

IFC Release Specific Concept Description (IFC2x3)

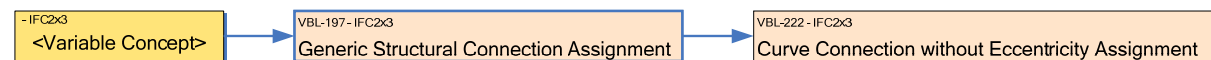
Curve Connection without Eccentricity Assignment

Reference	VBL-222	Version	3	Status	Proposal
Relationships	Implements general concept 'Non Eccentric Curve Connection'.				
History	Created 23.10.2006, improved 28.9.2007, Condition coordinate system added 17.1.2008				
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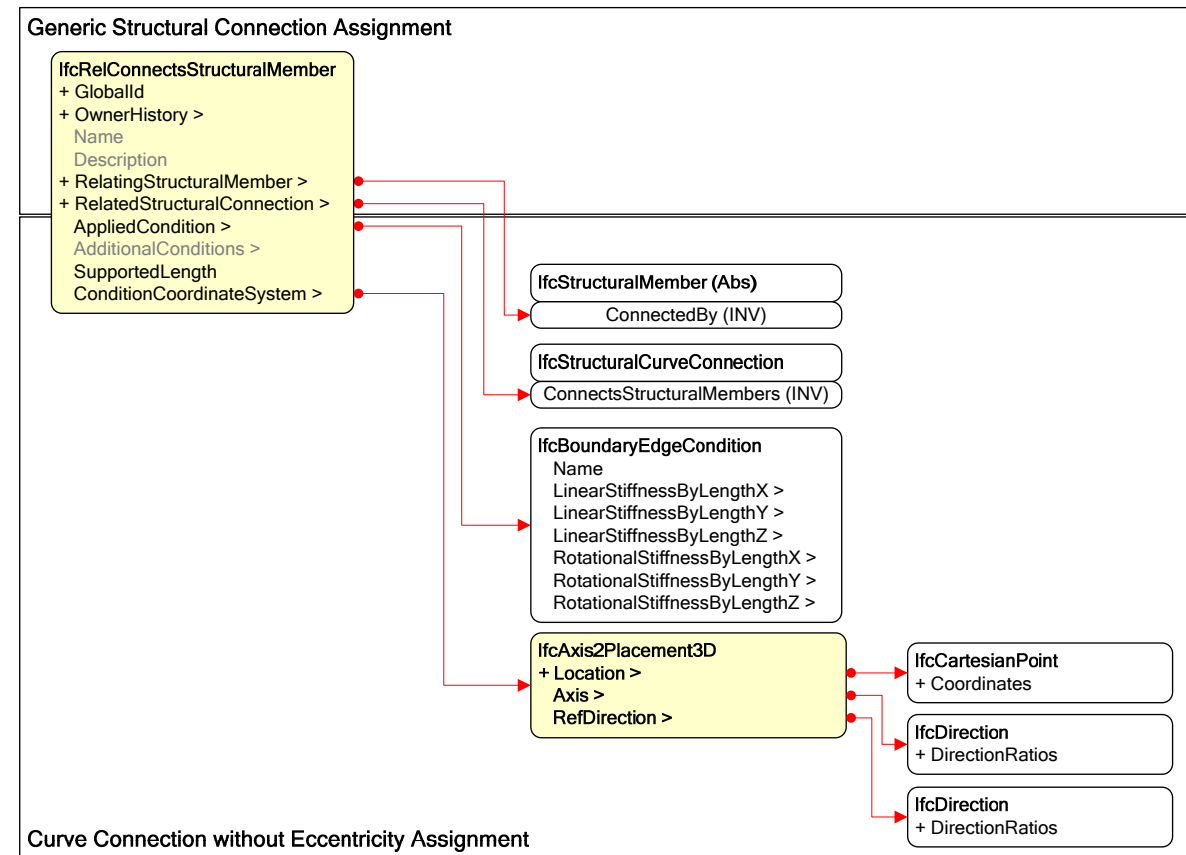
General

In the IfcBoundaryCondition value (-1.) represents an infinitive large value – or a fixed connectivity with infinitive stiffness, value zero (0.) represents no stiffness or a free connectivity, value NIL (\$) represents an unknown connectivity condition, any other value represents a finitive stiffness or spring connectivity in that direction or rotation.

Usage in view definition diagram



Instantiation diagram



Implementation agreements

IfcRelConnectsStructuralMember

Attribute	Implementation agreements
GlobalId	Providing a GUID is mandatory, but the GUID is allowed to change.
OwnerHistory	Providing an OwnerHistory is mandatory, but it is allowed to use dummy data.
Name	Reserved.
Description	Reserved.
RelatingStructuralMember	N/A
RelatedStructuralConnection	Must be IfcStructuralCurveConnection
AppliedCondition	Must be IfcBoundaryEdgeCondition.
AdditionalConditions	Not used.
SupportedLength	Only given if the support has actual width. Otherwise '\$' is used. Given in the units defined in the IfcProject's UnitsInContext.
ConditionCoordinateSystem	Not used.

IfcAxis2Placement3D

Attribute	Implementation agreements
Location	<i>Giving location is mandatory, but while in this case it doesn't have any special meaning (0,0,0) is used.</i>
Axis	N/A
RefDirection	N/A

Additional information

P21 example

```
#1932=IFCRELCONNECTSSTRUCTURALMEMBER('3Un2VvhJL1rdAhx8AzIFo',#2,$,$,#27,#1477,#84,$,$,#300);  
  
#27=IFCSTRUCTURALSURFACEMEMBER('0AbYY4X996QLF7zcCd1MFX',#2,'Example surface member',$,$,#1592,#1623,.BENDING_ELEMENT.,200.0);  
#1477=IFCSTRUCTURALCURVECONNECTION('2$8aT4gQrDOL6W1ZENGRST',#2,'Example curve connection',$,$,#1740,#1741,$);  
#84=IFCBOUNDARYEDGECONDITION($,-1.0,-1.0,-1.0,-1.0,-1.0,-1.0);  
#297= IFCCARTESIANPOINT((0.,0.,0.));  
#298= IFCDIRECTION((0.,0.,1.));  
#299= IFCDIRECTION((1.,0.,0.));  
#300= IFCAxis2PLACEMENT3D(#297,#298,#299);
```

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The content of this document has to be certified by the IAI before becoming part of an official IFC Model View Definition.