

Data dictionary for QIF Library **Auxiliary.xsd** (normative)

schema location: **..\QIFLibrary\Auxiliary.xsd**
 attributeFormDefault: **unqualified**
 elementFormDefault: **qualified**
 targetNamespace: **http://qifstandards.org/xsd/qif2**

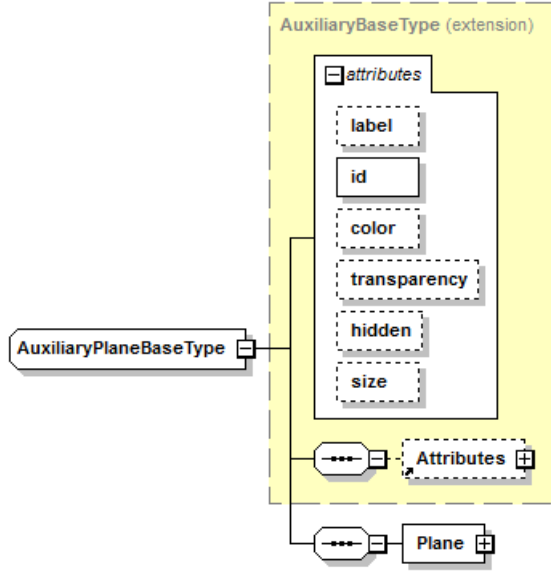
Complex types

[AuxiliaryBaseType](#)[AuxiliaryPlaneBaseType](#)[AuxiliarySetType](#)[CADCoordinateSystemType](#)[CoordinateSystemSetType](#)[LineAuxiliaryType](#)[PlaneClippingType](#)[PlaneReferenceType](#)[PointAuxiliaryType](#)complexType **AuxiliaryBaseType**

| | | | | | | | |
|------------|--------------------------------------|---|----------|---------|-------|--|--|
| diagram | | | | | | | |
| type | extension of DrawableBaseType | | | | | | |
| properties | base | DrawableBaseType | | | | | |
| | abstract | true | | | | | |
| children | Attributes | | | | | | |
| used by | element | Auxiliary | | | | | |
| | complexType | AuxiliaryPlaneBaseType LineAuxiliaryType PointAuxiliaryType | | | | | |
| attributes | Name | Type | Use | Default | Fixed | Annotation | |
| | label | xs:string | | | | documentation The optional label attribute is the model entity "nameplate". Normally it can be seen at the entity item in the project tree. | |
| | id | QIFIdType | required | | | documentation The required id attribute is the unique model entity identifier. | |
| | color | ColorType | | | | documentation The optional color attribute defines the RGB color property of a model entity. | |

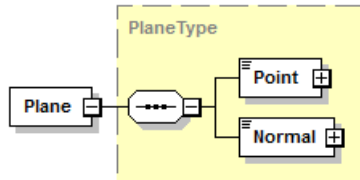
| | | | | |
|------------|--|---------------------------|-----|---|
| | transparency | xs:double | 0.0 | documentation The optional transparency attribute defines the transparency property of a model entity. |
| | hidden | xs:boolean | 0 | documentation The optional hidden attribute defines the visibility property of a model entity in the graphical window. |
| | size | DoublePositiveType | | documentation The optional size attribute defines a recommended size for visualization of an infinite drawable element such as plane, cylinder, axis, etc., or objects without explicit geometric parameters (e.g. coordinate system). |
| annotation | documentation The AuxiliaryBaseType is the abstract base type for all auxiliary object types. | | | |

complexType AuxiliaryPlaneBaseType

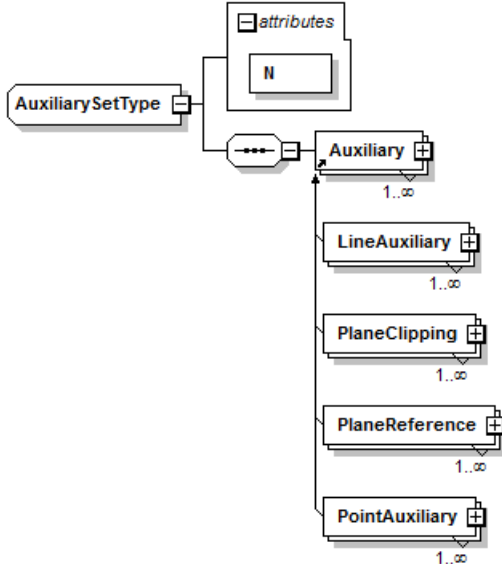
| | | | | | | | |
|------------|--|--|----------|---------|-------|--|--|
| diagram |  | | | | | | |
| type | extension of AuxiliaryBaseType | | | | | | |
| properties | base | AuxiliaryBaseType | | | | | |
| | abstract | true | | | | | |
| children | Attributes Plane | | | | | | |
| used by | complexTypes | PlaneClippingType PlaneReferenceType | | | | | |
| attributes | Name | Type | Use | Default | Fixed | Annotation | |
| | label | xs:string | | | | documentation The optional label attribute is the model entity "nameplate". Normally it can be seen at the entity item in the project tree. | |
| | id | QIFIdType | required | | | documentation The required id attribute is the unique model entity identifier. | |
| | color | ColorType | | | | documentation The optional color attribute defines the RGB color property of a model entity. | |
| | transparency | xs:double | | 0.0 | | documentation The optional transparency attribute defines the transparency property of a model entity. | |

| | | | | |
|------------|--|--------------------|---|---|
| | hidden | xs:boolean | 0 | documentation The optional hidden attribute defines the visibility property of a model entity in the graphical window. |
| | size | DoublePositiveType | | documentation The optional size attribute defines a recommended size for visualization of an infinite drawable element such as plane, cylinder, axis, etc., or objects without explicit geometric parameters (e.g. coordinate system). |
| annotation | documentation The AuxiliaryPlaneBaseType is the abstract base type for all auxiliary plane types. | | | |

element **AuxiliaryPlaneBaseType/Plane**

| | |
|------------|---|
| diagram |  |
| type | PlaneType |
| properties | content complex |
| children | Point Normal |
| annotation | documentation The Plane element is the plane definition. |

complexType **AuxiliarySetType**

| | | | | |
|------------|--|----------------------------|-----------------|--|
| diagram |  | | | |
| children | Auxiliary | | | |
| used by | element | AuxiliarySet | | |
| attributes | Name N | Type NaturalType | Use required | Default Fixed Annotation documentation The N attribute is the number of objects in this set. |
| annotation | documentation The AuxiliarySetType represents a container for storing all auxiliary objects present in the CAD scene. | | | |

attribute **AuxiliarySetType/@N**

| | | | |
|------------|--|----------|------------|
| type | NaturalType | | |
| properties | use | required | |
| facets | Kind | Value | Annotation |
| | minInclusive | 1 | |
| annotation | documentation The N attribute is the number of objects in this set. | | |

complexType **CADCoordinateSystemType**

| | | | | | | |
|------------|--|---------------------------|----------|---------|-------|--|
| diagram | <p>The diagram illustrates the structure of the CADCoordinateSystemType as an extension of DrawableBaseType. The DrawableBaseType (extension) is shown as a yellow box containing a dashed box labeled attributes. Inside attributes are the following elements: label (dashed box), id (solid box), color (dashed box), transparency (dashed box), hidden (dashed box), and size (dashed box). The CADCoordinateSystemType is shown as a solid box with a dashed box labeled Attributes and a dashed box labeled CoordinateSystemCore. The Attributes and CoordinateSystemCore boxes are connected to the attributes box in the DrawableBaseType extension.</p> | | | | | |
| type | extension of DrawableBaseType | | | | | |
| properties | base DrawableBaseType | | | | | |
| children | Attributes CoordinateSystemCore | | | | | |
| used by | element CoordinateSystem | | | | | |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| | label | xs:string | | | | documentation The optional label attribute is the model entity "nameplate". Normally it can be seen at the entity item in the project tree. |
| | id | QIFIdType | required | | | documentation The required id attribute is the unique model entity identifier. |
| | color | ColorType | | | | documentation The optional color attribute defines the RGB color property of a model entity. |
| | transparency | xs:double | | 0.0 | | documentation The optional transparency attribute defines the transparency property of a model entity. |
| | hidden | xs:boolean | | 0 | | documentation The optional hidden attribute defines the visibility property of a model entity in the graphical window. |
| | size | DoublePositiveType | | | | documentation The optional size attribute defines a recommended size for visualization of an infinite drawable element such as |

| | |
|------------|---|
| | plane, cylinder, axis, etc., or objects without explicit geometric parameters (e.g. coordinate system). |
| annotation | documentation The CADCoordinateSystemType defines the Cartesian 3D coordinate system in the model space. |

complexType **CoordinateSystemSetType**

| | | | | | | |
|------------|--|----------------------------|-----------------|---------|-------|--|
| diagram | | | | | | |
| children | CoordinateSystem | | | | | |
| used by | element CoordinateSystemSet | | | | | |
| attributes | Name N | Type NaturalType | Use required | Default | Fixed | Annotation documentation The N attribute is the number of objects in this set. |
| annotation | documentation The CoordinateSystemSetType represents a container for storing all coordinate systems present in the CAD scene. | | | | | |

attribute **CoordinateSystemSetType/@N**

| | | | |
|------------|--|------------|------------|
| type | NaturalType | | |
| properties | use required | | |
| facets | Kind minInclusive | Value 1 | Annotation |
| annotation | documentation The N attribute is the number of objects in this set. | | |

complexType **LineAuxiliaryType**

| | | | | | | |
|---------|--|--|--|--|--|--|
| diagram | | | | | | |
|---------|--|--|--|--|--|--|

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|------------|--|---|----------|---------|-------|---|
| type | extension of AuxiliaryBaseType | | | | | |
| properties | base abstract | AuxiliaryBaseType true | | | | |
| children | Attributes StartPoint EndPoint | | | | | |
| used by | element | LineAuxiliary | | | | |
| attributes | Name label | Type xs:string | Use | Default | Fixed | Annotation documentation The optional label attribute is the model entity "nameplate". Normally it can be seen at the entity item in the project tree. |
| | id | QIFIdType | required | | | documentation The required id attribute is the unique model entity identifier. |
| | color | ColorType | | | | documentation The optional color attribute defines the RGB color property of a model entity. |
| | transparency | xs:double | | 0.0 | | documentation The optional transparency attribute defines the transparency property of a model entity. |
| | hidden | xs:boolean | | 0 | | documentation The optional hidden attribute defines the visibility property of a model entity in the graphical window. |
| | size | DoublePositiveType | | | | documentation The optional size attribute defines a recommended size for visualization of an infinite drawable element such as plane, cylinder, axis, etc., or objects without explicit geometric parameters (e.g. coordinate system). |
| | annotation | documentation The LineAuxiliaryType defines an auxiliary line. | | | | |

complexType **PlaneClippingType**

| | | | | | | |
|------------|---|---------------------------|----------|---------|-------|--|
| diagram | | | | | | |
| type | extension of AuxiliaryPlaneBaseType | | | | | |
| properties | base AuxiliaryPlaneBaseType | | | | | |
| children | Attributes Plane | | | | | |
| used by | element PlaneClipping | | | | | |
| attributes | Name | Type | Use | Default | Fixed | Annotation |
| | label | xs:string | | | | documentation The optional label attribute is the model entity "nameplate". Normally it can be seen at the entity item in the project tree. |
| | id | QIFIdType | required | | | documentation The required id attribute is the unique model entity identifier. |
| | color | ColorType | | | | documentation The optional color attribute defines the RGB color property of a model entity. |
| | transparency | xs:double | | 0.0 | | documentation The optional transparency attribute defines the transparency property of a model entity. |
| | hidden | xs:boolean | | 0 | | documentation The optional hidden attribute defines the visibility property of a model entity in the graphical window. |
| | size | DoublePositiveType | | | | documentation The optional size attribute defines a recommended size for visualization of an infinite drawable element such as plane, cylinder, axis, etc., or objects without explicit |

| | | |
|------------|--|--|
| | <p>index xs:integer required</p> <p>enable xs:boolean true</p> | <p>geometric parameters (e.g. coordinate system). documentation The index attribute is the clipping plane index. documentation The enable attribute is the clipping plane state - enabled or disabled.</p> |
| annotation | <p>documentation The PlaneClippingType defines a model clipping plane. The objects or portions of objects in the scene on the side of the plane in the direction of the plane normal appear to be removed when the scene is drawn. This enables, for example, producing cutaway views of parts and assemblies.</p> | |

attribute **PlaneClippingType/@index**

| | |
|------------|---|
| type | xs:integer |
| properties | use required |
| annotation | <p>documentation The index attribute is the clipping plane index.</p> |

attribute **PlaneClippingType/@enable**

| | |
|------------|--|
| type | xs:boolean |
| properties | default true |
| annotation | <p>documentation The enable attribute is the clipping plane state - enabled or disabled.</p> |

complexType **PlaneReferenceType**

| | | | | | | |
|------------|---|--------------------------|-----|---------|-------|--|
| diagram | | | | | | |
| type | extension of AuxiliaryPlaneBaseType | | | | | |
| properties | base AuxiliaryPlaneBaseType | | | | | |
| children | Attributes Plane | | | | | |
| used by | element PlaneReference | | | | | |
| attributes | Name label | Type xs:string | Use | Default | Fixed | Annotation documentation The optional label attribute is the |

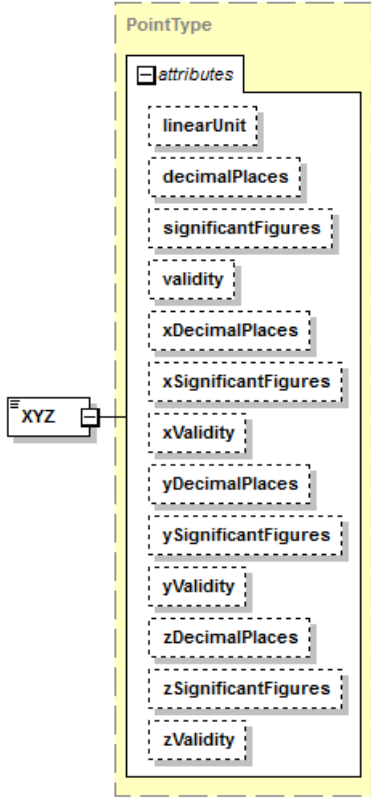
| | | |
|------------|---|---|
| | <div> <div>id</div> <div>QIFIdType</div> <div>required</div> </div> <div> <div>color</div> <div>ColorType</div> </div> <div> <div>transparency</div> <div>xs:double</div> <div>0.0</div> </div> <div> <div>hidden</div> <div>xs:boolean</div> <div>0</div> </div> <div> <div>size</div> <div>DoublePositiveType</div> </div> | <p>model entity "nameplate". Normally it can be seen at the entity item in the project tree.</p> <p>documentation</p> <p>The required id attribute is the unique model entity identifier.</p> <p>documentation</p> <p>The optional color attribute defines the RGB color property of a model entity.</p> <p>documentation</p> <p>The optional transparency attribute defines the transparency property of a model entity.</p> <p>documentation</p> <p>The optional hidden attribute defines the visibility property of a model entity in the graphical window.</p> <p>documentation</p> <p>The optional size attribute defines a recommended size for visualization of an infinite drawable element such as plane, cylinder, axis, etc., or objects without explicit geometric parameters (e.g. coordinate system).</p> |
| annotation | <p>documentation</p> <p>The PlaneReferenceType defines a plane with user defined attributes and direct references; the plane may be used as an auxiliary plane.</p> | |

complexType PointAuxiliaryType

| | | | | | | | |
|------------|--|-----------------------|-----|---------|-------|--|--|
| diagram | | | | | | | |
| type | extension of AuxiliaryBaseType | | | | | | |
| properties | base | AuxiliaryBaseType | | | | | |
| | abstract | true | | | | | |
| children | Attributes XYZ | | | | | | |
| used by | element | PointAuxiliary | | | | | |
| attributes | Name | Type | Use | Default | Fixed | Annotation | |
| | label | xs:string | | | | documentation The optional label attribute is the model entity "nameplate". Normally it can be seen at the entity item in the project tree. | |

| | | | | |
|------------|---|--------------------|----------|---|
| | id | QIFIdType | required | documentation The required id attribute is the unique model entity identifier. |
| | color | ColorType | | documentation The optional color attribute defines the RGB color property of a model entity. |
| | transparency | xs:double | 0.0 | documentation The optional transparency attribute defines the transparency property of a model entity. |
| | hidden | xs:boolean | 0 | documentation The optional hidden attribute defines the visibility property of a model entity in the graphical window. |
| | size | DoublePositiveType | | documentation The optional size attribute defines a recommended size for visualization of an infinite drawable element such as plane, cylinder, axis, etc., or objects without explicit geometric parameters (e.g. coordinate system). |
| annotation | documentation The PointAuxiliaryType defines an auxiliary point. | | | |

element **PointAuxiliaryType/XYZ**

| | | | |
|------------|--|---------|------------|
| diagram |  | | |
| type | PointType | | |
| properties | content | complex | |
| facets | Kind | Value | Annotation |
| | length | 3 | |

| attributes | Name | Type | Use | Default | Fixed | Annotation |
|------------|---|------------------------------|-----|---------|-------|------------|
| | linearUnit | xs:token | | | | |
| | decimalPlaces | xs:nonNegativeInteger | | | | |
| | significantFigures | xs:nonNegativeInteger | | | | |
| | validity | ValidityEnumType | | | | |
| | xDecimalPlaces | xs:nonNegativeInteger | | | | |
| | xSignificantFigures | xs:nonNegativeInteger | | | | |
| | xValidity | ValidityEnumType | | | | |
| | yDecimalPlaces | xs:nonNegativeInteger | | | | |
| | ySignificantFigures | xs:nonNegativeInteger | | | | |
| | yValidity | ValidityEnumType | | | | |
| | zDecimalPlaces | xs:nonNegativeInteger | | | | |
| | zSignificantFigures | xs:nonNegativeInteger | | | | |
| | zValidity | ValidityEnumType | | | | |
| annotation | documentation | | | | | |
| | The XYZ element is the Cartesian three-dimensional coordinates of the 3D point. | | | | | |