|STC Rating | | appinfo | | IfcPropertySingleValue.Unit (Prefix + Name) | | appinfo | | Attribute.Unit | | appinfo | | H | | documentation | | Definition: Identifies the unit for a COBie value Value: #|%|C|F|Feet|Inches|Kilometers|Meters|Miles|Millimeters|STC Rating ISO16739Mapping: IfcPropertySingleValue.Unit (Prefix + Name) COBie2.4Header: Attribute.Unit COBie2.4Column: H | | documentation | | Identifies the name of a unit of measure to be associated with a value. | |

element Warranties

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [WarrantyCollectionType](#Link49) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | false | | id |  | d2e3310 | | |
| children | [Warranty](#Link17B) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | WarrantyKey |  |  |  | Warranty |  | WarrantyName  WarrantyCategory |  |  | |
| annotation | |  | | --- | | documentation | | One or more warranties associated with this type of product. | |

element Warranty

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [WarrantyType](#Link17C) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e3323 | | |
| children | [WarrantyName](#Link17E)  [WarrantyCategory](#Link17F)  [WarrantyDuration](#Link180)  [WarrantyGaurantorContactAssignments](#Link181)  [WarrantyAttributes](#Link182)  [WarrantyDocuments](#Link183)  [WarrantyIssues](#Link184) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [WarrantyCollectionType](#Link49) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific warranty. | |

element WarrantyAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [WarrantyType](#Link17C) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Warranty element. | |

element WarrantyCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [WarrantyCategorySimpleType](#Link185) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e3362 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [WarrantyKeyType](#Link186)  [WarrantyType](#Link17C) | | |
| annotation | |  | | --- | | appinfo | | Warranty Category identifies specific coverage of this warranty. | | appinfo | | Parts and Labor|Labor|Parts | | appinfo | | IfcClassificationReference.Name | | appinfo | | if (1), both WarrantyDurationParts and COBie.Type.WarrantyDurationLabor. if (2), COBie.Type.WarrantyDurationLabor. if (3) WarrantyDurationParts | | appinfo | | M | | documentation | | Definition: Warranty Category identifies specific coverage of this warranty. Value: Parts and Labor|Labor|Parts ISO16739Mapping: IfcClassificationReference.Name COBie2.4Header: if (1), both WarrantyDurationParts and COBie.Type.WarrantyDurationLabor. if (2), COBie.Type.WarrantyDurationLabor. if (3) WarrantyDurationParts COBie2.4Column: M | |

element WarrantyDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [WarrantyType](#Link17C) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Warranty element. | |

element WarrantyDuration

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IntegerValueType](#Link35) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [UnitName](#Link12C)  [IntegerValue](#Link12D) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [WarrantyType](#Link17C) | | |
| annotation | |  | | --- | | appinfo | | Definition WarrantyDurationValue contains the length of time allowed under the warranty for claims pertaining to labor charges. | | appinfo | | 0|1|2|10 | | appinfo | | IfcTypeObject Property with Name containing "WarrantyDurationValue" | | appinfo | | Type.WarrantyDurationParts or COBie.Type.WarrantyDurationLabor | | appinfo | | K,L | | documentation | | Definition: Definition WarrantyDurationValue contains the length of time allowed under the warranty for claims pertaining to labor charges. Value: 0|1|2|10 ISO16739Mapping: IfcTypeObject Property with Name containing "WarrantyDurationValue" COBie2.4Header: Type.WarrantyDurationParts or COBie.Type.WarrantyDurationLabor COBie2.4Column: K,L | |

element WarrantyGaurantorContactAssignments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ContactAssignmentCollectionType](#Link47) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e2329 | | |
| children | [ContactAssignment](#LinkBD) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [WarrantyType](#Link17C) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | WarrantyContactAssignmentKey |  |  |  | ContactAssignment |  | ContactEmailReference |  |  | |
| annotation | |  | | --- | | documentation | | Assignment of Contacts to a Warranty element. | |

element WarrantyIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [WarrantyType](#Link17C) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Warranty element. | |

element WarrantyName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [WarrantyKeyType](#Link186)  [WarrantyType](#Link17C) | | |
| annotation | |  | | --- | | appinfo | | WarrantyName contains a description of the warranty terms and conditions. Specific warranty certificates will be linked to this Type.Name through the COBie.Document worksheet. | | appinfo | | All Certified Refurbished have a 120-day, etc.|provide Return to Base Warranty, etc.|Set forth in this manual are warranty standards, etc. |sold with a standard 12 months, etc.|under normal use conditions, malfunctions due, etc. | | appinfo | | IfcTypeObject Property with Name containing "WarrantyDescription" and/or "WarrantyIdentifier" | | appinfo | | Type.WarrantyDescription | | appinfo | | T | | documentation | | Definition: WarrantyName contains a description of the warranty terms and conditions. Specific warranty certificates will be linked to this Type.Name through the COBie.Document worksheet. Value: All Certified Refurbished have a 120-day, etc.|provide Return to Base Warranty, etc.|Set forth in this manual are warranty standards, etc. |sold with a standard 12 months, etc.|under normal use conditions, malfunctions due, etc. ISO16739Mapping: IfcTypeObject Property with Name containing "WarrantyDescription" and/or "WarrantyIdentifier" COBie2.4Header: Type.WarrantyDescription COBie2.4Column: T | |

element Zone

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ZoneType](#Link118) |
| properties | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | abstract |  | true | | id |  | d2e781 | | |
| children | [ZoneName](#Link102)  [ZoneCategory](#Link103) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ZoneCollectionType](#Link9B) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | COBie.Zone information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific zoning requirements. | |

element ZoneAssignment

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ZoneKeyType](#Link170) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [ZoneName](#Link102)  [ZoneCategory](#Link103) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ZoneAssignmentCollectionType](#LinkE6) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalIDReference](#Link177) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation If ZoneName and ZoneCategory are not provided then externalIDReference MUST be provided. | |
| annotation | |  | | --- | | documentation | | The assignment of a COBie element to a Zone. | |

element ZoneAttributes

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [AttributeCollectionType](#LinkB) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ZoneType](#Link101) | | |
| annotation | |  | | --- | | documentation | | A set of Attribute elements associated with an Zone element. | |

element ZoneCategory

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ZoneCategorySimpleType](#Link188) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | id |  | d2e820 | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ZoneKeyType](#Link170)  [ZoneType](#Link118) | | |
| annotation | |  | | --- | | appinfo | | Category provides the classification of the information provided in this row of data. In a given category of Zone a space should be listed only once. | | appinfo | | Circulation Zone|Lighting Zone|Fire Alarm Zone|Historical Preservation Zone|Occupancy Zone|Ventilation Zone | | appinfo | | IfcClassification.Name | | appinfo | | Zone.Category | | appinfo | | D | | documentation | | Definition: Category provides the classification of the information provided in this row of data. In a given category of Zone a space should be listed only once. Value: Circulation Zone|Lighting Zone|Fire Alarm Zone|Historical Preservation Zone|Occupancy Zone|Ventilation Zone ISO16739Mapping: IfcClassification.Name COBie2.4Header: Zone.Category COBie2.4Column: D | |

element ZoneDescription

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieDescriptionSimpleType](#Link120) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ZoneType](#Link101) | | |
| annotation | |  | | --- | | appinfo | | Human interpretable description of the purpose of the Zone. | | appinfo | | The executive administration offices|Outpatient examination rooms and labs for adult medical practice|HVAC for the first floor, west wing|Fire protection devices for west wing|Areas accessible to the public|Areas with privacy features such as bathrooms|Restricted access areas | | appinfo | | IfcZone.Description | | appinfo | | Zone.Description | | appinfo | | I | | documentation | | Definition: Human interpretable description of the purpose of the Zone. Value: The executive administration offices|Outpatient examination rooms and labs for adult medical practice|HVAC for the first floor, west wing|Fire protection devices for west wing|Areas accessible to the public|Areas with privacy features such as bathrooms|Restricted access areas ISO16739Mapping: IfcZone.Description COBie2.4Header: Zone.Description COBie2.4Column: I | |

element ZoneDocuments

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [DocumentCollectionType](#LinkD) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ZoneType](#Link101) | | |
| annotation | |  | | --- | | documentation | | A set of Document elements associated with an Zone element. | |

element ZoneIssues

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [IssueCollectionType](#LinkF) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ZoneType](#Link101) | | |
| annotation | |  | | --- | | documentation | | A set of Issue elements associated with an Zone element. | |

element ZoneName

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieNameSimpleType](#Link121) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | simple | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ZoneKeyType](#Link170)  [ZoneType](#Link118) | | |
| annotation | |  | | --- | | appinfo | | ZoneName is the name of the specific zone or sub-zone of the facility. Logical nesting of zones is accomplished, in COBie, by systematic naming of zones and sub zones. Zone.Name is part of a combination Primary Key comprised of Zone.Name, Zone.Category and Zone.SpaceNames. | | appinfo | | Administration|AdultMedicine|HVAC-FirstFloor-WestWing|FireZone01West|Public|Private|Restricted | | appinfo | | IfcZone.Name | | appinfo | | Zone.Name | | appinfo | | A | | documentation | | Definition: ZoneName is the name of the specific zone or sub-zone of the facility. Logical nesting of zones is accomplished, in COBie, by systematic naming of zones and sub zones. Zone.Name is part of a combination Primary Key comprised of Zone.Name, Zone.Category and Zone.SpaceNames. Value: Administration|AdultMedicine|HVAC-FirstFloor-WestWing|FireZone01West|Public|Private|Restricted ISO16739Mapping: IfcZone.Name COBie2.4Header: Zone.Name COBie2.4Column: A | |

element Zones

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ZoneCollectionType](#Link9B) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | content |  | complex | | id |  | d2e768 | | |
| children | [Zone](#Link108) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [FacilityType](#Link8A) | | |
| identity contstraints | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Name |  | Refer |  | Selector |  | Field(s) |  | Annotation | | key |  | ZoneKey |  |  |  | Zone |  | ZoneName  ZoneCategory |  |  | |
| annotation | |  | | --- | | documentation | | COBie.Zone provides a mechanism through which groups of spaces may be organized into relevant categories that support various design or operational functions of the facility. | |

complexType AllowedValueCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | |
| children | [AttributeAllowedValue](#Link11B) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AllowedValues](#Link119) | | |
| annotation | |  | | --- | | documentation | | A collection of AllowedValue elements. | |

complexType AssemblyAssignmentCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowAssignmentsType](#Link18B) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowAssignmentsType | | |
| children | [AssemblyAssignment](#Link10) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyAssignments](#Link25) | | |
| annotation | |  | | --- | | documentation | | A collection of AssemblyAssignment elements. | |

complexType AssemblyKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [AssemblyName](#Link6)  [AssemblyCategory](#Link8) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Assembly elements. | |

complexType AssemblyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [AssemblyName](#Link6)  [AssemblyParentName](#Link7) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyAssignment](#Link10) | | complexType |  | [AssemblyType](#Link2) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | The Assembly to which this Asset belongs | |

complexType AssetCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Asset](#Link2A) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Assets](#Link44) | | |
| annotation | |  | | --- | | documentation | | A collection of Asset elements. | |

complexType AssetInfoType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [AssetName](#Link16)  [AssetSpaceAssignments](#Link17) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Asset](#Link2A) | | complexType |  | [AssetInfoType](#Link15) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Asset record is required for all COBie deliverables related to equpment Asset information. | |

complexType AssetKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [AssetName](#Link16)  [AssetTypeAssignment](#Link129)  [AssetSpaceAssignments](#Link17) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Asset elements. | |

complexType AssetTypeCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [AssetType](#Link51) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetTypes](#Link9C) | | |
| annotation | |  | | --- | | documentation | | A collection of AssetType elements. | |

complexType AssetTypeInfoType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [AssetTypeName](#Link2D) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetType](#Link51) | | complexType |  | [AssetTypeInfoType](#Link2C) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Type record is required for all COBie deliverables related to equipment Type information. | |

complexType AssetTypeKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [AssetTypeName](#Link2D) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetTypeAssignment](#Link129) | | complexType |  | [JobKeyType](#Link163)  [SpareKeyType](#Link173)  [WarrantyKeyType](#Link186) | | |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for AssetType elements. | |

complexType AttributeCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Attribute](#Link5C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyAttributes](#LinkA)  [AssetAttributes](#Link27)  [AssetTypeAttributes](#Link4E)  [Attributes](#Link145)  [ConnectionAttributes](#Link67)  [ContactAttributes](#Link7B)  [DocumentAttributes](#Link86)  [FacilityAttributes](#LinkA4)  [FloorAttributes](#LinkB1)  [IssueAttributes](#Link15C)  [JobAttributes](#LinkCF)  [ResourceAttributes](#LinkD8)  [SpaceAttributes](#LinkE7)  [SpareAttributes](#LinkF3)  [SystemAttributes](#LinkFC)  [WarrantyAttributes](#Link182)  [ZoneAttributes](#Link105) | | |
| annotation | |  | | --- | | documentation | | A colleciton of Attribute elements. | |

complexType AttributeDecimalValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [DecimalValueType](#Link33) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | DecimalValueType | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F)  [MinValueDecimal](#Link13A)  [MaxValueDecimal](#Link13B) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AttributeDecimalValue](#Link138) | | |
| annotation | |  | | --- | | documentation | | COBie decimal type extending DecimalValueType to include an optional min and max value | |

complexType AttributeIntegerValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [IntegerValueType](#Link35) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | IntegerValueType | | |
| children | [UnitName](#Link12C)  [IntegerValue](#Link12D)  [MinValueInteger](#Link13F)  [MaxValueInteger](#Link140) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AttributeIntegerValue](#Link13D) | | |
| annotation | |  | | --- | | documentation | | COBie bounded integer type for Attribute. | |

complexType AttributeKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [AttributeName](#Link56)  [AttributeCategory](#Link57) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for AssetType elements. | |

complexType AttributeMonetaryValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| children | [MonetaryValue](#Link143)  [MonetaryUnit](#Link144) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AttributeMonetaryValue](#Link141) | | |
| annotation | |  | | --- | | documentation | | COBie monetary value type for Attributes. | |

complexType AttributeStringValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [StringValueType](#Link176) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | StringValueType | | |
| children | [UnitName](#Link12C)  [StringValue](#Link148)  [AllowedValues](#Link119) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AttributeStringValue](#Link147) | | |
| annotation | |  | | --- | | documentation | | COBie string type with AllowedValues for Attribute. | |

complexType AttributeType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [AttributeName](#Link56)  [AttributeCategory](#Link57) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Attribute](#Link5C) | | complexType |  | [AttributeType](#Link53) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | | [propertySetName](#Link54) |  | PropertySetNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of a logically grouped set of properties Value: IfcPropertySet ISO16739Mapping: Pset\_SpaceCommon|Pset\_ElectricalDeviceCommon|Pset\_BaseQuantities COBie2.4Header: Attribute.ExtObject (When originating from an IFC file) COBie2.4Column: J | | [propertySetExternalIdentifier](#Link55) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The unique identifier of the data structure Object that contains the specified property. Most commonly PropertySetName corresponds to the GlobalId attribute of an IfcPropertySet Object. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcPropertySet.GloballyUniqueId COBie2.4Header: Attribute.ExtIdentifier (If originating from an IFC file) COBie2.4Column: K | |
| annotation | |  | | --- | | documentation | | Information about a specific Attribute. | |

complexType AttributeValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | |
| children | [AttributeBooleanValue](#Link131)  [AttributeDateValue](#Link137)  [AttributeDateTimeValue](#Link136)  [AttributeDecimalValue](#Link138)  [AttributeIntegerValue](#Link13D)  [AttributeMonetaryValue](#Link141)  [AttributeStringValue](#Link147)  [AttributeTimeValue](#Link149) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AttributeValue](#Link59) | | |
| annotation | |  | | --- | | documentation | | A choice of boolean, date, datetime, decimal,integer,string, or time values. | |

complexType BooleanValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [ValueBaseType](#Link17A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ValueBaseType | | |
| children | [UnitName](#Link12C)  [BooleanValue](#Link133) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AttributeBooleanValue](#Link131) | | |
| annotation | |  | | --- | | documentation | | A boolean Attribute Value. | |

complexType CobieBaseType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | abstract |  | true | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [CobieRowType](#Link18D)  [ProjectType](#Link8E)  [SiteType](#Link90)  [SpaceType](#Link115)  [WarrantyType](#Link17C) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Base type that all major COBie elements extend. | |

complexType CobieComplexObjectType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | abstract |  | true | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AllowedValueCollectionType](#Link11A)  [AttributeValueType](#Link5A)  [CobieBaseType](#Link18F)  [CobieKeyType](#Link18C)  [CobieRowAssignmentsType](#Link18B)  [CobieWorksheetType](#Link18E)  [SpaceAssignmentCollectionType](#Link18)  [ValueBaseType](#Link17A)  [WarrantyCollectionType](#Link49) | | |
| annotation | |  | | --- | | documentation | | The complex type that all declared Complex types derive | |

complexType CobieKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | abstract |  | true | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyKeyType](#Link11F)  [AssetKeyType](#Link122)  [AssetTypeKeyType](#Link12A)  [AttributeKeyType](#Link135)  [ContactKeyType](#LinkBE)  [DocumentKeyType](#Link150)  [FacilityKeyType](#Link158)  [FloorKeyType](#Link15A)  [IssueKeyType](#Link15E)  [SystemKeyType](#Link126)  [ZoneKeyType](#Link170) | | |
| annotation | |  | | --- | | documentation | | Abstract type used for all COBie keys | |

complexType CobieRowAssignmentsType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | abstract |  | true | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyAssignmentCollectionType](#Link26)  [ContactAssignmentCollectionType](#Link47)  [SystemAssignmentCollectionType](#Link24)  [ZoneAssignmentCollectionType](#LinkE6) | | |
| annotation | |  | | --- | | documentation | | Abstract type used for all complexTypes that represent a collection of assignments from one COBie element to other COBie elements. | |

complexType CobieRowType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieBaseType](#Link18F) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieBaseType | | abstract |  | true | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssemblyType](#Link109)  [AssetInfoType](#Link10A)  [AssetTypeInfoType](#Link10B)  [AttributeType](#Link10C)  [ConnectionType](#Link10D)  [ContactType](#Link10E)  [DocumentType](#Link10F)  [FacilityType](#Link110)  [FloorType](#Link111)  [IssueType](#Link112)  [JobType](#Link113)  [ResourceType](#Link114)  [SpareType](#Link116)  [SystemType](#Link117)  [ZoneType](#Link118) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Abstract type used for all elements that correspond to a COBie row | |

complexType CobieWorksheetType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | abstract |  | true | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AssetCollectionType](#Link45)  [AssetTypeCollectionType](#Link9D)  [AttributeCollectionType](#LinkB)  [ConnectionCollectionType](#LinkA1)  [ContactCollectionType](#LinkA3)  [DocumentCollectionType](#LinkD)  [FloorCollectionType](#Link99)  [IssueCollectionType](#LinkF)  [JobCollectionType](#Link4D)  [ResourceCollectionType](#LinkCE)  [SpaceCollectionType](#LinkB0)  [SpareCollectionType](#Link4B)  [SystemCollectionType](#Link9F)  [ZoneCollectionType](#Link9B) | | |
| annotation | |  | | --- | | documentation | | Abstract type used for all collection object types that correspond to COBie worksheets. | |

complexType ConnectionCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Connection](#Link6A) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Connections](#LinkA0) | | |
| annotation | |  | | --- | | documentation | | A collection of Connection elements. | |

complexType ConnectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [ConnectionName](#Link60)  [ConnectionCategory](#Link61) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Connection](#Link6A) | | complexType |  | [ConnectionType](#Link5F) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A type for representing Connection Information. | |

complexType ContactAssignmentCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowAssignmentsType](#Link18B) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowAssignmentsType | | |
| children | [ContactAssignment](#LinkBD) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetTypeManufacturerContactAssignments](#Link46)  [SpareSupplierContactAssignments](#LinkF2)  [WarrantyGaurantorContactAssignments](#Link181) | | |
| annotation | |  | | --- | | documentation | | A collection of ContactAssignment elements. | |

complexType ContactCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Contact](#Link7E) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Contacts](#LinkA2) | | |
| annotation | |  | | --- | | documentation | | A collection of Contact elements. | |

complexType ContactKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [ContactEmailReference](#Link14C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [ContactAssignment](#LinkBD) | | |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Contact elements. | |

complexType ContactType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [ContactEmail](#Link6D) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Contact](#Link7E) | | complexType |  | [ContactType](#Link6C) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific company who can provide the type of equipment. | |

complexType DecimalValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [ValueBaseType](#Link17A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ValueBaseType | | |
| children | [UnitName](#Link12C)  [DecimalValue](#Link12F) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetTypeNominalHeight](#Link38)  [AssetTypeNominalLength](#Link36)  [AssetTypeNominalWidth](#Link37)  [AssetTypeReplacementCostValue](#Link32)  [FloorElevationValue](#LinkAD)  [FloorHeightValue](#LinkAE)  [JobFrequencyValue](#LinkCB)  [SpaceGrossAreaValue](#LinkE3)  [SpaceNetAreaValue](#LinkE4)  [SpaceUsableHeightValue](#LinkE2) | | complexType |  | [AttributeDecimalValueType](#Link139) | | |
| annotation | |  | | --- | | documentation | | COBie decimal type extending ValueBaseType. | |

complexType DocumentCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Document](#Link88) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyDocuments](#LinkC)  [AssetDocuments](#Link28)  [AssetTypeDocuments](#Link4F)  [AttributeDocuments](#Link13C)  [ConnectionDocuments](#Link68)  [ContactDocuments](#Link7C)  [Documents](#Link151)  [FacilityDocuments](#LinkA5)  [FloorDocuments](#LinkB2)  [IssueDocuments](#Link15F)  [JobDocuments](#LinkD0)  [ResourceDocuments](#LinkD9)  [SpaceDocuments](#LinkE8)  [SpareDocuments](#LinkF4)  [SystemDocuments](#LinkFD)  [WarrantyDocuments](#Link183)  [ZoneDocuments](#Link106) | | |
| annotation | |  | | --- | | documentation | | A collection of Document elements. | |

complexType DocumentKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [DocumentName](#Link81) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Document elements. | |

complexType DocumentType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [DocumentName](#Link81) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Document](#Link88) | | complexType |  | [DocumentType](#Link80) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific Document. | |

complexType FacilityKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [FacilityName](#Link8B) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Facility elements. | |

complexType FacilityType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [FacilityName](#Link8B) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Facility](#LinkA7) | | complexType |  | [FacilityType](#Link8A) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A type for the Facility element that is the root of a COBie document | |

complexType FloorCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Floor](#LinkB4) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Floors](#Link98) | | |
| annotation | |  | | --- | | documentation | | A collection of Floor elements. | |

complexType FloorKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [FloorName](#LinkAA) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SpaceKeyType](#Link124) | | |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Facility elements. | |

complexType FloorType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [FloorName](#LinkAA) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Floor](#LinkB4) | | complexType |  | [FloorType](#LinkA9) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Floor record is required for all COBie deliverables containing spatial information. | |

complexType IntegerValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [ValueBaseType](#Link17A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ValueBaseType | | |
| children | [UnitName](#Link12C)  [IntegerValue](#Link12D) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetTypeExpectedLifeValue](#Link34)  [JobDuration](#LinkC8)  [WarrantyDuration](#Link180) | | complexType |  | [AttributeIntegerValueType](#Link13E) | | |
| annotation | |  | | --- | | documentation | | COBie integer type extending ValueBaseType | |

complexType IssueCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Issue](#LinkC0) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyIssues](#LinkE)  [AssetIssues](#Link29)  [AssetTypeIssues](#Link50)  [AttributeIssues](#Link5B)  [ConnectionIssues](#Link69)  [ContactIssues](#Link7D)  [DocumentIssues](#Link87)  [FacilityIssues](#LinkA6)  [FloorIssues](#LinkB3)  [Issues](#Link160)  [JobIssues](#LinkD1)  [ResourceIssues](#LinkDA)  [SpaceIssues](#LinkE9)  [SpareIssues](#LinkF5)  [SystemIssues](#LinkFE)  [WarrantyIssues](#Link184)  [ZoneIssues](#Link107) | | |
| annotation | |  | | --- | | documentation | | A collection of Issue elements. | |

complexType IssueKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [IssueName](#LinkB7)  [IssueCategory](#LinkB8) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Issue elements. | |

complexType IssueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [IssueName](#LinkB7)  [IssueCategory](#LinkB8) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Issue](#LinkC0) | | complexType |  | [IssueType](#LinkB6) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A specific Issue within this set of Issues. | |

complexType JobCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Job](#LinkD2) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Jobs](#Link4C) | | |
| annotation | |  | | --- | | documentation | | A collection of Job elements. | |

complexType JobKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [AssetTypeKeyType](#Link12A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | AssetTypeKeyType | | |
| children | [AssetTypeName](#Link2D)  [JobName](#LinkC3)  [JobTaskID](#LinkC4) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [ResourceKeyType](#Link169) | | |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Job elements. | |

complexType JobType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [JobName](#LinkC3)  [JobTaskID](#LinkC4) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Job](#LinkD2) | | complexType |  | [JobType](#LinkC2) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Job record is required for all relevant COBie.Type objects submitted at the benefical occupancy or facility handover stage. | |

complexType ProjectType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieBaseType](#Link18F) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieBaseType | | |
| children | [ProjectName](#Link166)  [ProjectDescription](#Link167) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [ProjectAssignment](#Link8D) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | The elements describing a project that is assigned to a facility. | |

complexType ResourceCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Resource](#LinkDB) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Resources](#LinkCD) | | |
| annotation | |  | | --- | | documentation | | A collection of Resource elements. | |

complexType ResourceKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [JobKeyType](#Link163) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | JobKeyType | | |
| children | [AssetTypeName](#Link2D)  [JobName](#LinkC3)  [JobTaskID](#LinkC4)  [ResourceName](#LinkD5) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Resource elements. | |

complexType ResourceType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [ResourceName](#LinkD5) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Resource](#LinkDB) | | complexType |  | [ResourceType](#LinkD4) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific resource. | |

complexType SiteType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieBaseType](#Link18F) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieBaseType | | |
| children | [SiteName](#Link16B)  [SiteDescription](#Link16C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [SiteAssignment](#Link8F) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | The elements describing a project that is assigned to a facility. | |

complexType SpaceAssignmentCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | |
| children | [SpaceAssignment](#Link123) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetSpaceAssignments](#Link17) | | |
| annotation | |  | | --- | | documentation | | A collection of SpaceAssignment elements | |

complexType SpaceCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Space](#LinkEA) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Spaces](#LinkAF) | | |
| annotation | |  | | --- | | documentation | | A collection of Space elements. | |

complexType SpaceKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [FloorKeyType](#Link15A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | FloorKeyType | | |
| children | [FloorName](#LinkAA)  [SpaceName](#LinkDE) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [SpaceAssignment](#Link123) | | |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Space elements. | |

complexType SpaceType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieBaseType](#Link18F) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieBaseType | | |
| children | [SpaceName](#LinkDE) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Space](#LinkEA) | | complexType |  | [SpaceType](#LinkDD) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | A minimum of one COBie.Space record is required for all COBie deliverables related to Space information. | |

complexType SpareCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Spare](#LinkF6) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Spares](#Link4A) | | |
| annotation | |  | | --- | | documentation | | A collection of Spare elements. | |

complexType SpareKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [AssetTypeKeyType](#Link12A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | AssetTypeKeyType | | |
| children | [AssetTypeName](#Link2D)  [SpareName](#LinkED) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Spare elements. | |

complexType SpareType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [SpareName](#LinkED)  [SpareCategory](#LinkEE) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Spare](#LinkF6) | | complexType |  | [SpareType](#LinkEC) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific Spare. | |

complexType StringValueType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [ValueBaseType](#Link17A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ValueBaseType | | |
| children | [UnitName](#Link12C)  [StringValue](#Link148) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeStringValueType](#Link11C) | | |
| annotation | |  | | --- | | documentation | | COBie string type extending ValueBaseType | |

complexType SystemAssignmentCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowAssignmentsType](#Link18B) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowAssignmentsType | | |
| children | [SystemAssignment](#Link125) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetSystemAssignments](#Link23) | | |
| annotation | |  | | --- | | documentation | | A collection of SystemAssignment elements. | |

complexType SystemCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [System](#LinkFF) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Systems](#Link9E) | | |
| annotation | |  | | --- | | documentation | | A collection of System elements. | |

complexType SystemKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [SystemName](#LinkF9)  [SystemCategory](#LinkFA) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [SystemAssignment](#Link125) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalIDReference](#Link177) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation If SystemName and SystemCategory are not provided then externalIDReference MUST be provided. | |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for System elements. | |

complexType SystemType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [SystemName](#LinkF9)  [SystemCategory](#LinkFA) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [System](#LinkFF) | | complexType |  | [SystemType](#LinkF8) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | COBie.System information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific system requirements. | |

complexType ValueBaseType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | abstract |  | true | | |
| children | [UnitName](#Link12C) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [BooleanValueType](#Link132)  [DecimalValueType](#Link33)  [IntegerValueType](#Link35)  [StringValueType](#Link176) | | |
| annotation | |  | | --- | | documentation | | ValueBaseType is the abstract superclass of typed values such as DecimalValueType, IntegerValueType. It provides an optional element for UnitName representing the units of measure. | |

complexType WarrantyCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieComplexObjectType](#Link18A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieComplexObjectType | | |
| children | [Warranty](#Link17B) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Warranties](#Link48) | | |
| annotation | |  | | --- | | documentation | | A collection of Warranty elements. | |

complexType WarrantyKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [AssetTypeKeyType](#Link12A) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | AssetTypeKeyType | | |
| children | [AssetTypeName](#Link2D)  [WarrantyName](#Link17E)  [WarrantyCategory](#Link17F) |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for an AssetType Warranty element | |

complexType WarrantyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieBaseType](#Link18F) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieBaseType | | |
| children | [WarrantyName](#Link17E)  [WarrantyCategory](#Link17F)  [WarrantyDuration](#Link180)  [WarrantyGaurantorContactAssignments](#Link181)  [WarrantyAttributes](#Link182)  [WarrantyDocuments](#Link183)  [WarrantyIssues](#Link184) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Warranty](#Link17B) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | Information about a specific warranty. | |

complexType ZoneAssignmentCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowAssignmentsType](#Link18B) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowAssignmentsType | | |
| children | [ZoneAssignment](#Link16F) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [SpaceZoneAssignments](#LinkE5) | | |
| annotation | |  | | --- | | documentation | | A collection of ZoneAssignment elements. | |

complexType ZoneCollectionType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieWorksheetType](#Link18E) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieWorksheetType | | |
| children | [Zone](#Link108) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Zones](#Link9A) | | |
| annotation | |  | | --- | | documentation | | A collection of Zone elements. | |

complexType ZoneKeyType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieKeyType](#Link18C) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieKeyType | | |
| children | [ZoneName](#Link102)  [ZoneCategory](#Link103) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [ZoneAssignment](#Link16F) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalIDReference](#Link177) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation If ZoneName and ZoneCategory are not provided then externalIDReference MUST be provided. | |
| annotation | |  | | --- | | documentation | | The elements required to form a primary key for Zone elements. | |

complexType ZoneType

|  |  |
| --- | --- |
| diagram |  |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | extension of [CobieRowType](#Link18D) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieRowType | | |
| children | [ZoneName](#Link102)  [ZoneCategory](#Link103) |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [Zone](#Link108) | | complexType |  | [ZoneType](#Link101) | | |
| attributes | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Name |  | Type |  | Use |  | Default |  | Fixed |  | Annotation | | [externalEntityName](#Link3) |  | ExternalEntityNameSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | | [externalID](#Link4) |  | ExternalIdentifierSimpleType |  | optional |  |  |  |  |  | documentation  Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | | [externalSystemName](#Link5) |  | CobieTextSimpleType |  | optional |  |  |  |  |  | documentation  Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |
| annotation | |  | | --- | | documentation | | COBie.Zone information is considered to be required only as-specified. Please refer to the COBie Guide for more information on specific zoning requirements. | |

simpleType AreaUnitSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | restriction of xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [FacilityDefaultAreaUnit](#Link92) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | square centimeters |  |  | | enumeration |  | square feet |  |  | | enumeration |  | square inches |  |  | | enumeration |  | square kilometers |  |  | | enumeration |  | square meters |  |  | | enumeration |  | square miles |  |  | | enumeration |  | square millimeters |  |  | | enumeration |  | square yards |  |  | | enumeration |  |  |  |  | |
| annotation | |  | | --- | | documentation | | Acceptable area units for Facility default units. | |

simpleType AssemblyCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyCategory](#Link8) | | |
| annotation | |  | | --- | | documentation | | A simple base type for AssetCategory | |

simpleType AssemblyExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable assembly external entity names. | |

simpleType AssetCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetTypeCategory](#Link2E) | | |
| annotation | |  | | --- | | documentation | | A simple base type for AssetTypeCategory | |

simpleType AssetExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Asset external entity names. | |

simpleType AssetPortabilitySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | restriction of xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetTypeAccountingCategory](#Link30) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | Fixed |  |  | | enumeration |  | Moveable |  |  | | enumeration |  |  |  |  | |
| annotation | |  | | --- | | documentation | | AssetPortability type represents an enumeration representing the portability of an asset: fixed or moveable. | |

simpleType AssetTypeExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable AssetType external entity names. | |

simpleType AttributeCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AttributeCategory](#Link57) | | |
| annotation | |  | | --- | | documentation | | A simple base type for AttributeCategory | |

simpleType AttributeExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Attribute external entity names. | |

simpleType CobieCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [ContactCategory](#Link6E) | | |
| annotation | |  | | --- | | documentation | | A simple base type for all Cobie Category fields | |

simpleType CobieDescriptionSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieTextSimpleType | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyDescription](#Link9)  [AssetDescription](#Link19)  [AssetLocationDescription](#Link22)  [AssetTypeConstituentsDescription](#Link3C)  [AssetTypeDescription](#Link2F)  [AssetTypeFeaturesDescription](#Link3D)  [AssetTypeFinishDescription](#Link3E)  [AssetTypeGradeDescription](#Link3F)  [AssetTypeMaterialDescription](#Link40)  [AssetTypeShapeDescription](#Link41)  [AssetTypeSizeDescription](#Link42)  [AssetTypeSustainabilityPerformanceDescription](#Link43)  [AttributeDescription](#Link58)  [ConnectionDescription](#Link66)  [DocumentDescription](#Link83)  [FacilityDescription](#Link96)  [FloorDescription](#LinkAC)  [JobDescription](#LinkC7)  [ProjectDescription](#Link167)  [ResourceDescription](#LinkD7)  [SiteDescription](#Link16C)  [SpaceDescription](#LinkE0)  [SpareDescription](#LinkEF)  [SystemDescription](#LinkFB)  [ZoneDescription](#Link104) | | |
| annotation | |  | | --- | | documentation | | Simple type for all COBie Description fields | |

simpleType CobieNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | CobieTextSimpleType | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssemblyName](#Link6)  [AssemblyParentName](#Link7)  [AssetName](#Link16)  [AssetTypeName](#Link2D)  [AttributeName](#Link56)  [ConnectionAsset1Name](#Link62)  [ConnectionAsset2Name](#Link64)  [ConnectionName](#Link60)  [ContactEmail](#Link6D)  [ContactEmailReference](#Link14C)  [DocumentName](#Link81)  [FacilityName](#Link8B)  [FloorName](#LinkAA)  [IssueName](#LinkB7)  [JobName](#LinkC3)  [ProjectName](#Link166)  [ResourceName](#LinkD5)  [SiteName](#Link16B)  [SpaceName](#LinkDE)  [SpareName](#LinkED)  [SystemName](#LinkF9)  [WarrantyName](#Link17E)  [ZoneName](#Link102) | | |
| annotation | |  | | --- | | documentation | | A base type for all COBie Name fields | |

simpleType CobieTextSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [AssetBarCode](#Link20)  [AssetIdentifier](#Link21)  [AssetInstalledModelNumber](#Link1C)  [AssetSerialNumber](#Link1A)  [AssetStartDate](#Link1E)  [AssetTagNumber](#Link1F)  [AssetTypeAccessibilityText](#Link39)  [AssetTypeCodePerformance](#Link3A)  [AssetTypeColorCode](#Link3B)  [AssetTypeModelNumber](#Link31)  [AttributeAllowedValue](#Link11B)  [ConnectionAsset1PortName](#Link63)  [ConnectionAsset2PortName](#Link65)  [ContactCompanyName](#Link6F)  [ContactCountryName](#Link78)  [ContactDepartmentName](#Link71)  [ContactFamilyName](#Link73)  [ContactGivenName](#Link72)  [ContactPhoneNumber](#Link70)  [ContactPostalBoxNumber](#Link75)  [ContactPostalCode](#Link79)  [ContactRegionCode](#Link77)  [ContactStreet](#Link74)  [ContactTownName](#Link76)  [ContactURL](#Link7A)  [DocumentReferenceURI](#Link85)  [DocumentURI](#Link84)  [FacilityDefaultMeasurementStandard](#Link95)  [FacilityDeliverablePhaseName](#Link97)  [IssueDescription](#LinkBC)  [IssueImpactText](#LinkBB)  [IssueMitigationDescription](#LinkBF)  [IssueRiskText](#LinkB9)  [IssueSeverityText](#LinkBA)  [JobPriorTaskID](#LinkCC)  [JobStartConditionDescription](#LinkCA)  [JobStatus](#LinkC6)  [JobTaskID](#LinkC4)  [SpaceSignageName](#LinkE1)  [SparePartNumber](#LinkF1)  [SpareSetNumber](#LinkF0)  [StringValue](#Link148)  [UnitName](#Link12C) | | simpleType |  | [CobieDescriptionSimpleType](#Link120)  [CobieNameSimpleType](#Link121) | | attribute |  | [externalSystemName](#Link5) | | |
| annotation | |  | | --- | | documentation | | Simple type for all text fields. | |

simpleType ConnectionCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [ConnectionCategory](#Link61) | | |
| annotation | |  | | --- | | documentation | | A simple base type for ConnectionCategory | |

simpleType ConnectionExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Connection external entity names. | |

simpleType CurrencyUnitSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | restriction of xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [FacilityDefaultCurrencyUnit](#Link94)  [MonetaryUnit](#Link144) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | British Pounds |  |  | | enumeration |  | Dollars |  |  | | enumeration |  | Euros |  |  | | enumeration |  |  |  |  | |
| annotation | |  | | --- | | documentation | | Acceptable currency units for Facility default units. | |

simpleType DocumentCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [DocumentCategory](#Link82) | | |
| annotation | |  | | --- | | documentation | | A simple base type for DocumentCategory | |

simpleType ExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | simpleType |  | [AssemblyExternalEntityNameSimpleType](#Link190)  [AssetExternalEntityNameSimpleType](#Link191)  [AssetTypeExternalEntityNameSimpleType](#Link192)  [AttributeExternalEntityNameSimpleType](#Link193)  [ConnectionExternalEntityNameSimpleType](#Link194)  [FacilityExternalEntityNameSimpleType](#Link195)  [FloorExternalEntityNameSimpleType](#Link196)  [IssueExternalEntityNameSimpleType](#Link197)  [JobExternalEntityNameSimpleType](#Link198)  [ResourceExternalEntityNameSimpleType](#Link199)  [SpaceExternalEntityNameSimpleType](#Link19A)  [SpareExternalEntityNameSimpleType](#Link19B)  [SystemExternalEntityNameSimpleType](#Link19C)  [ZoneExternallEntityNameSimpleType](#Link19D) | | attribute |  | [externalEntityName](#Link3) | | |
| annotation | |  | | --- | | documentation | | Base type for external entity names. | |

simpleType ExternalIdentifierSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | attribute |  | [externalID](#Link4)  [externalIDReference](#Link177)  [propertySetExternalIdentifier](#Link55) | | |
| annotation | |  | | --- | | documentation | | Base type for external entity identifiers. | |

simpleType FacilityCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [FacilityCategory](#Link8C) | | |
| annotation | |  | | --- | | documentation | | A simple base type for FacilityCategory | |

simpleType FacilityExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Facility external entity names. | |

simpleType FloorCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [FloorCategory](#LinkAB) | | |
| annotation | |  | | --- | | documentation | | A simple base type for AssetCategory | |

simpleType FloorExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Floor external entity names. | |

simpleType IssueCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [IssueCategory](#LinkB8) | | |
| annotation | |  | | --- | | documentation | | A simple base type for IssueCategory | |

simpleType IssueExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Issue external entity names. | |

simpleType JobCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [JobCategory](#LinkC5) | | |
| annotation | |  | | --- | | documentation | | A simple base type for JobCategory | |

simpleType JobExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Job external entity names. | |

simpleType LinearUnitSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | restriction of xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [FacilityDefaultLinearUnit](#Link91) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | centimeters |  |  | | enumeration |  | feet |  |  | | enumeration |  | inches |  |  | | enumeration |  | kilometers |  |  | | enumeration |  | meters |  |  | | enumeration |  | miles |  |  | | enumeration |  | millimeters |  |  | | enumeration |  | yards |  |  | |
| annotation | |  | | --- | | documentation | | Picklist of linear units acceptable for Facility default linear units. | |

simpleType MonetaryValueSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | restriction of xs:decimal |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:decimal | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [MonetaryValue](#Link143) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | fractionDigits |  | 2 |  |  | |
| annotation | |  | | --- | | documentation | | A decimal type with only 2 decimal places. | |

simpleType PropertySetNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | attribute |  | [propertySetName](#Link54) | | |
| annotation | |  | | --- | | documentation | | A simple type for property set names. | |

simpleType ResourceCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [ResourceCategory](#LinkD6) | | |
| annotation | |  | | --- | | documentation | | A simple base type for ResourceCategory | |

simpleType ResourceExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Resource external entity names. | |

simpleType SpaceCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [SpaceCategory](#LinkDF) | | |
| annotation | |  | | --- | | documentation | | A simple base type for SpaceCategory | |

simpleType SpaceExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Space external entity names. | |

simpleType SpareCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [SpareCategory](#LinkEE) | | |
| annotation | |  | | --- | | documentation | | A simple base type for SpareCategory | |

simpleType SpareExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Spare external entity names. | |

simpleType SystemCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [SystemCategory](#LinkFA) | | |
| annotation | |  | | --- | | documentation | | A simple base type for SystemCategory | |

simpleType SystemExternalEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable System external entity names. | |

simpleType VolumeUnitSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | restriction of xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [FacilityDefaultVolumeUnit](#Link93) | | |
| facets | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Kind |  | Value |  | Annotation | | enumeration |  | cubic centimeters |  |  | | enumeration |  | cubic feet |  |  | | enumeration |  | cubic inches |  |  | | enumeration |  | cubic meters |  |  | | enumeration |  | cubic millimeters |  |  | | enumeration |  | cubic yards |  |  | |
| annotation | |  | | --- | | documentation | | Acceptable volume units for Facility default units. | |

simpleType WarrantyCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [WarrantyCategory](#Link17F) | | |
| annotation | |  | | --- | | documentation | | A simple base type for WarrantyCategory | |

simpleType ZoneCategorySimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | xs:string |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | xs:string | | |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | element |  | [ZoneCategory](#Link103) | | |
| annotation | |  | | --- | | documentation | | A simple base type for ZoneCategory | |

simpleType ZoneExternallEntityNameSimpleType

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| properties | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | base |  | ExternalEntityNameSimpleType | | |
| annotation | |  | | --- | | documentation | | Enumeration of allowable Zone external entity names. | |

attribute externalEntityName

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalEntityNameSimpleType](#Link11) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [CobieBaseType](#Link18F) | | |
| annotation | |  | | --- | | appinfo | | The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. | | appinfo | | IfcFurnishingElement|IfcDoor|IfcWindow | | appinfo | | n/a | | appinfo | | ExtObject | | appinfo | | Varies | | documentation | | Definition: The name of an entity from an external data type. In practice, ExternalEntityName is most commonly used to represent the name of the Industry Foundation Class entity corresponding to the specified COBie element. Value: IfcFurnishingElement|IfcDoor|IfcWindow ISO16739Mapping: n/a COBie2.4Header: ExtObject COBie2.4Column: Varies | |

attribute externalID

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalIdentifierSimpleType](#Link12) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [CobieBaseType](#Link18F) | | |
| annotation | |  | | --- | | appinfo | | A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. | | appinfo | | 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 | | appinfo | | IfcRoot.GloballyUniqueId | | appinfo | | ExtIdentifier | | appinfo | | Varies | | documentation | | Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | |

attribute externalIDReference

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalIdentifierSimpleType](#Link12) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [SystemKeyType](#Link126)  [ZoneKeyType](#Link170) | | |
| annotation | |  | | --- | | appinfo | | A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. The externalIDReference is used as an alternate foreign key reference in System and Zone assignments. | | appinfo | | 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 | | appinfo | | IfcRoot.GloballyUniqueId | | appinfo | | ExtIdentifier | | appinfo | | Varies | | documentation | | Definition: A unique id used in an external representation of the specified COBie element. Most commonly ExternalID is used to represent the value of IfcGloballyUniqueID entity. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcRoot.GloballyUniqueId COBie2.4Header: ExtIdentifier COBie2.4Column: Varies | |

attribute externalSystemName

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [CobieTextSimpleType](#Link13) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [CobieBaseType](#Link18F) | | |
| annotation | |  | | --- | | appinfo | | The name of the software application that authored the value of the corresponding COBie element. | | appinfo | | Revit MEP|Excel|Constructivity|ProjectWise | | appinfo | | IfcApplication.ApplicationFullName | | appinfo | | ExtSystem | | appinfo | | Varies | | documentation | | Definition: The name of the software application that authored the value of the corresponding COBie element. Value: Revit MEP|Excel|Constructivity|ProjectWise ISO16739Mapping: IfcApplication.ApplicationFullName COBie2.4Header: ExtSystem COBie2.4Column: Varies | |

attribute propertySetExternalIdentifier

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [ExternalIdentifierSimpleType](#Link12) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeType](#Link10C) | | |
| annotation | |  | | --- | | appinfo | | The unique identifier of the data structure Object that contains the specified property. Most commonly PropertySetName corresponds to the GlobalId attribute of an IfcPropertySet Object. | | appinfo | | 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 | | appinfo | | IfcPropertySet.GloballyUniqueId | | appinfo | | Attribute.ExtIdentifier (If originating from an IFC file) | | appinfo | | K | | documentation | | Definition: The unique identifier of the data structure Object that contains the specified property. Most commonly PropertySetName corresponds to the GlobalId attribute of an IfcPropertySet Object. Value: 1hypqXnMHDlwKZc9bkVjNR|3QYFkhRmzECBGi\_FDC88Pu|30b56ZPunCX9x5gIL$UTx9 ISO16739Mapping: IfcPropertySet.GloballyUniqueId COBie2.4Header: Attribute.ExtIdentifier (If originating from an IFC file) COBie2.4Column: K | |

attribute propertySetName

|  |  |
| --- | --- |
| namespace | http://docs.buildingsmartalliance.org/nbims03/cobie/core |
| type | [PropertySetNameSimpleType](#Link5D) |
| used by | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | complexType |  | [AttributeType](#Link10C) | | |
| annotation | |  | | --- | | appinfo | | The name of a logically grouped set of properties | | appinfo | | Pset\_SpaceCommon|Pset\_ElectricalDeviceCommon|Pset\_BaseQuantities | | appinfo | | IfcPropertySet.Name | | appinfo | | Attribute.ExtObject (When originating from an IFC file) | | appinfo | | J | | documentation | | Definition: The name of a logically grouped set of properties Value: IfcPropertySet ISO16739Mapping: Pset\_SpaceCommon|Pset\_ElectricalDeviceCommon|Pset\_BaseQuantities COBie2.4Header: Attribute.ExtObject (When originating from an IFC file) COBie2.4Column: J | |