

**ACCA software proposal for the structure of the IDS file in XML format (version 0.220a of February 18, 2021)**

Files: IDS schema ( 220a ).xsd – IDS schema ( 220a ).docx

**TECHNICAL DOCUMENTATION**

Schema **IDS schema ( 220a ).xsd**

|  |  |  |
| --- | --- | --- |
| Elements | Complex types | Simple types |
| [**IDS**](#Link1) | [**type\_booleanType**](#Link2) | [**type\_ID**](#Link3) |
|  | [**type\_classification**](#Link4) |  |
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|  | [**type\_materialType**](#Link15) |  |
|  | [**type\_property**](#Link16) |  |
|  | [**type\_propertySet**](#Link17) |  |
|  | [**type\_quantity**](#Link18) |  |
|  | [**type\_quantitySet**](#Link19) |  |
|  | [**type\_quantityTypes**](#Link1A) |  |
|  | [**type\_stringType**](#Link1B) |  |

element **IDS**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**info**](#Link1C)[**document**](#Link1D) |

element **IDS/info**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_IDS\_info**](#LinkF) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**copyright**](#Link1E)[**version**](#Link1F)[**date**](#Link20) |
| annotation | |  | | --- | | documentation | | general information about the document | |

element **IDS/document**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**ID**](#Link21)[**info**](#Link22)[**content**](#Link23)[**dataTables**](#Link24) |

element **IDS/document/ID**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_ID\_owner**](#LinkE) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**ID\_owner**](#Link25)[**ID\_model**](#Link26) |
| annotation | |  | | --- | | documentation | | unique identifier of the document (globalID) | |

element **IDS/document/info**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_documentInfo**](#LinkC) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_version**](#Link27)[**owner**](#Link28)[**name**](#Link29)[**description**](#Link2A)[**purpose**](#Link2B)[**infoDeliveryMileStone**](#Link2C)[**actor**](#Link2D) |
| annotation | |  | | --- | | documentation | | general information and context of the document | |

element **IDS/document/content**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**elements**](#Link2E)[**other\_\_\_**](#Link2F) |

element **IDS/document/content/elements**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**element**](#Link30) |

element **IDS/document/content/elements/element**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_element**](#LinkD) |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**code**](#Link31)[**name**](#Link32)[**description**](#Link33)[**WBS**](#Link34)[**maxElement**](#Link35)[**IFC\_entity**](#Link36)[**propertySets**](#Link37)[**quantitySets**](#Link38)[**classifications**](#Link39)[**materials**](#Link3A)[**referenceToPreviusElementCode**](#Link3B)[**childElements**](#Link3C) |

element **IDS/document/content/other\_\_\_**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| annotation | |  | | --- | | documentation | | ...work in progress ...other to define (any) | |

element **IDS/document/dataTables**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**classificationTables**](#Link3D)[**otherTables\_\_\_**](#Link3E) |

element **IDS/document/dataTables/classificationTables**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**classification**](#Link3F) |
| annotation | |  | | --- | | documentation | | list of classifications for the elements - MASTERFORMAT - OMNICLASS - etc... | |

element **IDS/document/dataTables/classificationTables/classification**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**ID**](#Link40)[**name**](#Link41)[**source**](#Link42)[**edition**](#Link43)[**classificationDefinition**](#Link44) |
| annotation | |  | | --- | | documentation | | una classificazione: es. MASTERFORMAT | |

element **IDS/document/dataTables/classificationTables/classification/ID**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_ID**](#Link3) |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 1 |  | |
| annotation | |  | | --- | | documentation | | unique identifier of the classification (globalID) | |

element **IDS/document/dataTables/classificationTables/classification/name**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link45) |  |  |  |  |  | | [referenceToClassification](#Link46) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link47) | **xs:anyURI** | optional |  |  |  | |

attribute **IDS/document/dataTables/classificationTables/classification/name/@referenceTo\_bSDD**

attribute **IDS/document/dataTables/classificationTables/classification/name/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **IDS/document/dataTables/classificationTables/classification/name/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **IDS/document/dataTables/classificationTables/classification/source**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |

element **IDS/document/dataTables/classificationTables/classification/edition**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |

element **IDS/document/dataTables/classificationTables/classification/classificationDefinition**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_classificationDefinition**](#Link5) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**name**](#Link48)[**editionVersion**](#Link49)[**editionDate**](#Link4A)[**description**](#Link4B)[**source**](#Link4C)[**items**](#Link4D) |
| annotation | |  | | --- | | documentation | | classification definition in line !!! example: MASTERFORMAT, OMNICLASS, UNICLASS, etc. | |

element **IDS/document/dataTables/otherTables\_\_\_**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | unbounded | |
| annotation | |  | | --- | | documentation | | ...work in progress ...other to define (any) | |

complexType **type\_booleanType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_type**](#Link4E)[**defaultValue**](#Link4F)[**fixedValue**](#Link50)[**choiceList**](#Link51)[**indefiniteValue**](#Link52) |
| used by | |  |  | | --- | --- | | element | [**type\_dataTypes/booleanType**](#Link53) | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link54) |  |  |  |  |  | | [referenceToClassification](#Link55) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link56) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_booleanType/@referenceTo\_bSDD**

attribute **type\_booleanType/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_booleanType/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_booleanType/IFC\_type**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | IfcBoolean |  | |
| annotation | |  | | --- | | documentation | | IfcBoolean | |

element **type\_booleanType/defaultValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | TRUE |  | | enumeration | FALSE |  | |

element **type\_booleanType/fixedValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | TRUE |  | | enumeration | FALSE |  | |

element **type\_booleanType/choiceList**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**trueValue**](#Link57)[**falseValue**](#Link58) |
| annotation | |  | | --- | | documentation | | list of possible values | |

element **type\_booleanType/choiceList/trueValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | TRUE |  | |

element **type\_booleanType/choiceList/falseValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | FALSE |  | |

element **type\_booleanType/indefiniteValue**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_indefiniteType**](#Link11) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**IFC\_type**](#Link59)[**description**](#Link5A)[**indefiniteValue**](#Link5B) |

complexType **type\_classification**

|  |  |
| --- | --- |
| diagram |  |
| children | [**ID\_classification**](#Link5C)[**code**](#Link5D) |
| used by | |  |  | | --- | --- | | element | [**type\_element/classifications/classification**](#Link5E) | |

element **type\_classification/ID\_classification**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_ID**](#Link3) |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 1 |  | |
| annotation | |  | | --- | | documentation | | reference to the ID of a classification (unique identifier of the classification defined in the classificationTables) | |

element **type\_classification/code**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_ID**](#Link3) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 1 |  | |
| annotation | |  | | --- | | documentation | | if not defined it is assigned by the modeler | |

complexType **type\_classificationDefinition**

|  |  |
| --- | --- |
| diagram |  |
| children | [**name**](#Link48)[**editionVersion**](#Link49)[**editionDate**](#Link4A)[**description**](#Link4B)[**source**](#Link4C)[**items**](#Link4D) |
| used by | |  |  | | --- | --- | | element | [**IDS/document/dataTables/classificationTables/classification/classificationDefinition**](#Link44) | |

element **type\_classificationDefinition/name**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_classificationDefinition/editionVersion**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_classificationDefinition/editionDate**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:date** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | FORMAT: YYYY-MM-DD | |

element **type\_classificationDefinition/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_classificationDefinition/source**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_classificationDefinition/items**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**item**](#Link5F) |

element **type\_classificationDefinition/items/item**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_classificationItem**](#Link6) |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**ID**](#Link60)[**name**](#Link61)[**description**](#Link62)[**availability**](#Link63)[**children**](#Link64) |

complexType **type\_classificationItem**

|  |  |
| --- | --- |
| diagram |  |
| children | [**ID**](#Link60)[**name**](#Link61)[**description**](#Link62)[**availability**](#Link63)[**children**](#Link64) |
| used by | |  |  | | --- | --- | | elements | [**type\_classificationDefinition/items/item**](#Link5F)[**type\_classificationItem/children/Item**](#Link65) | |

element **type\_classificationItem/ID**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_classificationItem/name**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_classificationItem/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_classificationItem/availability**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_classificationItem/children**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**Item**](#Link65) |

element **type\_classificationItem/children/Item**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_classificationItem**](#Link6) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | unbounded | | content | complex | |
| children | [**ID**](#Link60)[**name**](#Link61)[**description**](#Link62)[**availability**](#Link63)[**children**](#Link64) |

complexType **type\_classTypeEnum**

|  |  |
| --- | --- |
| diagram |  |
| children | [**allowedValue**](#Link66)[**enumValue**](#Link67)[**objectType**](#Link68) |
| used by | |  |  | | --- | --- | | element | [**type\_IFCentity/IFC\_classTypeEnum**](#Link69) | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link6A) |  |  |  |  |  | | [referenceToClassification](#Link6B) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link6C) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_classTypeEnum/@referenceTo\_bSDD**

attribute **type\_classTypeEnum/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_classTypeEnum/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_classTypeEnum/allowedValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:boolean** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | true |  | |
| annotation | |  | | --- | | documentation | | if TRUE any of the allowed enumeration values can be assigned | |

element **type\_classTypeEnum/enumValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | \.[A-Z0-9]+\. |  | |
| annotation | |  | | --- | | documentation | | indicates the required enumeration value | |

element **type\_classTypeEnum/objectType**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| annotation | |  | | --- | | documentation | | if objectType is defined, the value of enumValue must be equal to .USERDEFINED. | |

complexType **type\_counterType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_type**](#Link6D)[**startValue**](#Link6E) |
| used by | |  |  | | --- | --- | | element | [**type\_dataTypes/counterType**](#Link6F) | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link70) |  |  |  |  |  | | [referenceToClassification](#Link71) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link72) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_counterType/@referenceTo\_bSDD**

attribute **type\_counterType/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_counterType/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_counterType/IFC\_type**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | IfcInteger |  | |
| annotation | |  | | --- | | documentation | | IfcInteger | |

element **type\_counterType/startValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:integer** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minInclusive | 1 |  | |
| annotation | |  | | --- | | documentation | | starting value of the counter default=1 | |

complexType **type\_dataTypes**

|  |  |
| --- | --- |
| diagram |  |
| children | [**stringType**](#Link73)[**integerType**](#Link74)[**decimalType**](#Link75)[**dateType**](#Link76)[**booleanType**](#Link53)[**logicalType**](#Link77)[**counterType**](#Link6F) |
| used by | |  |  | | --- | --- | | element | [**type\_property/data**](#Link78) | |

element **type\_dataTypes/stringType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_stringType**](#Link1B) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link79)[**restriction**](#Link7A)[**choiceList**](#Link7B)[**defaultValue**](#Link7C)[**fixedValue**](#Link7D)[**indefiniteValue**](#Link7E)[**regularExpression**](#Link7F) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link80) |  |  |  |  |  | | [referenceToClassification](#Link81) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link82) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | IfcLabel, IfcText or IfcIdentifier | |

element **type\_dataTypes/integerType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_IntegerType**](#Link12) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link83)[**choiceList**](#Link84)[**defaultValue**](#Link85)[**fixedValue**](#Link86)[**indefiniteValue**](#Link87) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link88) |  |  |  |  |  | | [referenceToClassification](#Link89) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link8A) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | IfcInteger | |

element **type\_dataTypes/decimalType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_decimalType**](#LinkB) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link8B)[**choiceList**](#Link8C)[**defaultValue**](#Link8D)[**fixedValue**](#Link8E)[**indefiniteValue**](#Link8F) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link90) |  |  |  |  |  | | [referenceToClassification](#Link91) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link92) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | IfcReal | |

element **type\_dataTypes/dateType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_dateType**](#LinkA) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link93)[**restriction**](#Link94)[**choiceList**](#Link95)[**defaultValue**](#Link96)[**fixedValue**](#Link97)[**indefiniteValue**](#Link98)[**patternFormat**](#Link99) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link9A) |  |  |  |  |  | | [referenceToClassification](#Link9B) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link9C) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | IfcLabel for IFC2x3 IfcDate for IFC4... | |

element **type\_dataTypes/booleanType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_booleanType**](#Link2) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link4E)[**defaultValue**](#Link4F)[**fixedValue**](#Link50)[**choiceList**](#Link51)[**indefiniteValue**](#Link52) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link54) |  |  |  |  |  | | [referenceToClassification](#Link55) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link56) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | IfcBoolean | |

element **type\_dataTypes/logicalType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_logicalType**](#Link13) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link9D)[**defaultValue**](#Link9E)[**fixedValue**](#Link9F)[**choiceList**](#LinkA0)[**indefiniteValue**](#LinkA1) |
| annotation | |  | | --- | | documentation | | IfcLogical | |

element **type\_dataTypes/counterType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_counterType**](#Link8) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link6D)[**startValue**](#Link6E) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link70) |  |  |  |  |  | | [referenceToClassification](#Link71) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link72) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | IfcInteger element counter | |

complexType **type\_dateType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_type**](#Link93)[**restriction**](#Link94)[**choiceList**](#Link95)[**defaultValue**](#Link96)[**fixedValue**](#Link97)[**indefiniteValue**](#Link98)[**patternFormat**](#Link99) |
| used by | |  |  | | --- | --- | | element | [**type\_dataTypes/dateType**](#Link76) | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link9A) |  |  |  |  |  | | [referenceToClassification](#Link9B) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link9C) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_dateType/@referenceTo\_bSDD**

attribute **type\_dateType/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_dateType/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_dateType/IFC\_type**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | IfcLabel |  | | enumeration | IfcDate |  | |
| annotation | |  | | --- | | documentation | | IfcLabel for IFC2x3 IfcDate for IFC4... | |

element **type\_dateType/restriction**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [minInclusive](#LinkA2) | **xs:date** |  |  |  |  | | [maxInclusive](#LinkA3) | **xs:date** |  |  |  |  | | [minExclusive](#LinkA4) | **xs:date** |  |  |  |  | | [maxExclusive](#LinkA5) | **xs:date** |  |  |  |  | |

attribute **type\_dateType/restriction/@minInclusive**

|  |  |
| --- | --- |
| type | **xs:date** |

attribute **type\_dateType/restriction/@maxInclusive**

|  |  |
| --- | --- |
| type | **xs:date** |

attribute **type\_dateType/restriction/@minExclusive**

|  |  |
| --- | --- |
| type | **xs:date** |

attribute **type\_dateType/restriction/@maxExclusive**

|  |  |
| --- | --- |
| type | **xs:date** |

element **type\_dateType/choiceList**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**value**](#LinkA6) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [withOther](#LinkA7) | **xs:boolean** | optional | false |  | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | | |
| annotation | |  | | --- | | documentation | | any list of possible values | |

attribute **type\_dateType/choiceList/@withOther**

|  |  |
| --- | --- |
| type | **xs:boolean** |
| properties | |  |  | | --- | --- | | use | optional | | default | false | |
| annotation | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | |

element **type\_dateType/choiceList/value**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:date** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [label](#LinkA8) | **xs:string** | optional |  |  |  | |

attribute **type\_dateType/choiceList/value/@label**

|  |  |
| --- | --- |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_dateType/defaultValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:date** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_dateType/fixedValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:date** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_dateType/indefiniteValue**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_indefiniteType**](#Link11) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**IFC\_type**](#Link59)[**description**](#Link5A)[**indefiniteValue**](#Link5B) |

element **type\_dateType/patternFormat**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | YYYY-MM-DD |  | |
| annotation | |  | | --- | | documentation | | Format: YYYY-MM-DD | |

complexType **type\_decimalType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_type**](#Link8B)[**choiceList**](#Link8C)[**defaultValue**](#Link8D)[**fixedValue**](#Link8E)[**indefiniteValue**](#Link8F) |
| used by | |  |  | | --- | --- | | elements | [**type\_dataTypes/decimalType**](#Link75)[**type\_quantityTypes/decimalType**](#LinkA9) | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link90) |  |  |  |  |  | | [referenceToClassification](#Link91) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link92) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_decimalType/@referenceTo\_bSDD**

attribute **type\_decimalType/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_decimalType/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_decimalType/IFC\_type**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | IfcReal |  | |
| annotation | |  | | --- | | documentation | | IfcReal | |

element **type\_decimalType/choiceList**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**value**](#LinkAA) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [withOther](#LinkAB) | **xs:boolean** | optional | false |  | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | | |
| annotation | |  | | --- | | documentation | | any list of possible values | |

attribute **type\_decimalType/choiceList/@withOther**

|  |  |
| --- | --- |
| type | **xs:boolean** |
| properties | |  |  | | --- | --- | | use | optional | | default | false | |
| annotation | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | |

element **type\_decimalType/choiceList/value**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:decimal** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [label](#LinkAC) | **xs:string** | optional |  |  |  | |

attribute **type\_decimalType/choiceList/value/@label**

|  |  |
| --- | --- |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_decimalType/defaultValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:decimal** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_decimalType/fixedValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:decimal** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_decimalType/indefiniteValue**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_indefiniteType**](#Link11) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**IFC\_type**](#Link59)[**description**](#Link5A)[**indefiniteValue**](#Link5B) |

complexType **type\_documentInfo**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_version**](#Link27)[**owner**](#Link28)[**name**](#Link29)[**description**](#Link2A)[**purpose**](#Link2B)[**infoDeliveryMileStone**](#Link2C)[**actor**](#Link2D) |
| used by | |  |  | | --- | --- | | element | [**IDS/document/info**](#Link22) | |

element **type\_documentInfo/IFC\_version**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| annotation | |  | | --- | | documentation | | IFC version required IFC2x3, IFC4, IFC5... | |

element **type\_documentInfo/owner**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_documentInfo/name**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkAD) |  |  |  |  |  | | [referenceToClassification](#LinkAE) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkAF) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | (...with reference to the bSDD, classification, documentation) | |

attribute **type\_documentInfo/name/@referenceTo\_bSDD**

attribute **type\_documentInfo/name/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_documentInfo/name/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_documentInfo/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |

element **type\_documentInfo/purpose**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkB0) |  |  |  |  |  | | [referenceToClassification](#LinkB1) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkB2) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | EN 17412-1 | |

attribute **type\_documentInfo/purpose/@referenceTo\_bSDD**

attribute **type\_documentInfo/purpose/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_documentInfo/purpose/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_documentInfo/infoDeliveryMileStone**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | EN 17412-1 | |

element **type\_documentInfo/actor**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | EN 17412-1 | |

complexType **type\_element**

|  |  |
| --- | --- |
| diagram |  |
| children | [**code**](#Link31)[**name**](#Link32)[**description**](#Link33)[**WBS**](#Link34)[**maxElement**](#Link35)[**IFC\_entity**](#Link36)[**propertySets**](#Link37)[**quantitySets**](#Link38)[**classifications**](#Link39)[**materials**](#Link3A)[**referenceToPreviusElementCode**](#Link3B)[**childElements**](#Link3C) |
| used by | |  |  | | --- | --- | | elements | [**IDS/document/content/elements/element**](#Link30)[**type\_element/childElements/element**](#LinkB3) | |

element **type\_element/code**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 2 |  | |
| annotation | |  | | --- | | documentation | | owner's classification code | |

element **type\_element/name**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkB4) |  |  |  |  |  | | [referenceToClassification](#LinkB5) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkB6) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | owner's classification name | |

attribute **type\_element/name/@referenceTo\_bSDD**

attribute **type\_element/name/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_element/name/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_element/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | any description or comment to help better understand the request for this element | |

element **type\_element/WBS**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 1 |  | | pattern | [A-Za-z0-9] |  | |
| annotation | |  | | --- | | documentation | | owner's WBS level code | |

element **type\_element/maxElement**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:unsignedLong** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | | default | 1 | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minInclusive | 1 |  | |
| annotation | |  | | --- | | documentation | | limit on the maximum number of element at this WBS level | |

element **type\_element/IFC\_entity**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_IFCentity**](#Link10) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**IFC\_class**](#LinkB7)[**IFC\_classTypeEnum**](#Link69)[**IFC\_name**](#LinkB8)[**IFC\_description**](#LinkB9) |

element **type\_element/propertySets**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**propertySet**](#LinkBA) |

element **type\_element/propertySets/propertySet**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_propertySet**](#Link17) |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**code**](#LinkBB)[**name**](#LinkBC)[**description**](#LinkBD)[**property**](#LinkBE) |

element **type\_element/quantitySets**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**quantitySet**](#LinkBF) |

element **type\_element/quantitySets/quantitySet**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_quantitySet**](#Link19) |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**code**](#LinkC0)[**name**](#LinkC1)[**description**](#LinkC2)[**quantity**](#LinkC3) |

element **type\_element/classifications**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**classification**](#Link5E) |
| annotation | |  | | --- | | documentation | | any further classifications | |

element **type\_element/classifications/classification**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of [**type\_classification**](#Link4) |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**ID\_classification**](#Link5C)[**code**](#Link5D) |

element **type\_element/materials**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**material**](#LinkC4) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [count](#LinkC5) | **derived by: xs:byte** | required |  |  | |  | | --- | | documentation | | number of materials required (min 1) | | |

attribute **type\_element/materials/@count**

|  |  |
| --- | --- |
| type | restriction of **xs:byte** |
| properties | |  |  | | --- | --- | | use | required | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minInclusive | 1 |  | |
| annotation | |  | | --- | | documentation | | number of materials required (min 1) | |

element **type\_element/materials/material**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_material**](#Link14) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | unbounded | | content | complex | |
| children | [**code**](#LinkC6)[**name**](#LinkC7)[**description**](#LinkC8)[**data**](#LinkC9) |

element **type\_element/referenceToPreviusElementCode**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| annotation | |  | | --- | | documentation | | reference to the code of a previously defined element | |

element **type\_element/childElements**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**element**](#LinkB3) |

element **type\_element/childElements/element**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_element**](#LinkD) |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**code**](#Link31)[**name**](#Link32)[**description**](#Link33)[**WBS**](#Link34)[**maxElement**](#Link35)[**IFC\_entity**](#Link36)[**propertySets**](#Link37)[**quantitySets**](#Link38)[**classifications**](#Link39)[**materials**](#Link3A)[**referenceToPreviusElementCode**](#Link3B)[**childElements**](#Link3C) |

complexType **type\_ID\_owner**

|  |  |
| --- | --- |
| diagram |  |
| children | [**ID\_owner**](#Link25)[**ID\_model**](#Link26) |
| used by | |  |  | | --- | --- | | element | [**IDS/document/ID**](#Link21) | |

element **type\_ID\_owner/ID\_owner**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_ID**](#Link3) |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 1 |  | |
| annotation | |  | | --- | | documentation | | code, classification, globalID, etc. of the owner | |

element **type\_ID\_owner/ID\_model**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_ID**](#Link3) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 1 |  | |
| annotation | |  | | --- | | documentation | | any code for connection to the model. EXAMPLE: for validation request with attached IFC model. | |

complexType **type\_IDS\_info**

|  |  |
| --- | --- |
| diagram |  |
| children | [**copyright**](#Link1E)[**version**](#Link1F)[**date**](#Link20) |
| used by | |  |  | | --- | --- | | element | [**IDS/info**](#Link1C) | |

element **type\_IDS\_info/copyright**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | IDS FORMAT by buildingSMART |  | |
| annotation | |  | | --- | | documentation | | IDS FORMAT by buildingSMART | |

element **type\_IDS\_info/version**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | 0.220a |  | |
| annotation | |  | | --- | | documentation | | IDS version | |

element **type\_IDS\_info/date**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:date** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | 2021-02-18 |  | |
| annotation | |  | | --- | | documentation | | version date of the IDS | |

complexType **type\_IFCentity**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_class**](#LinkB7)[**IFC\_classTypeEnum**](#Link69)[**IFC\_name**](#LinkB8)[**IFC\_description**](#LinkB9) |
| used by | |  |  | | --- | --- | | element | [**type\_element/IFC\_entity**](#Link36) | |

element **type\_IFCentity/IFC\_class**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkCA) |  |  |  |  |  | | [referenceToClassification](#LinkCB) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkCC) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | specifica la classe IFC richiesta per l'elemento | |

attribute **type\_IFCentity/IFC\_class/@referenceTo\_bSDD**

attribute **type\_IFCentity/IFC\_class/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_IFCentity/IFC\_class/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_IFCentity/IFC\_classTypeEnum**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_classTypeEnum**](#Link7) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**allowedValue**](#Link66)[**enumValue**](#Link67)[**objectType**](#Link68) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link6A) |  |  |  |  |  | | [referenceToClassification](#Link6B) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link6C) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | specifies a possible enumeration type request | |

element **type\_IFCentity/IFC\_name**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:boolean** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | true |  | |
| annotation | |  | | --- | | documentation | | VERY IMPORTANT !!! Indicates that the "name" attribute of the IFC entity MUST contain the WBS code to rebuild the hierarchical structure and classification code as required in the IDS.  Format: CS1.RTF24.AB264.(F0034)  CS01 = WBS(CS) + counter(1) level 0 of WBS RTF24 = WBS(RTF) + counter(24) level 1 of WBS AB264 = WBS(AB) + counter(264) level 2 of WBS F0034 = owner's classification code (see "code")  where WBS = owner's WBS level code (see "WBS"). counter = element counter in the WBS level. The level separator is the dot  ---------------------- ENTITY IfcRoot Name :IfcLabel; | |

element **type\_IFCentity/IFC\_description**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:boolean** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | true |  | |
| annotation | |  | | --- | | documentation | | if required it must contain the name of the classification defined by the owner (see "name")  ---------------------- ENTITY IfcRoot Description :IfcText; | |

complexType **type\_indefiniteType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_type**](#Link59)[**description**](#Link5A)[**indefiniteValue**](#Link5B) |
| used by | |  |  | | --- | --- | | elements | [**type\_stringType/indefiniteValue**](#Link7E)[**type\_IntegerType/indefiniteValue**](#Link87)[**type\_decimalType/indefiniteValue**](#Link8F)[**type\_dateType/indefiniteValue**](#Link98)[**type\_booleanType/indefiniteValue**](#Link52)[**type\_logicalType/indefiniteValue**](#LinkA1) | |

element **type\_indefiniteType/IFC\_type**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | IfcLabel |  | |
| annotation | |  | | --- | | documentation | | IfcLabel in the case of undefined property the type must always be indicated as IfcLabel !!! | |

element **type\_indefiniteType/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | description or comment to indicate if and when it is possible NOT to report the property's value and declare it undefined. | |

element **type\_indefiniteType/indefiniteValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | | default | UNDEFINED | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 1 |  | |
| annotation | |  | | --- | | documentation | | default=UNDEFINED | |

complexType **type\_IntegerType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_type**](#Link83)[**choiceList**](#Link84)[**defaultValue**](#Link85)[**fixedValue**](#Link86)[**indefiniteValue**](#Link87) |
| used by | |  |  | | --- | --- | | elements | [**type\_dataTypes/integerType**](#Link74)[**type\_quantityTypes/integerType**](#LinkCD) | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link88) |  |  |  |  |  | | [referenceToClassification](#Link89) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link8A) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_IntegerType/@referenceTo\_bSDD**

attribute **type\_IntegerType/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_IntegerType/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_IntegerType/IFC\_type**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | IfcInteger |  | |
| annotation | |  | | --- | | documentation | | IfcInteger | |

element **type\_IntegerType/choiceList**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**value**](#LinkCE) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [withOther](#LinkCF) | **xs:boolean** | optional | false |  | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | | |
| annotation | |  | | --- | | documentation | | any list of possible values | |

attribute **type\_IntegerType/choiceList/@withOther**

|  |  |
| --- | --- |
| type | **xs:boolean** |
| properties | |  |  | | --- | --- | | use | optional | | default | false | |
| annotation | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | |

element **type\_IntegerType/choiceList/value**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:integer** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [label](#LinkD0) | **xs:string** | optional |  |  |  | |

attribute **type\_IntegerType/choiceList/value/@label**

|  |  |
| --- | --- |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_IntegerType/defaultValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:integer** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_IntegerType/fixedValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:integer** |
| properties | |  |  | | --- | --- | | content | simple | |
| annotation | |  | | --- | | documentation | | example: class, code, etc. for connection to other owner systems | |

element **type\_IntegerType/indefiniteValue**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_indefiniteType**](#Link11) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**IFC\_type**](#Link59)[**description**](#Link5A)[**indefiniteValue**](#Link5B) |

complexType **type\_logicalType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_type**](#Link9D)[**defaultValue**](#Link9E)[**fixedValue**](#Link9F)[**choiceList**](#LinkA0)[**indefiniteValue**](#LinkA1) |
| used by | |  |  | | --- | --- | | element | [**type\_dataTypes/logicalType**](#Link77) | |

element **type\_logicalType/IFC\_type**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | IfcLogical |  | |
| annotation | |  | | --- | | documentation | | IfcLogical | |

element **type\_logicalType/defaultValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | TRUE |  | | enumeration | FALSE |  | | enumeration | UNKNOWN |  | |

element **type\_logicalType/fixedValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | TRUE |  | | enumeration | FALSE |  | | enumeration | UNKNOWN |  | |

element **type\_logicalType/choiceList**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**trueValue**](#LinkD1)[**falseValue**](#LinkD2)[**unknownValue**](#LinkD3) |
| annotation | |  | | --- | | documentation | | list of possible values | |

element **type\_logicalType/choiceList/trueValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | TRUE |  | |

element **type\_logicalType/choiceList/falseValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | FALSE |  | |

element **type\_logicalType/choiceList/unknownValue**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | pattern | UNKNOWN |  | |

element **type\_logicalType/indefiniteValue**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_indefiniteType**](#Link11) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**IFC\_type**](#Link59)[**description**](#Link5A)[**indefiniteValue**](#Link5B) |

complexType **type\_material**

|  |  |
| --- | --- |
| diagram |  |
| children | [**code**](#LinkC6)[**name**](#LinkC7)[**description**](#LinkC8)[**data**](#LinkC9) |
| used by | |  |  | | --- | --- | | element | [**type\_element/materials/material**](#LinkC4) | |

element **type\_material/code**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| annotation | |  | | --- | | documentation | | owner's classification code | |

element **type\_material/name**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkD4) |  |  |  |  |  | | [referenceToClassification](#LinkD5) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkD6) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_material/name/@referenceTo\_bSDD**

attribute **type\_material/name/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_material/name/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_material/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | any description or comment to help better understand the request for this property | |

element **type\_material/data**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of [**type\_materialType**](#Link15) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**IFC\_materials**](#LinkD7)[**IFC\_materialLayerSet**](#LinkD8) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkD9) |  |  |  |  |  | | [referenceToClassification](#LinkDA) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkDB) | **xs:anyURI** | optional |  |  |  | |

complexType **type\_materialType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_materials**](#LinkD7)[**IFC\_materialLayerSet**](#LinkD8) |
| used by | |  |  | | --- | --- | | element | [**type\_material/data**](#LinkC9) | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkD9) |  |  |  |  |  | | [referenceToClassification](#LinkDA) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkDB) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_materialType/@referenceTo\_bSDD**

attribute **type\_materialType/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_materialType/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_materialType/IFC\_materials**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**choiceList**](#LinkDC)[**defaultValue**](#LinkDD)[**fixedValue**](#LinkDE) |

element **type\_materialType/IFC\_materials/choiceList**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**value**](#LinkDF) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [withOther](#LinkE0) | **xs:boolean** | optional | false |  | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | | |
| annotation | |  | | --- | | documentation | | any list of possible values | |

attribute **type\_materialType/IFC\_materials/choiceList/@withOther**

|  |  |
| --- | --- |
| type | **xs:boolean** |
| properties | |  |  | | --- | --- | | use | optional | | default | false | |
| annotation | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | |

element **type\_materialType/IFC\_materials/choiceList/value**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [label](#LinkE1) | **xs:string** | optional |  |  |  | |

attribute **type\_materialType/IFC\_materials/choiceList/value/@label**

|  |  |
| --- | --- |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_materialType/IFC\_materials/defaultValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_materialType/IFC\_materials/fixedValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| annotation | |  | | --- | | documentation | | example: class, code, etc. for connection to other owner systems | |

element **type\_materialType/IFC\_materialLayerSet**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| annotation | |  | | --- | | documentation | | to be defined further if necessary... | |

complexType **type\_property**

|  |  |
| --- | --- |
| diagram |  |
| children | [**code**](#LinkE2)[**name**](#LinkE3)[**description**](#LinkE4)[**unit**](#LinkE5)[**data**](#Link78) |
| used by | |  |  | | --- | --- | | element | [**type\_propertySet/property**](#LinkBE) | |

element **type\_property/code**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| annotation | |  | | --- | | documentation | | owner's classification code | |

element **type\_property/name**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkE6) |  |  |  |  |  | | [referenceToClassification](#LinkE7) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkE8) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_property/name/@referenceTo\_bSDD**

attribute **type\_property/name/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_property/name/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_property/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | any description or comment to help better understand the request for this property | |

element **type\_property/unit**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkE9) |  |  |  |  |  | | [referenceToClassification](#LinkEA) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkEB) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_property/unit/@referenceTo\_bSDD**

attribute **type\_property/unit/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_property/unit/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_property/data**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_dataTypes**](#Link9) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**stringType**](#Link73)[**integerType**](#Link74)[**decimalType**](#Link75)[**dateType**](#Link76)[**booleanType**](#Link53)[**logicalType**](#Link77)[**counterType**](#Link6F) |
| annotation | |  | | --- | | documentation | | IfcSimpleValue:  IfcLabel, IfcText, IfcIdentifier, IfcInteger, IfcReal, IfcDate, IfcBoolean, IfcLogical | |

complexType **type\_propertySet**

|  |  |
| --- | --- |
| diagram |  |
| children | [**code**](#LinkBB)[**name**](#LinkBC)[**description**](#LinkBD)[**property**](#LinkBE) |
| used by | |  |  | | --- | --- | | element | [**type\_element/propertySets/propertySet**](#LinkBA) | |

element **type\_propertySet/code**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| annotation | |  | | --- | | documentation | | owner's classification code | |

element **type\_propertySet/name**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkEC) |  |  |  |  |  | | [referenceToClassification](#LinkED) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkEE) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_propertySet/name/@referenceTo\_bSDD**

attribute **type\_propertySet/name/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_propertySet/name/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_propertySet/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | any description or comment to help better understand the request for this propertySet | |

element **type\_propertySet/property**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_property**](#Link16) |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**code**](#LinkE2)[**name**](#LinkE3)[**description**](#LinkE4)[**unit**](#LinkE5)[**data**](#Link78) |

complexType **type\_quantity**

|  |  |
| --- | --- |
| diagram |  |
| children | [**code**](#LinkEF)[**name**](#LinkF0)[**description**](#LinkF1)[**unit**](#LinkF2)[**data**](#LinkF3) |
| used by | |  |  | | --- | --- | | element | [**type\_quantitySet/quantity**](#LinkC3) | |

element **type\_quantity/code**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| annotation | |  | | --- | | documentation | | owner's classification code | |

element **type\_quantity/name**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkF4) |  |  |  |  |  | | [referenceToClassification](#LinkF5) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkF6) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_quantity/name/@referenceTo\_bSDD**

attribute **type\_quantity/name/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_quantity/name/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_quantity/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | any description or comment to help better understand the request for this property | |

element **type\_quantity/unit**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkF7) |  |  |  |  |  | | [referenceToClassification](#LinkF8) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkF9) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_quantity/unit/@referenceTo\_bSDD**

attribute **type\_quantity/unit/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_quantity/unit/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_quantity/data**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_quantityTypes**](#Link1A) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**integerType**](#LinkCD)[**decimalType**](#LinkA9) |
| annotation | |  | | --- | | documentation | | IfcPhysicalSimpleQuantity:  IfcQuantityArea, IfcQuantityCount, IfcQuantityLength, IfcQuantityTime, IfcQuantityVolume, IfcQuantityWeight | |

complexType **type\_quantitySet**

|  |  |
| --- | --- |
| diagram |  |
| children | [**code**](#LinkC0)[**name**](#LinkC1)[**description**](#LinkC2)[**quantity**](#LinkC3) |
| used by | |  |  | | --- | --- | | element | [**type\_element/quantitySets/quantitySet**](#LinkBF) | |

element **type\_quantitySet/code**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| annotation | |  | | --- | | documentation | | owner's classification code | |

element **type\_quantitySet/name**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#LinkFA) |  |  |  |  |  | | [referenceToClassification](#LinkFB) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#LinkFC) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_quantitySet/name/@referenceTo\_bSDD**

attribute **type\_quantitySet/name/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_quantitySet/name/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_quantitySet/description**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |
| annotation | |  | | --- | | documentation | | any description or comment to help better understand the request for this quantitySet | |

element **type\_quantitySet/quantity**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_quantity**](#Link18) |
| properties | |  |  | | --- | --- | | minOcc | 1 | | maxOcc | unbounded | | content | complex | |
| children | [**code**](#LinkEF)[**name**](#LinkF0)[**description**](#LinkF1)[**unit**](#LinkF2)[**data**](#LinkF3) |

complexType **type\_quantityTypes**

|  |  |
| --- | --- |
| diagram |  |
| children | [**integerType**](#LinkCD)[**decimalType**](#LinkA9) |
| used by | |  |  | | --- | --- | | element | [**type\_quantity/data**](#LinkF3) | |

element **type\_quantityTypes/integerType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_IntegerType**](#Link12) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link83)[**choiceList**](#Link84)[**defaultValue**](#Link85)[**fixedValue**](#Link86)[**indefiniteValue**](#Link87) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link88) |  |  |  |  |  | | [referenceToClassification](#Link89) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link8A) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | IfcInteger: IfcQuantityCount | |

element **type\_quantityTypes/decimalType**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_decimalType**](#LinkB) |
| properties | |  |  | | --- | --- | | content | complex | |
| children | [**IFC\_type**](#Link8B)[**choiceList**](#Link8C)[**defaultValue**](#Link8D)[**fixedValue**](#Link8E)[**indefiniteValue**](#Link8F) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link90) |  |  |  |  |  | | [referenceToClassification](#Link91) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link92) | **xs:anyURI** | optional |  |  |  | |
| annotation | |  | | --- | | documentation | | IfcReal: IfcQuantityArea, IfcQuantityLength, IfcQuantityTime, IfcQuantityVolume, IfcQuantityWeight | |

complexType **type\_stringType**

|  |  |
| --- | --- |
| diagram |  |
| children | [**IFC\_type**](#Link79)[**restriction**](#Link7A)[**choiceList**](#Link7B)[**defaultValue**](#Link7C)[**fixedValue**](#Link7D)[**indefiniteValue**](#Link7E)[**regularExpression**](#Link7F) |
| used by | |  |  | | --- | --- | | element | [**type\_dataTypes/stringType**](#Link73) | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [referenceTo\_bSDD](#Link80) |  |  |  |  |  | | [referenceToClassification](#Link81) | **xs:anyURI** | optional |  |  |  | | [referenceToDocumentation](#Link82) | **xs:anyURI** | optional |  |  |  | |

attribute **type\_stringType/@referenceTo\_bSDD**

attribute **type\_stringType/@referenceToClassification**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

attribute **type\_stringType/@referenceToDocumentation**

|  |  |
| --- | --- |
| type | **xs:anyURI** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_stringType/IFC\_type**

|  |  |
| --- | --- |
| diagram |  |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | enumeration | IfcLabel |  | | enumeration | IfcText |  | | enumeration | IfcIdentifier |  | |
| annotation | |  | | --- | | documentation | | Possible values: IfcLabel ...for naming purposes (max 255 char)  IfcText ...for descriptive purposes  IfcIdentifier ...for identification purposes (max 255 char) | |

element **type\_stringType/restriction**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [minLength](#LinkFD) | **xs:integer** |  |  |  |  | | [maxLength](#LinkFE) | **xs:integer** |  |  |  |  | |

attribute **type\_stringType/restriction/@minLength**

|  |  |
| --- | --- |
| type | **xs:integer** |

attribute **type\_stringType/restriction/@maxLength**

|  |  |
| --- | --- |
| type | **xs:integer** |

element **type\_stringType/choiceList**

|  |  |
| --- | --- |
| diagram |  |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**value**](#LinkFF) |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [withOther](#Link100) | **xs:boolean** | optional | false |  | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | | |
| annotation | |  | | --- | | documentation | | any list of possible values | |

attribute **type\_stringType/choiceList/@withOther**

|  |  |
| --- | --- |
| type | **xs:boolean** |
| properties | |  |  | | --- | --- | | use | optional | | default | false | |
| annotation | |  | | --- | | documentation | | if TRUE, a value outside the list can also be entered default = FALSE | |

element **type\_stringType/choiceList/value**

|  |  |
| --- | --- |
| diagram |  |
| type | extension of **xs:string** |
| properties | |  |  | | --- | --- | | content | complex | |
| attributes | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name | Type | Use | Default | Fixed | Annotation | | [label](#Link101) | **xs:string** | optional |  |  |  | |

attribute **type\_stringType/choiceList/value/@label**

|  |  |
| --- | --- |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | use | optional | |

element **type\_stringType/defaultValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |

element **type\_stringType/fixedValue**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | content | simple | |
| annotation | |  | | --- | | documentation | | example: class, code, etc. for connection to other owner systems | |

element **type\_stringType/indefiniteValue**

|  |  |
| --- | --- |
| diagram |  |
| type | [**type\_indefiniteType**](#Link11) |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | complex | |
| children | [**IFC\_type**](#Link59)[**description**](#Link5A)[**indefiniteValue**](#Link5B) |

element **type\_stringType/regularExpression**

|  |  |
| --- | --- |
| diagram |  |
| type | **xs:string** |
| properties | |  |  | | --- | --- | | minOcc | 0 | | maxOcc | 1 | | content | simple | |

simpleType **type\_ID**

|  |  |
| --- | --- |
| type | restriction of **xs:string** |
| properties | |  |  | | --- | --- | | base | xs:string | |
| used by | |  |  | | --- | --- | | elements | [**type\_classification/code**](#Link5D)[**IDS/document/dataTables/classificationTables/classification/ID**](#Link40)[**type\_classification/ID\_classification**](#Link5C)[**type\_ID\_owner/ID\_model**](#Link26)[**type\_ID\_owner/ID\_owner**](#Link25) | |
| facets | |  |  |  | | --- | --- | --- | | Kind | Value | Annotation | | minLength | 1 |  | |