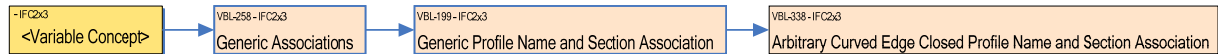


## IFC Release Specific Concept Description (IFC2x3)

# Arbitrary Curved Edge Closed Profile Name and Section Associations

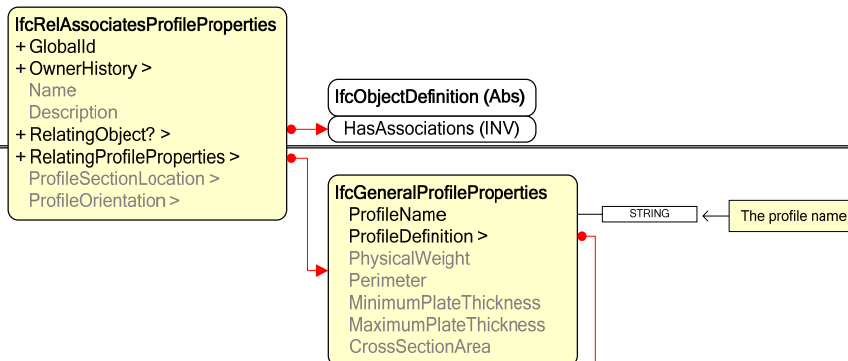
Reference	VLB-338	Version	2	Status	Proposal
Relationships					
History	Created 16.3.2007, improved 28.9.2007				
Authors	Sakari Lehtinen				
Document Owner	Virtual Building Laboratory @ TUT (sakari.lehtinen@tut.fi)				

### Usage in view definition diagram

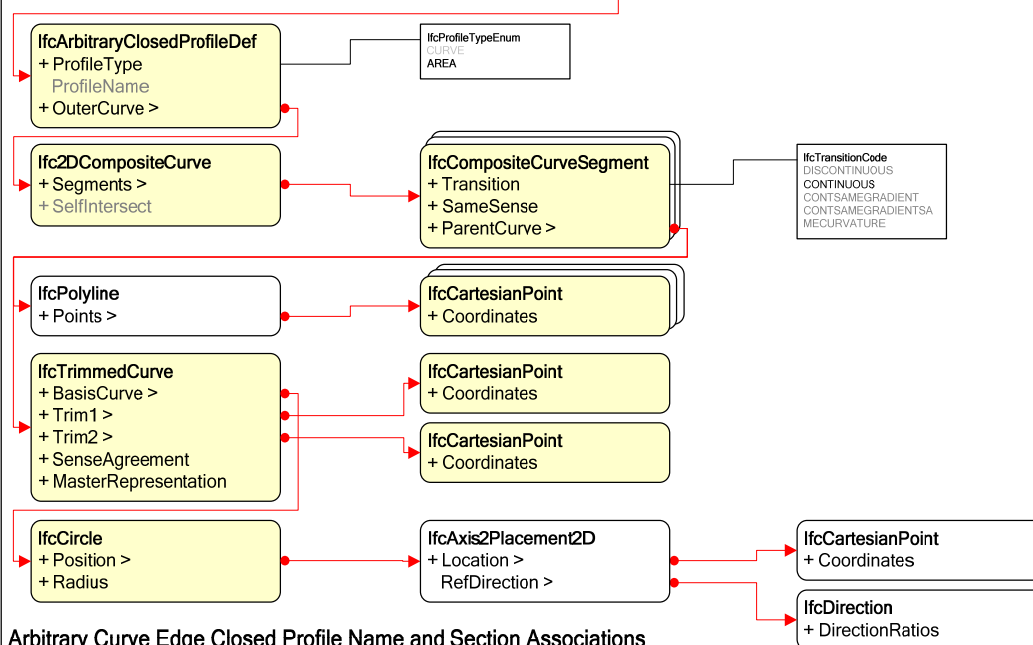


### Instantiation diagram

#### Generic Associations



#### Generic Profile Name and Section Associations



#### Arbitrary Curve Edge Closed Profile Name and Section Associations

### Implementation agreements

#### IfcRelAssociatesProfileProperties

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.
RelatedObjects	N/A
RelatingProfileProperties	Must be IfcGeneralProfileProperties.
ProfileSectionLocation	Not used.
ProfileOrientation	Not used.
IfcGeneralProfileProperties	
Attribute	Implementation agreements
ProfileName	The profile name associated to the structural member is entered here.
ProfileDefinition	Must be IfcArbitraryClosedProfileDef.
PhysicalWeight	Not used.
Perimeter	Not used.
MinimumPlateThickness	Not used.
MaximumPlateThickness	Not used.
CrossSectionArea	Not used.
IfcArbitraryClosedProfileDef	
Attribute	Implementation agreements
ProfileType	Must be AREA.
ProfileName	Not used.
OuterCurve	Must be Ifc2DCompositeCurve.
Ifc2DCompositeCurve	
Attribute	Implementation agreements
Dim	N/A
Segments	N/A
SelfIntersect	Not used.
NSegments	N/A
ClosedCurve	N/A
IfcCompositeCurveSegment	
Attribute	Implementation agreements
Transition	Must be CONTINUOUS.
SameSense	N/A
ParentCurve	Must be IfcPolyline or/and IfcTrimmedCurve.
Dim	N/A
IfcTrimmedCurve	
Attribute	Implementation agreements
Dim	N/A
BasisCurve	Must be IfcCircle.
Trim1	Must be IfcCartesianPoint.
Trim2	Must be IfcCartesianPoint.
SenseAgreement	N/A
MasterRepresentation	N/A
IfcCircle	
Attribute	Implementation agreements
Dim	N/A
Position	Must be IfcAxis2Placement2D
Radius	N/A
IfcCartesianPoint	
Attribute	Implementation agreements
Coordinates	Must be two dimensions.
Dim	N/A

This document uses the official IFC Model View Definition Format version 1.1.0. of the IAI ([www.iai-international.org](http://www.iai-international.org))  
The content of this document has to be certified by the IAI before becoming part of an official IFC Model View Definition.