CoordinationView 2.0 / Import

CV2.0

RIB

RIB iTWO

26/11/2013

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Introduction

RIB iTWO 2013 and following versions ship with IFC import in the 5D standard setups.

The release being certified is iTWO 2013 build 3.3.468.

Users find the IFC functionality in the 3D Control import menu.
The following steps allow quality check, filtering merging of the models before further processing the data in iTWO 5D project management.

The description is part of the help documentation.

Testlist

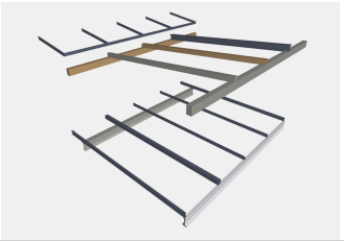
Name test	concepts total	manually checked		
		■	■	■
Beam_01 / 2x3	10	10		
Beam_02 / 2x3	12	8	4	
Beam_03 / 2x3	6	3	2	1
Column 01 / 2x3	11	11		
Column_02 / 2x3	6	6		
CoveringFurnishing-01 / 2x3	57	35	13	9
CurtainWall-01 / 2x3	29	22	4	3
Door 01 / 2x3	22	14	5	3
Grid 01 / 2x3	11	8	2	1
Member_01S / 2x3	10	7	1	2
Pile 01 / 2x3	19	15	3	1
PlateFastener-01 / 2x3	67	46	15	6
RampRailing-01 / 2x3	28	25		3
RandomArch-X1 AC16 / 2x3	52	32	11	9
RandomArch-X2 RAC / 2x3	10	7		3
RandomMEP-X2 BENCH / 2x3	21	21		
RandomMEP-X5 BENCH / 2x3	32	31		1
RandomStruc-X2 TS / 2x3	9	8	1	
RandomStruc-X5 Scia / 2x3	9	8	1	
Reinforcement-01 / 2x3	94	75	14	4
Roof 01 / 2x3	15	12	2	1
Site 02 / 2x3	13	10	3	
Slab 02A / 2x3	24	16	6	2
Space 01A / 2x3	12	11		1
StairSlab-01 / 2x3	19	17		2
UnitTest-01A / 2x3	3	3		

■ Supported ■ Restricted ■ Not Supported

Name test	concepts total	manually checked		
		■	■	■
Wall 02 / 2x3	14	11	2	1
WallStandardCase 01A / 2x3	15	10	3	2
Window 01 / 2x3	22	14	5	3

Concepts

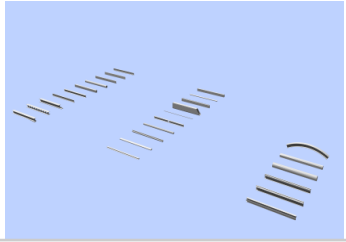
Beam_01 / 2x3



103 IfcBeam	*company statement*	*Beam_01 / 2x3*
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element. will be imported.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	

040 Presentation		
040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported object's according to #CV-2x3-131. In order to get a better color represention for IfcBooleanResult, which have no directly connected styleItem, the color of the first operand will be used.
040-2 Material Presentation		If a material has a presentation but no geometrical presentation, the material presentation color will be used for imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResult, which have no directly connected styleItem, the color of the first operand will be used.
120 Spatial Containment		Spatial structure is mapped to the object structure, which is necessary for following process in RIB iTWO.
200 Material		
200-1 Single Material		Material name will be collected and imported as property "MaterialName".
210 Property Set		
210-1 Property Set IFC Common		IFC common properties will be collected and imported as properties.
General	*company statement*	*Beam_01 / 2x3*
_G4 Remarks		All necessary data will be imported from the source IFC file, such as the spatial structure, geometrical data, object's color and properties.

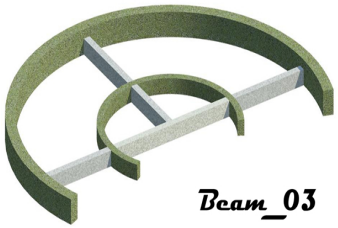
Beam_02 / 2x3



103 IfcBeam	*company statement*	*Beam_02 / 2x3*
010 Naming	Elements will be imported using their given names.	
030 Geometry		
030-2 Geometry Axis	Axis information will be collected and imported as properties "cpiComponentDirection" and "cpiComponentAxis". The RIB iTWO viewer doesn't show the axis currently.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	
030-6-5 Geometry Explicit	Geometry Explicit will be imported. Elements with more than one Brep will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
050 CAD Layer	The CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". No native layer concept as used in CAD applications.	

070 Voiding		
070-1 Voiding Geometry Explicit		Voiding Geometry Explicit will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.
070-2 Voiding Geometry Mapped		Voiding Geometry Mapped will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.imported.
070-3 Voiding Geometry SweptSolid		Voiding Geometry SweptSolid will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.
120 Spatial Containment		Spatial structure will be mapped to the object structure, which is necessary for following process of RIB iTWO. Negative elements will be linked to voided elements. The RIB iTWO viewer doesn't show it this way currently.
200 Material		
200-1 Single Material		Material name will be imported as property "MaterialName".
General	*company statement*	*Beam_02 / 2x3*
_G4 Remarks		All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one Brep will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.

Beam_03 / 2x3

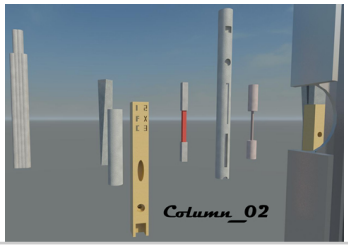


103 IfcBeam	company statement	Beam_03 / 2x3
030 Geometry		
030-1 Geometry Box	The bounding box in the source file will not be imported. RIB iTWO will generate a bounding box according to its usage.	
030-2 Geometry Axis	Axis information will be collected and imported as properties "cpiComponentDirection" and "cpiComponentAxis". The RIB iTWO viewer doesn't show the axis currently.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	
300 Type		
300-5 Type Property Set	Type properties will be collected and imported as properties. Properties from type object will be assigned to imported object instances.	

General	company statement	Beam_03 / 2x3
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one Brep will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

Supported Restricted Not Supported

Column_02 / 2x3



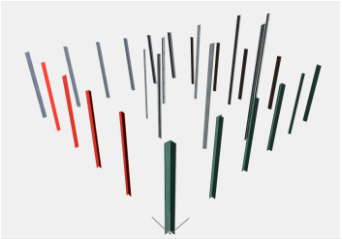
104 IfcColumn	company statement	Column_02 / 2x3
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-5 Geometry Explicit	Their geometrical data will be imported.	
070 Voiding		
070-1 Voiding Geometry Explicit	Voiding Geometry Explicit will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.	
070-2 Voiding Geometry Mapped	Voiding Geometry Mapped will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.	
070-3 Voiding Geometry SweptSolid	Voiding SweptSolid will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.	

General	company statement	Column_02 / 2x3
_G4 Remarks		

Supported Restricted Not Supported

All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties.

Column 01 / 2x3

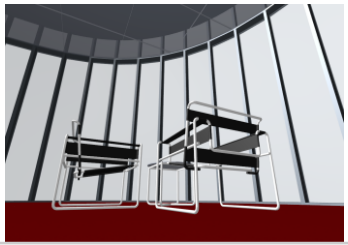


104 IfcColumn	company statement	Column 01 / 2x3
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	
040 Presentation		
040-1 Geometric Presentation	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.	
040-2 Material Presentation	If a material has a presentation but no geometric presentation, the material presentation color will be used for imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResult, which has no directly connected styleItem, the color of the first operand will be used.	
050 CAD Layer	CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". No native layer concept as used in CAD	

Supported Restricted Not Supported

	applications	
120 Spatial Containment	Spatial structure will be mapped to the object structure, which is necessary for following business process of RIB iTWO.	
200 Material		
200-1 Single Material	Material name will be imported as property "MaterialName".	
210 Property Set		
210-1 Property Set IFC Common	IFC common properties will be collected and imported as properties.	
General	*company statement*	*Column 01 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties.	

CoveringFurnishing-01 / 2x3



CoveringFurnishing-01 / 2x3

210 IfcFlowTerminal	company statement
001 GUIDs	IFC GUIDs will be imported.
010 Naming	Elements will be imported using their given names.
020 Placement	
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry	
030-6 Geometry Body	
030-6-5 Geometry Explicit	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-9 Geometry Mapped	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
040 Presentation	
040-1 Geometric Presentation	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.

Supported Restricted Not Supported

050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for following business process of RIB iTWO.
210 Property Set		
210-1 Property Set IFC Common		IFC Common properties will be imported as properties.
210-6 Property Set IFC any		IFC "any" properties will be imported as properties.
210-9 Property Set User Defined		User Defined properties will be imported as properties.
300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances.
300-3 Type Material		Material of type object will be assigned to imported object instances.
300-5 Type Property Set		Type properties will be imported as properties. Properties of type object will be assigned to imported object instances.
303 IfcCovering	*company statement*	*CoveringFurnishing-01 / 2x3*
010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.

030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-9 Geometry Mapped	■	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
040 Presentation		
040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	■	CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
070 Voiding		
120 Spatial Containment	■	Spatial structure will be mapped to the object structure which is necessary for following business process of RIB iTWO.
200 Material		
200-1 Single Material	■	Material name will be imported as property "MaterialName".
200-3 Material Layer Set	■	Layer information will be imported as properties.
210 Property Set		
210-1 Property Set IFC Common	■	IFC Common properties will be imported as properties.

300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances.
300-3 Type Material		Material from type object will be assigned to imported object instances.
300-5 Type Property Set		The type properties will be imported as properties. Properties from type object will be assigned to imported object instances.
304 IfcFurnishingElement	*company statement*	*CoveringFurnishing-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit		Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-9 Geometry Mapped		Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.

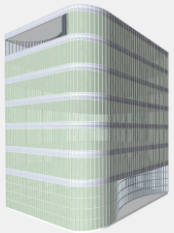
040 Presentation		
040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for following business process of RIB iTWO.
200 Material		
200-1 Single Material		Material name will be imported as property "MaterialName".
200-5 Material List		Material List will not be imported, since it will not be used within the RIB iTWO business process currently.
210 Property Set		
210-6 Property Set IFC any		IFC "any" properties will be imported as properties.
210-9 Property Set User Defined		User Defined properties will be imported as properties.
300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances.
300-3 Type Material		Material of type object will be assigned to imported object instances.
300-5 Type Property Set		Type properties will be imported as properties. Properties of type object will be assigned to imported object instances.
505 IfcSpace	*company statement*	*CoveringFurnishing-01 / 2x3*

Supported Restricted Not Supported

030 Geometry		
030-3 Geometry FootPrint	Profile is not used within the RIB iTWO process currently. Profile will be imported if no body representation exits.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Their geometrical data will be imported.	
120 Spatial Containment	Spatial structure will be mapped to the object structure which is necessary for following process.	
130 Grouping		
130-3 Grouping to Zones	Grouping To Zones will not be imported, since it is not used within the RIB iTWO business process currently.	
230 Classification	Classification will not be imported, since it is not used within the RIB iTWO business process currently.	
508 IfcZone	*company statement*	*CoveringFurnishing-01 / 2x3*
001 GUIDs	Zone objects for grouping will not be imported, since they will not be used within the RIB iTWO business process currently.	
002 History	Zone objects for grouping will not be imported, since they will not be used within the RIB iTWO business process currently.	
010 Naming	Zone objects for grouping will not be imported, since they will not be used within the RIB iTWO business process currently.	
130 Grouping		
130-5 Is Group	Zone objects for grouping will not be imported, since they will not be used within the RIB iTWO business process currently.	

210 Property Set		
210-1 Property Set IFC Common	Zone objects for grouping will not be imported, since they will not be used within the RIB iTWO business process currently.	
210-9 Property Set User Defined	Zone objects for grouping will not be imported, since they will not be used within the RIB iTWO business process currently.	
General	*company statement*	*CoveringFurnishing-01 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

CurtainWall-01 / 2x3



109 IfcCurtainWall	*company statement*	*CurtainWall-01 / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-1 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	Geometry Explicit will be imported.	
030-9 Geometry By Components	AX 2013-04-17] Components' geometry will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
040 Presentation		
040-1 Geometric Presentation	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.	
050 CAD Layer	CAD layer information will be collected and imported as property	

Supported Restricted Not Supported

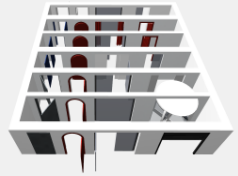
		"ifcPresentationLayerAssignment". No native layer concept will be used as in CAD applications.	
100 Element Aggregation			
100-2 Element Decomposition		Element decomposition will be mapped to the object structure. The composite element will be mapped to a composite container.	
120 Spatial Containment		Spatial structure will be mapped to the object structure, which is necessary for the following process of RIB iTWO.	
200 Material			
200-1 Single Material		Material name will be imported as property "MaterialName".	
200-5 Material List		Material List will not be imported, since it will not be used within the RIB iITWO business process currently.	
210 Property Set			
210-1 Property Set IFC Common		IFC Common Properties will be collected and imported as properties.	
210-3 Property Set User Defined		User Defined properties will be collected and imported as properties.	
300 Type			
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.	
300-2 Type Naming		No "TypeObject" concept. Name of type object will be collected as a property "ifcTypeObjectName" of object occurrences.	
300-3 Type Material		Material from type object will be assigned to imported object instances.	
300-5 Type Property Set		Properties will be imported as properties. Properties from type object will be assigned to imported object instances.	
501 IfcProject		*company statement*	*CurtainWall-01 / 2x3*
010 Naming		Elements will be imported using their given names.	
502 IfcSite		*company statement*	*CurtainWall-01 / 2x3*

Supported Restricted Not Supported

010 Naming	Elements will be imported using their given names.	
060 Location		
060-1 Geographic Location	Geographic Location data will be stored in property "ifcRelLatitude" and "ifcRelLongtitude" for site container.	
060-2 Address	Address data will not be imported, since it is not used within the RIB iTWO business process currently.	
503 IfcBuilding	*company statement*	*CurtainWall-01 / 2x3*
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
504 IfcBuildingStorey	*company statement*	*CurtainWall-01 / 2x3*
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
060 Location		
060-4 Storey Elevation	Property "ifcStoreyElevation" for storey container stores the real height value of the storey. Property "ifcElevation" for storey container stores the height object. Elevation is the height value of that height object.	
210 Property Set		
210-1 Property Set IFC Common	The properties will be collected and imported as properties.	
General	*company statement*	*CurtainWall-01 / 2x3*

_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties.

Door 01 / 2x3

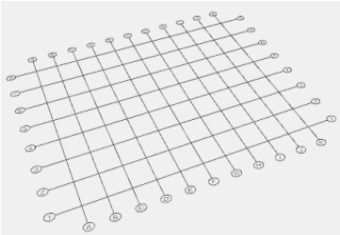


302 IfcDoor	company statement	Door 01 / 2x3
001 GUIDs		IFC GUIDs will be imported.
002 History		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-5 Geometry Profile		Profile is not used within the RIB iTWO business process currently. Profile will be imported if no body representation exists.
030-6 Geometry Body		
030-6-5 Geometry Explicit		Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.
030-6-9 Geometry Mapped		Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.

040 Presentation		
040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	■	CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.
080 Filling		
080-2 Is Filling	■	All object will be imported as free standing. Property "ifcIsFilling" will be added to store the IFC GUID of the related filled opening. The RIB iTWO viewer doesn't show this relationship.
120 Spatial Containment	■	All Doors will be imported as free standing objects.
200 Material		
200-1 Single Material	■	Material name will be imported as property "MaterialName".
200-5 Material List	■	Material List will not be imported, since it will not be used within the RIB iTWO business process currently.
210 Property Set		
210-1 Property Set IFC Common	■	IFC Common properties will be imported as properties.
210-2 Property Set IFC any	■	IFC "any" properties will be imported as properties.
210-3 Property Set User Defined	■	User Defined properties will be imported as properties.

300 Type		
300-1 Type Geometry	No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.	
300-2 Type Naming	No "TypeObject" concept. Name of type object will be collected as a property "ifcTypeObjectName" and will be assigned to imported object instances.	
300-3 Type Material	Material from type object will be assigned to imported object instances.	
300-5 Type Property Set	The type properties will be imported as properties. Properties from type object will be assigned to imported object instances.	
300-6 Type Predefined Properties		
300-6-1 Type Predefined Properties Door	No "TypeObject" concept. Type predefined properties door will not be imported.	
General	*company statement*	*Door 01 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element. If a voiding element has multiple body representation items, the voiding element will be imported as several geometric objects.	

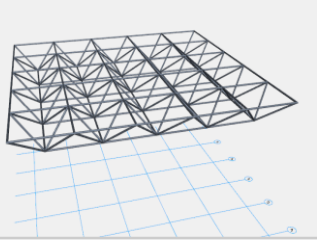
Grid 01 / 2x3



509 IfcGrid	company statement	Grid 01 / 2x3
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming	Elements will be imported using their given names.	
020 Placement 020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry 030-3 Geometry FootPrint	"FootPrint" curves will be imported.	
040 Presentation 040-1 Geometric Presentation	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131.	
050 CAD Layer	CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.	
120 Spatial Containment	Spatial structure will be mapped to the object structure, which is necessary for the following business process of RIB iTWO.	

210 Property Set		
210-3 Property Set User Defined		User Defined properties will be imported as properties.
270 Grid Usage		
270-1 Grid Axes		Grid curves will be imported. Grid tags will not be supported currently. It is not necessary for the following business logic of RIB iTWO currently.
General	*company statement*	*Grid 01 / 2x3*
_G4 Remarks		All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Grid tags will not be supported currently.

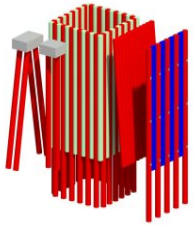
Member_01S / 2x3



401 IfcMember	company statement	Member_01S / 2x3
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	
110 Connectivity		
110-1 Connectivity Basic	Connectivity Basic will not be imported, since it is not used within the RIB iTWO business process currently.	
110-3 Connectivity Realization		
110-3-1 Connectivity Realized	Connectivity Realized will not be imported, since it is not used within the RIB iTWO business process currently.	
120 Spatial Containment	Spatial structure will be mapped to the object structure which is necessary for following process of RIB iTWO.	

200 Material		
200-1 Single Material	Material name will be imported as property "MaterialName".	
300 Type		
300-1 Type Geometry	No "TypeObject" concept. The representation map will be parsed if it is referenced by imported object instances.	
General	*company statement*	*Member_01S / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

Pile 01 / 2x3

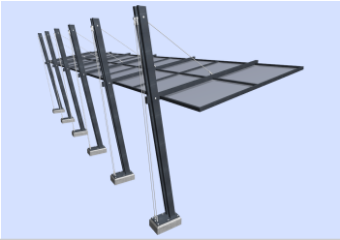


404 IfcPile	*company statement*	*Pile 01 / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-1 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	
030-6-9 Geometry Mapped	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	

040 Presentation		
040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
040-2 Material Presentation	■	If a material has a presentation but no geometrical presentation, the material presentation color will be used for imported objects according to #CV-2x3-131.
050 CAD Layer	■	CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
070 Voiding		
070-3 Voiding Geometry SweptSolid	■	Voiding SweptSolid will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.
100 Element Aggregation		
100-2 Element Decomposition	■	Element decomposition iwill be mapped to the object structure. The composite element will be mapped to a composite container.
120 Spatial Containment	■	Spatial structure will be mapped to the object structure which is necessary for following process of RIB iTWO.
200 Material		
200-1 Single Material	■	Material name will be imported as property "MaterialName".
210 Property Set		
210-3 Property Set User Defined	■	User Defined properties will be imported as properties.

300 Type		
300-1 Type Geometry	No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.	
300-3 Type Material	Material of type object will be assigned to imported object instances.	
300-5 Type Property Set	The type properties will be imported as properties. Properties of type object will be assigned to existing object instances.	
General	*company statement*	*Pile 01 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties.	

PlateFastener-01 / 2x3



103 IfcBeam	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-9 Geometry Mapped	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	

104 IfcColumn	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	

030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-9 Geometry Mapped		Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
100 Element Aggregation		
100-2 Element Decomposition		Element decomposition will be mapped to the object structure. The composite element will be mapped to a composite container.
210 Property Set		
210-3 Property Set User Defined		User Defined properties will be imported as properties.
300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it is referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances.
300-3 Type Material		Material of type object will be assigned to imported object instances.
300-5 Type Property Set		The type properties will be imported as properties. Properties of type object will be assigned to imported object instances.
401 IfcMember	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
002 History		

Supported Restricted Not Supported

		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-9 Geometry Mapped		Their geometrical data will be imported.
040 Presentation		
040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
210 Property Set		
210-1 Property Set IFC Common		IFC Common properties will be imported as properties.
210-3 Property Set User Defined		The properties will be collected and imported as properties.

300 Type			
300-2 Type Naming		No "TypeObject" concept. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances.	
300-3 Type Material		Material of type object will be assigned to imported object instances.	
300-5 Type Property Set		Type properties will be imported as properties. Properties of type object will be assigned to imported object instances.	
402 IfcPlate		*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.	
002 History		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming		Elements will be imported using their given names.	
020 Placement			
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping		Geometry Clipping will be imported.	
030-6-5 Geometry Explicit		Their geometrical data will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	

040 Presentation		
040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	■	CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
070 Voiding		
070-3 Voiding Geometry SweptSolid	■	Voiding SweptSolid will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.
120 Spatial Containment	■	Spatial structure will be mapped to the object structure which is necessary for following process of RIB iTWO.
200 Material		
200-2 Material Layer Set	■	Layer information will be imported as properties.
210 Property Set		
210-1 Property Set IFC Common	■	IFC Common properties will be imported as properties.
210-3 Property Set User Defined	■	User Defined properties will be imported as properties.

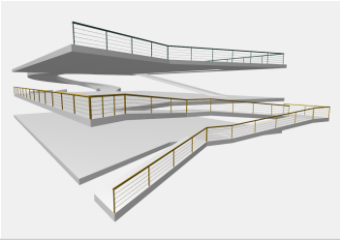
300 Type			
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.	
300-2 Type Naming		No "TypeObject" concept. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances.	
300-3 Type Material		Material of type object will be assigned to imported object instances.	
300-5 Type Property Set		The type properties will be imported as properties. Properties of type object will be assigned to existing object instances.	
403 IfcFooting		*company statement*	*PlateFastener-01 / 2x3*
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping		Geometry Clipping will be imported.	
405 IfcFastener		*company statement*	*PlateFastener-01 / 2x3*
010 Naming		Elements will be imported using their given names.	
020 Placement			
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry			
030-2 Geometry Axis		Geometry Axis of IfcFastener will not be imported, since it will not be used within the RIB iTWO business process currently.	
406 IfcMechanicalFastener		*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs			

Supported Restricted Not Supported

		IFC GUIDs will be imported.
002 History		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considerd as one element.
030-6-5 Geometry Explicit		Geometry Explicit data will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considerd as one element.
030-6-9 Geometry Mapped		Geometry Mapped data will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considerd as one element.
040 Presentation		
040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
120 Spatial Containment		

		Spatial structure will be mapped to the object structure which is necessary for following process of RIB iTWO.
200 Material		
200-1 Single Material		Material name will be imported as property "MaterialName".
210 Property Set		
210-6 Property Set IFC any		IFC "any" properties will be imported as properties.
210-9 Property Set User Defined		User Defined properties will be imported as properties.
300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances
300-3 Type Material		Material of type object will be assigned to imported object instances.
300-5 Type Property Set		Type properties will be imported as properties. Properties of type object will be assigned to imported object instances.
General	*company statement*	*PlateFastener-01 / 2x3*
_G4 Remarks		

RampRailing-01 / 2x3



107 IfcRamp	*company statement*	*RampRailing-01 / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-1 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-9 Geometry By Components	Components' geometry will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	

040 Presentation		
040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer		CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". No native layer concept as used in CAD applications.
100 Element Aggregation		
100-2 Element Decomposition		Element decomposition will be mapped to the object structure. The composite element will be mapped to a composite container.
120 Spatial Containment		Spatial structure will be mapped to the object structure, which is necessary for the following business process of RIB iTWO.
200 Material		
200-1 Single Material		Material name will be imported as property "MaterialName".
210 Property Set		
210-1 Property Set IFC Common		IFC Common properties will be imported as properties.
210-3 Property Set User Defined		User Defined properties will be imported as properties.
108 IfcRailing	*company statement*	*RampRailing-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
002 History		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
010 Naming		Elements will be imported using their given names.

020 Placement		
020-2 Placement Relative	■	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-5 Geometry Explicit	■	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-9 Geometry Mapped	■	Geometry SwepMapped Solid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
040 Presentation		
040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	■	CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". No native layer concept as used in CAD applications.
120 Spatial Containment	■	Spatial structure will be mapped to the object structure, which is necessary for the following business process of RIB iTWO.

200 Material		
200-1 Single Material	Material name will be imported as property "MaterialName".	
200-5 Material List	Material List will not be imported, since it will not be used within the business process of RIB iTWO currently.	
210 Property Set		
210-1 Property Set IFC Common	IFC Common properties will be imported as properties.	
210-3 Property Set User Defined	User Defined properties will be imported as properties.	
General	*company statement*	*RampRailing-01 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

RandomArch-X1 AC16 / 2x3

101 IfcWallStandardCase	*company statement*	*RandomArch-X1 AC16 / 2x3*
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming	Elements will be imported using their given names.	
030 Geometry		
030-2 Geometry Axis	Axis information will be imported as properties "cpiComponentDirection" and "cpiComponentAxis". The RIB iTWO viewer doesn't show the axis currently.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
050 CAD Layer	CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.	
070 Voiding		
070-1 Voiding Geometry SweptSolid	Their geometrical data will be imported if existing. Imported as negative elements, which can show or hidden within RIB iTWO viewer.	

080 Filling 081 Has Filling 081-2 Has Filling Window		Property "ifcHasFilling" will be assigned to their negative objects in order to store the IFC GUID of he filling window as a reference. The RIB iTWO viewer doesn't show this relationship.	
200 Material 200-4 Material Layer Usage		Layer information will be collected and imported as properties. Position of the layers is not available in RIB iTWO.	
300 Type 300-2 Type Naming		No "TypeObject" concept. Name of type object will be collected as a property "ifcTypeObjectName" of imported object instances.	
102 IfcWall		*company statement*	*RandomArch-X1 AC16 / 2x3*
002 History		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming		Elements will be imported using their given names.	
030 Geometry *030-2 Geometry Axis*		Axis information will be imported and will be collected as property "cpiComponentDirection" and "cpiComponentAxis". iTWO viewer doesn't show axis currently.	
030-6 Geometry Body 030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
050 CAD Layer		CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment".	

Supported Restricted Not Supported

		No native layer concept exists as it is used in CAD applications.
070 Voiding		
070-1 Voiding Geometry Explicit		Voiding Geometry Explicit will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects
070-3 Voiding Geometry SweptSolid		Voiding Geometry SweptSolid will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.
080 Filling		
080-1 Has Filling		
080-1-1 Has Filling Door		Property "ifcHasFilling" will be added to the referenced negative objects, in order to store the IFC GUID of the filling door. The RIB iTWO viewer doesn't show this relationship.
080-1-2 Has Filling Window		Property "ifcHasFilling" will be added to the referenced negative objects, in order to store the IFC GUID of the filling window. The RIB iTWO viewer doesn't show this relationship.
200 Material		
200-1 Single Material		Material name will be imported as property "MaterialName".
200-3 Material Layer Set		The layer information will be collected as properties.
210 Property Set		
210-1 Property Set IFC Common		IFC Common properties will be collected and imported as properties.
300 Type		
300-2 Type Naming		No "TypeObject" concept. Name of type object will be collected as a property "ifcTypeObjectName" of imported object instance.

104 IfcColumn	company statement	RandomArch-X1 AC16 / 2x3
002 History	It is not used within the RIB iTWO process currently.	
010 Naming	Elements will be imported using their given names.	
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
050 CAD Layer	CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.	
200 Material 200-1 Single Material	Material name will be imported as property "MaterialName".	
210 Property Set 210-1 Property Set IFC Common	IFC common properties will be collected and imported as properties.	
300 Type 300-2 Type Naming	No "TypeObject" concept. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances.	

105 IfcSlab	company statement	RandomArch-X1 AC16 / 2x3
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming	Elements will be imported using their given names.	

030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
050 CAD Layer		CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". No native layer concept exists as it is used in CAD applications.
070 Voiding		
070-3 Voiding Geometry SweptSolid		Their geometrical data will be imported if existing. Imported as negative elements, which may be hidden or shown within RIB iTWO viewer.
200 Material		
200-2 Material Layer Set		Layer information will be collected and imported as properties.
200-3 Material Layer Usage		Layer information will be collected and imported as properties. Position of layers is not available.
210 Property Set		
210-1 Property Set IFC Common		IFC Common properties will be collected and imported as properties.
301 IfcWindow	*company statement*	*RandomArch-X1 AC16 / 2x3*
002 History		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
010 Naming		Elements will be imported using their given names.

030 Geometry 030-6 Geometry Body 030-6-5 Geometry Explicit		Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.	
200 Material *200-1 Single Material*		Material name will be imported as property "MaterialName".	
300 Type 300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.	
300-2 Type Naming		No "TypeObject" concept. Name of type object will be collected as a property "ifcTypeObjectName" of object occurrences.	
300-6 Type Predefined Properties			
302 IfcDoor		*company statement*	*RandomArch-X1 AC16 / 2x3*
002 History		It is not used within the RIB iTWO process currently.	
010 Naming		Elements will be imported using their given names.	

030 Geometry 030-6 Geometry Body 030-6-5 Geometry Explicit		Their geometrical data will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.
200 Material *200-1 Single Material*		Material name will be imported as property "MaterialName".
300 Type 300-2 Type Naming		No "TypeObject" concept. Name of type object will be collected as a property "ifcTypeObjectName" and will be assigned to imported object instances.
300-6 Type Predefined Properties 300-6-1 Type Predefined Properties Door		No "TypeObject" concept. Type "Predefined Properties Door" will not be imported.
509 IfcGrid	*company statement*	*RandomArch-X1 AC16 / 2x3*
030 Geometry		
General	*company statement*	*RandomArch-X1 AC16 / 2x3*
_G4 Remarks		All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element. If a voiding element has multiple body representation items, the voiding element will be imported as several geometrical objects.

RandomArch-X2 RAC / 2x3

104 IfcColumn	*company statement*	*RandomArch-X2 RAC / 2x3*
020 Placement 020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry *030-1 Geometry Box*	Bounding box on the source file will not be imported. iTWO will generate a bounding box by itself according to its usage.	
105 IfcSlab	*company statement*	*RandomArch-X2 RAC / 2x3*
020 Placement 020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
408 IfcElementAssembly	*company statement*	*RandomArch-X2 RAC / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
010 Naming	Elements will be imported using their given names.	
020 Placement 020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	

Supported Restricted Not Supported

030 Geometry		
030-1 Geometry Box	Bounding box of the source file will not be imported. iTWO will generate a bounding box by itself according to its usage.	
030-2 Geometry Axis	Geometry Axis for IfcElementAssembly will not be imported, since it is not necessary for the business process of RIB iTWO currently.	
100 Element Aggregation		
100-1 Element Composition	Element composition will be mapped to the object structure. The composite element will be mapped to a composite container.	
General	*company statement*	*RandomArch-X2 RAC / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as the spatial structure, geometrical data, the object's color and the properties.	

RandomMEP-X2 BENCH / 2x3

206 IfcFlowFitting	company statement	RandomMEP-X2 BENCH / 2x3
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	Geometry Mapped will be imported.	
100 Element Aggregation		
100-4 Port Assignment	Assigned ports will be imported below their parent elements. Property "ifcContainedIn" will be added for a port in order to store the IFC GUID of its parent element.	
110 Connectivity		
110-5 Connectivity by Ports	Property "ifcConnectedTo" or "ifcConnectedFrom" will be added for a port to store the IFC GUID of the connected port.	

207 IfcFlowMovingDevice	company statement	RandomMEP-X2 BENCH / 2x3
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	Geometry Explicit will be imported.	
030-6-9 Geometry Mapped	Geometry Mapped will be imported.	

040 Presentation 040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
100 Element Aggregation 100-4 Port Assignment		Assigned ports will be imported below their parent elements. Property "ifcContainedIn" will be added for a port to store the IFC GUID of its parent element.
110 Connectivity 110-5 Connectivity by Ports		Property "ifcConnectedTo" or "ifcConnectedFrom" will be added for a port to store the IFC GUID of the connected port.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for following business process of RIB iTWO.
200 Material 200-1 Single Material		Material name will be imported as property "MaterialName".
210 Property Set 210-9 Property Set User Defined		User Defined properties will be imported as properties.
208 IfcFlowSegment	*company statement*	*RandomMEP-X2 BENCH / 2x3*
030 Geometry 030-6 Geometry Body 030-6-9 Geometry Mapped		Geometry Mapped will be imported.

100 Element Aggregation 100-4 Port Assignment		Assigned ports will be imported below their parent elements. Property "ifcContainedIn" will be added for a port to store the IFC GUID of its parent element.
110 Connectivity 110-5 Connectivity by Ports		Property "ifcConnectedTo" or "ifcConnectedFrom" will be added for a port to store the IFC GUID of the connected port.
210 IfcFlowTerminal	*company statement*	*RandomMEP-X2 BENCH / 2x3*
030 Geometry 030-6 Geometry Body 030-6-9 Geometry Mapped		Geometry Mapped will be imported.
100 Element Aggregation 100-4 Port Assignment		Assigned ports will be imported below their parent elements. Property "ifcContainedIn" will be added for a port to store the IFC GUID of its parent element.
110 Connectivity 110-5 Connectivity by Ports		Property "ifcConnectedTo" or "ifcConnectedFrom" will be added for a port to store the IFC GUID of the connected port.
General	*company statement*	*RandomMEP-X2 BENCH / 2x3*
_G4 Remarks		All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. If an element has children, this element will be mapped to a container and its geometry will be stored in an additional geometrical object which will be added below the element container.The "MaterialName" property will be exported to the geometrical object.

RandomMEP-X5 BENCH / 2x3

205 IfcFlowController	*company statement*	*RandomMEP-X5 BENCH / 2x3*
100 Element Aggregation		
100-4 Port Assignment	Assigned ports will be imported below their parent elements. Property "ifcContainedIn" will be added for a port to store the IFC GUID of its parent element.	
110 Connectivity		
110-5 Connectivity by Ports	Property "ifcConnectedTo" or "ifcConnectedFrom" will be added for a port in order to store the IFC GUID of the connected port.	
206 IfcFlowFitting	*company statement*	*RandomMEP-X5 BENCH / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	

030 Geometry 030-6 Geometry Body 030-6-5 Geometry Explicit	■	Geometry Explicit will be imported.
030-6-9 Geometry Mapped	■	Geometry Mapped will be imported.
040 Presentation 040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	■	CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
100 Element Aggregation 100-4 Port Assignment	■	Assigned ports will be imported below their parent elements. Property "ifcContainedIn" will be added for a port in order to store the IFC GUID of its parent element.
110 Connectivity 110-5 Connectivity by Ports	■	Property "ifcConnectedTo" or "ifcConnectedFrom" will be added for a port in order to store the IFC GUID of the connected port.
120 Spatial Containment	■	Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
200 Material 200-1 Single Material	■	Material name will be imported as property "MaterialName".
210 Property Set 210-9 Property Set User Defined	■	User Defined properties will be imported as properties.
208 IfcFlowSegment	*company statement*	*RandomMEP-X5 BENCH / 2x3*

■ Supported ■ Restricted ■ Not Supported

010 Naming		Elements will be imported using their given names.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported.
030-6-5 Geometry Explicit		Geometry Explicit will be imported.
030-6-9 Geometry Mapped		Geometry Mapped will be imported.
100 Element Aggregation		
100-4 Port Assignment		Assigned ports will be imported below their parent elements. Property "ifcContainedIn" will be added for a port in order to store the IFC GUID of its parent element.
110 Connectivity		
110-5 Connectivity by Ports		Property "ifcConnectedTo" or "ifcConnectedFrom" will be added for a port in order to store the IFC GUID of the connected port.
210 IfcFlowTerminal	*company statement*	*RandomMEP-X5 BENCH / 2x3*
010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit		Geometry Explicit will be imported.
030-6-9 Geometry Mapped		Geometry Mapped will be imported.

040 Presentation 040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". There is no native layer concept as it is used in CAD applications.
100 Element Aggregation 100-4 Port Assignment		Assigned ports will be imported below their parent elements. Property "ifcContainedIn" will be added for a port in order to store the IFC GUID of its parent element.
110 Connectivity 110-5 Connectivity by Ports		Property "ifcConnectedTo" or "ifcConnectedFrom" will be added for a port in order to store the IFC GUID of the connected port.
200 Material 200-1 Single Material		Material name will be imported as property "MaterialName".
210 Property Set 210-9 Property Set User Defined		User Defined properties will be imported as properties.
General	*company statement*	*RandomMEP-X5 BENCH / 2x3*
_G4 Remarks		All necessary data wll be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. If an element has children, this element will be mapped to a container and its geometry will be stored in an additional geometrical object which will be added below the element container.The "MaterialName" property will be exported to the geometrical object.

RandomStruc-X2 TS / 2x3

409 IfcReinforcingBar	company statement	RandomStruc-X2 TS / 2x3
010 Naming		Elements will be imported using their given names.
030 Geometry		
030-6 Geometry Body		
030-6-4 Geometry AdvancedSweptSolid		For the usage in RIB iTWO, only the direction information will be imported.
030-6-5 Geometry Explicit		Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.
030-6-9 Geometry Mapped		Geometry Mapped will be imported. But for mapped "AdvancedSweptSolid",only the directrion information will be imported.
040 Presentation		
040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.

Supported Restricted Not Supported

100 Element Aggregation		
100-1 Element Composition	Element composition will be mapped to the object structure. The composite element will be mapped to a composite container.	
200 Material		
200-1 Single Material	Material name will be imported as property "MaterialName".	
General	*company statement*	*RandomStruc-X2 TS / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as the spatial structure, geometrical data, the object's color and the properties. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

RandomStruc-X5 Scia / 2x3

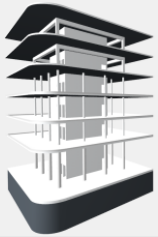
403 IfcFooting	*company statement*	*RandomStruc-X5 Scia / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
030-6-9 Geometry Mapped	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
200 Material		
200-1 Single Material	Material name will be imported as property "MaterialName".	

409 IfcReinforcingBar	*company statement*	*RandomStruc-X5 Scia / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-4 Geometry AdvancedSweptSolid	For the usage in RIB iTWO, only the direction information will be imported.	
030-6-9 Geometry Mapped	Their geometrical data will be imported. But for mapped "AdvancedSweptSolid", only the direction informaton will be imported.	

Supported Restricted Not Supported

050 CAD Layer	The CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". No native layer concept as used in CAD applications.	
200 Material		
200-1 Single Material	The material name will be collected and imported as property "MaterialName".	
General	*company statement*	*RandomStruc-X5 Scia / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as the spatial structure, geometrical data, the object's color and the properties. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

Reinforcement-01 / 2x3



101 IfcWallStandardCase	company statement	Reinforcement-01 / 2x3
020 Placement 020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
120 Spatial Containment	Spatial structure of the IFC data will be mapped to the object structure of RIB iTWO. This is necessary for the subsequent business process of RIB iTWO.	

103 IfcBeam	company statement	Reinforcement-01 / 2x3
020 Placement 020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	

030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
104 IfcColumn	*company statement*	*Reinforcement-01 / 2x3*
020 Placement 020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
105 IfcSlab	*company statement*	*Reinforcement-01 / 2x3*
020 Placement 020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.

030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
403 IfcFooting	*company statement*	*Reinforcement-01 / 2x3*
010 Naming		Elements will be imported using their given names.
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid		Their geometrical data will be imported.
040 Presentation 040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
210 Property Set 210-3 Property Set User Defined		User Defined properties will be imported as properties.

407 IfcDiscreteAccessory	company statement	Reinforcement-01 / 2x3
001 GUIDs	IFC GUIDs will be imported.	
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
030-6-9 Geometry Mapped	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
040 Presentation		
040-1 Geometric Presentation	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.	
050 CAD Layer	CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.	
120 Spatial Containment	Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.	

200 Material		
200-1 Single Material		The material name will be collected and imported as property "MaterialName".
210 Property Set		
210-9 Property Set User Defined		User Defined properties will be imported as properties.
300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be imported as property "ifcTypeObjectName" and will be assigned to imported object instances.
300-3 Type Material		Material of type object will be assigned to imported object instances.
300-5 Type Property Set		ype properties will be imported as properties. Properties of type object will be assigned to imported object instances.
408 IfcElementAssembly	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.

030 Geometry 030-6 Geometry Body 030-9 Geometry By Components		Components Geometry will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.
040 Presentation 040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.
100 Element Aggregation 100-2 Element Decomposition		Element decomposition will be mapped to the object structure. The compsite element will be mapped to a composite container.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
210 Property Set 210-9 Property Set User Defined		User Defined properties will be imported as properties.
409 IfcReinforcingBar	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
010 Naming		Elements will be imported using their given names.

020 Placement		
020-2 Placement Relative	■	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-6 Geometry Body		
030-6-4 Geometry AdvancedSweptSolid	■	For the usage in RIB iTWO, only the direction information will be imported.
030-6-5 Geometry Explicit	■	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.
030-6-9 Geometry Mapped	■	Geometry Mapped will be imported. But for mapped "AdvancedSweptSolid",only the directrion information will be imported.
040 Presentation		
040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	■	CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.
120 Spatial Containment	■	Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
200 Material		
200-1 Single Material	■	Material name will be imported as property "MaterialName".

210 Property Set		
210-9 Property Set User Defined		User Defined properties will be imported as properties.
300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be imported as property "ifcTypeObjectName" and will be assigned to imported object instances.
300-3 Type Material		Material of type object will be assigned to imported object instances.
300-5 Type Property Set		Type properties will be imported as properties. Properties of type object will be assigned to imported object instances.
410 IfcReinforcingMesh	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.

030 Geometry		
030-6 Geometry Body		
030-6-4 Geometry AdvancedSweptSolid	🟨	For the usage in RIB iTWO, only the direction information will be imported.
030-6-5 Geometry Explicit	🟩	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.
030-6-9 Geometry Mapped	🟩	Geometry Mapped will be imported. But for mapped "AdvancedSweptSolid",only the directrion information will be imported.
040 Presentation		
040-1 Geometric Presentation	🟩	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	🟩	CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.
120 Spatial Containment	🟩	Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
200 Material		
200-1 Single Material	🟩	Material name will be imported as property "MaterialName".
210 Property Set		
210-9 Property Set User Defined	🟩	User Defined properties will be imported as properties.

300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be imported as property "ifcTypeObjectName" and will be assigned to imported object instances.
300-3 Type Material		Material of type object will be assigned to imported object instances.
300-5 Type Property Set		Type properties will be imported as properties. Properties of type object will be assigned to imported object instances.
501 IfcProject	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
002 History		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
005 Project Units		
005-1 Project Metric Units		Metric Units will be supported. Length units and plane angle units will be supported.
008 Representation Context		
008-1 Representation Main Context		Imperial Units will be supported. Length units and plane angle units will be supported.
008-2 Representation Sub Context		
008-2-2 Representation Sub Context 3D		Data from "Sub Context 3D" will be imported.
010 Naming		Elements will be imported using their given names.

150 Spatial Aggregation 150-2 Spatial Decomposition		Spatial Decomposition will be mapped to the object structure.
503 IfcBuilding	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
002 History		History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
010 Naming		Elements will be imported using their given names.
020 Placement 020-1 Placement Absolute		Absolute placement will be processed during importing.
060 Location *060-2 Address*		Address will not be imported, since it is not necessary for the RIB iTWO business process currently.
150 Spatial Aggregation 150-1 Spatial Composition		Spatial structure will be mapped to the object structure which is necessary for following business process of RIB iTWO.
150-2 Spatial Decomposition		Spatial Decomposition will be mapped to the object structure.
504 IfcBuildingStorey	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs		IFC GUIDs will be imported.
002 History		It is not used within the RIB iTWO process currently.

Supported Restricted Not Supported

010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
060 Location		
060-4 Storey Elevation		Property "ifcStoreyElevation" for storey container stores the real height value of the storey. Property "ifcElevation" for storey container stores the height object. Elevation is the height value of that height object.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for the following business process of RIB iTWO.
150 Spatial Aggregation		
150-1 Spatial Composition		Spatial structure will be mapped to the object structure which is necessary for following business process of RIB iTWO.
150-2 Spatial Decomposition		Spatial Decomposition will be mapped to the object structure.
General	*company statement*	*Reinforcement-01 / 2x3*
_G4 Remarks		

Roof 01 / 2x3

101 IfcWallStandardCase	company statement	Roof 01 / 2x3
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	

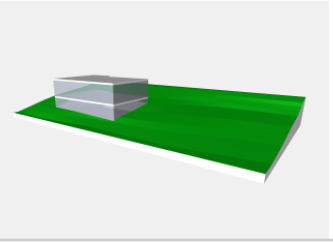
105 IfcSlab	company statement	Roof 01 / 2x3
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	
030-6-9 Geometry Mapped	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	

070 Voiding		
070-3 Voiding Geometry SweptSolid		Voiding SweptSolid will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.
080 Filling		
080-1 Has Filling		
080-1-2 Has Filling Window		Property "ifcHasFilling" will be added to their negative objects in order to store the IFC GUID of the related filling window. The RIB iTWO viewer doesn't show this relationship.
200 Material		
200-2 Material Layer Set		Layer information will be imported as properties.
110 IfcRoof	*company statement*	*Roof 01 / 2x3*
030 Geometry		
030-1 Geometry Box		Bounding box of the source IFC file will not be imported. RIB iTWO will generate a bounding box according to its usage.
040 Presentation		
040-1 Geometric Presentation		Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color display, for IfcBooleanResult, which has no directly connected styleItem, the color of the first operand will be used.
040-2 Material Presentation		If a material has a presentation but no geometrical presentation, the material presentation color will be used for imported objects according to #CV-2x3-131.
100 Element Aggregation		
100-2 Element Decomposition		Element decomposition will be mapped to the object structure. The composite element will be mapped to a composite container.
120 Spatial Containment		Spatial structure will be mapped to the object structure which is necessary for following process of RIB iTWO.

Supported Restricted Not Supported

	And negative elements will be linked to voided elements. The RIB iTWO viewer doesn't show it this way currently.	
200 Material		
200-1 Single Material	Material name will be imported as property "MaterialName".	
General	*company statement*	*Roof 01 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as the spatial structure, geometrical data, the object's color and the properties. Elements with more than one body representation item will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

Site 02 / 2x3

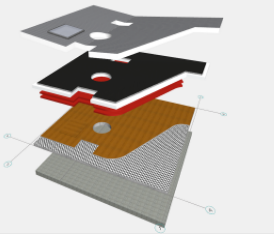


502 IfcSite	company statement	Site 02 / 2x3
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-1 Placement Absolute	Absolute placement will be processed during importing.	
030 Geometry		
030-3 Geometry FootPrint	FootPrint will be imported only if site has no body geometry.	
030-6 Geometry Body		
030-6-5 Geometry Explicit	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
150 Spatial Aggregation		
150-1 Spatial Composition	Spatial Composition will be mapped to the object structure.	
150-2 Spatial Decomposition	Spatial Decomposition will be mapped to the object structure. Site container cannot store its geometry directly. Its geometry will be stored in an additional geometrical object which will be added under site container.	
210 Property Set		
210-9 Property Set User Defined	The properties will be collected and imported as properties.	
503 IfcBuilding	company statement	Site 02 / 2x3

Supported Restricted Not Supported

010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
150 Spatial Aggregation		
150-1 Spatial Composition		Spatial Composition will be mapped to the object structure.
150-2 Spatial Decomposition		Spatial Decomposition will be mapped to the object structure.
210 Property Set		
210-1 Property Set IFC Common		The properties will be collected as properties.
General	*company statement*	*Site 02 / 2x3*
_G4 Remarks		All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Site container cannot store its geometry directly. Its geometry will be stored in an additional geometrical object which will be added below the site container.

Slab 02A / 2x3



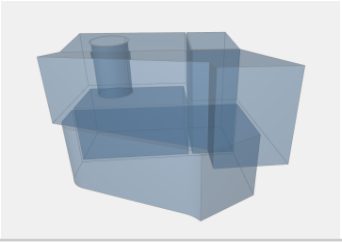
105 IfcSlab	*company statement*	*Slab 02A / 2x3*
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	

030 Geometry		
030-1 Geometry Box	🟥	Bounding box of source IFC file will not be imported. iTWO will generate a bounding box according to its usage.
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-2 Geometry Clipping	🟩	Geometry Clipping will be imported.
030-6-5 Geometry Explicit	🟩	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-6-9 Geometry Mapped	🟩	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
070 Voiding		
070-1 Voiding Geometry Explicit	🟩	Voiding Geometry Explicit will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects..
070-2 Voiding Geometry Mapped	🟩	Voiding Geometry Mapped will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.
070-3 Voiding Geometry SweptSolid	🟩	Voiding SweptSolid will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.

080 Filling		
080-1 Has Filling		
080-1-1 Has Filling Door	Restricted	Property "ifcHasFilling" will be added to referenced negative objects in order to store the IFC GUID of the filling door. The RIB iTWO viewer doesn't show this relationship.
080-1-2 Has Filling Window	Restricted	Property "ifcHasFilling" will be added to referenced negative objects in order to store the IFC GUID of the filling window. The RIB iTWO viewer doesn't show this relationship.
120 Spatial Containment	Supported	Spatial structure will be mapped to the object structure, which is necessary for following process of RIB iTWO.
130 Grouping		
130-1 Grouping General	Not Supported	Grouping information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
200 Material		
200-1 Single Material	Supported	Material name will be imported as property "MaterialName".
200-2 Material Layer Set	Supported	Layer information will be imported as properties.
210 Property Set		
210-1 Property Set IFC Common	Supported	IFC Common properties will be collected and imported as properties.
210-2 Property Set IFC any	Supported	The properties will be collectedand imported as properties.
210-3 Property Set User Defined	Supported	The properties will be collectedand imported as properties.

300 Type		
300-1 Type Geometry	No "TypeObject" concept. The representation map will be parsed if it is referenced by imported object instances.	
300-2 Type Naming	No "TypeObject" concept. Name of type object will be collected as a property "ifcTypeObjectName" of imported object instances.	
300-3 Type Material	Material from type object will be assigned to imported object instances.	
300-5 Type Property Set	TheType properties will be collected and imported as properties. Properties from type object will be assigned to imported object instances.	
General	*company statement*	*Slab 02A / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

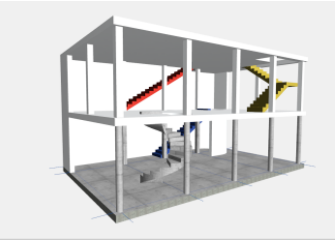
Space 01A / 2x3



505 IfcSpace	company statement	Space 01A / 2x3
001 GUIDs		IFC GUIDs will be imported.
002 History		It is not used within the RIB iTWO process currently.
010 Naming		Elements will be imported using their given names.
020 Placement		
020-2 Placement Relative		Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		Geometry SweptSolid will be imported.
030-6-2 Geometry Clipping		Geometry Clipping will be imported.
040 Presentation		
040-1 Geometric Presentation		For imported spaces, a default presentation "half transparent blue" will be assigned. The source presentation will not be used.
050 CAD Layer		CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.

150 Spatial Aggregation		
150-1 Spatial Composition	Spatial Composition will be mapped to the object structure.	
210 Property Set		
210-1 Property Set IFC Common	IFC Common properties will be imported as properties.	
210-6 Property Set IFC any	IFC Common properties will be imported as properties.	
General	*company statement*	*Space 01A / 2x3*
_G4 Remarks	All necessary data wll be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties.	

StairSlab-01 / 2x3

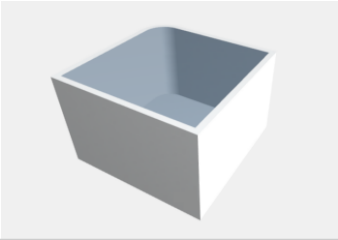


105 IfcSlab	*company statement*	*StairSlab-01 / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
040 Presentation		
040-1 Geometric Presentation	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color display, for IfcBooleanResult, which has no directly connected styleItem, the color of the first operand will be used.	
040-2 Material Presentation	If a material has a presentation but no geometrical presentation, the material presentation color is used for imported objects according to #CV-2x3-131.	
070 Voiding		
070-3 Voiding Geometry SweptSolid	Voiding SweptSolid will be imported. Imported as negative elements. If voiding elements have multiple body representation items, the voiding elements will be imported as several geometrical objects.	
106 IfcStair	*company statement*	*StairSlab-01 / 2x3*

001 GUIDs	■	IFC GUIDs will be imported.
002 History	■	It is not necessary for the following business logic of RIB iTWO currently.
010 Naming	■	Elements will be imported using their given names.
020 Placement		
020-1 Placement Relative	■	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	■	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.
030-9 Geometry By Components	■	Components' geometry will be imported.
040 Presentation		
040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color display for IfcBooleanResult, which has no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	■	CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". No native layer concept as used in CAD applications.
100 Element Aggregation		
100-2 Element Decomposition	■	Element decomposition will be mapped to the object structure. The composite element will be mapped to a composite container.
120 Spatial Containment	■	Spatial structure will be mapped to the object structure, which is necessary for the following process of RIB iTWO.

200 Material		
200-1 Single Material	Material name will be imported as a property "MaterialName".	
210 Property Set		
210-1 Property Set IFC Common	IFC Common properties will be collected and imported as properties.	
General	*company statement*	*StairSlab-01 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one body representation items are imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

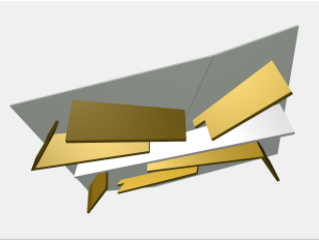
UnitTest-01A / 2x3



	company statement	UnitTest-01A / 2x3
501 IfcProject		
005 Project Units		
005-1 Project Metric Units	Metric Units, as well as length units and plane angle units will be supported.	
005-2 Project Imperial Units	Imperial Units, as well as length units and plane angle units will be supported.	

	company statement	UnitTest-01A / 2x3
General		
_G4 Remarks	Metric Units and Imperial Units, as well as length units and plane angle units will be supported.	

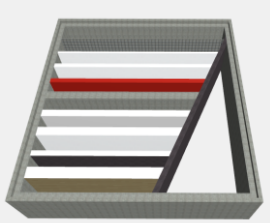
Wall 02 / 2x3



102 IfcWall	*company statement*	*Wall 02 / 2x3*
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-2 Geometry Axis	Axis information will be collected and imported as properties "cpiComponentDirection" and "cpiComponentAxis". The RIB iTWO viewer doesn't show the axis currently.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Their geometrical data will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
030-6-2 Geometry Clipping	Their geometrical data will be imported.	
030-6-5 Geometry Explicit	Their geometrical data will be imported.	
050 CAD Layer	The CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". No native layer concept as used in CAD applications.	

070 Voiding		
070-1 Voiding Geometry Explicit	Their geometrical data will be imported. Imported as negative elements.	
070-3 Voiding Geometry SweptSolid	Their geometrical data will be imported.	
120 Spatial Containment	The spatial structure will be mapped to the object structure,which is necessary for following business process of RIB iTWO.	
130 Grouping		
130-1 Grouping General	Grouping will be not imported, since it is not necessary for the following business logic of RIB iTWO currently.	
200 Material		
200-3 Material Layer Set	Layer information will be collected and imported as properties.	
300 Type		
300-2 Type Naming	Currently no "TypeObject" concept exists for RIB iTWO. Name of type object will be assigned as property "ifcTypeObjectName" to imported object instances.	
General	*company statement*	*Wall 02 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as the spatial structure, geometrical data, the object's color and the properties. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	

WallStandardCase 01A / 2x3



101 IfcWallStandardCase	company statement	WallStandardCase 01A / 2x3
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-2 Geometry Axis	Axis information will be imported and will be collected as properties "cpiComponentDirection" and "cpiComponentAxis". The RIB iTWO viewer doesn't show the axis currently.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Geometry SweptSolid will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that one composite container will be considered as one element.	
030-6-2 Geometry Clipping	Geometry Clipping will be imported.	
040 Presentation		
040-1 Geometric Presentation	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131.	
040-2 Material Presentation	If a material has a presentation but no geometrical presentation, the material presentation color will be used for imported objects according to #CV-2x3-131.	
050 CAD Layer		

Supported Restricted Not Supported

		CAD layer information will be collected and imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.
110 Connectivity		
110-2 Connectivity Path		Connectivity Path information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.
120 Spatial Containment		Spatial structure of the IFC data will be mapped to the object structure of RIB iTWO. This is necessary for the subsequent business process of RIB iTWO.
200 Material		
200-4 Material Layer Usage		Layer information will be collected and imported as properties. Position of the layers is not available in RIB iTWO.
210 Property Set		
210-3 Property Set User Defined		Properties will be collected and imported as properties.
300 Type		
300-3 Type Material		Material from wall type will be assigned to imported wall objects.
300-5 Type Property Set		Type properties will be collected and imported as properties. Properties from wall type will be assigned to wall objects.
General	*company statement*	*WallStandardCase 01A / 2x3*
_G4 Remarks		All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties.

Window 01 / 2x3

301 IfcWindow	*company statement*	*Window 01 / 2x3*
001 GUIDs	IFC GUIDs will be imported.	
002 History	History information will not be imported, since it is not necessary for the following business logic of RIB iTWO currently.	
010 Naming	Elements will be imported using their given names.	
020 Placement		
020-2 Placement Relative	Relative placement will be processed during importing. Spatial structure will be kept. Local coordinates will be mapped to global coordinates.	
030 Geometry		
030-5 Geometry Profile	Profile is not used within the RIB iTWO process currently. Profile will be imported if no body representation exits.	
030-6 Geometry Body		
030-6-5 Geometry Explicit	Geometry Explicit will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	
030-6-9 Geometry Mapped	Geometry Mapped will be imported. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element.	

040 Presentation		
040-1 Geometric Presentation	■	Geometrical presentation is prefered to set the display style of imported objects according to #CV-2x3-131. In order to get a better color representation for IfcBooleanResults, which have no directly connected styleItem, the color of the first operand will be used.
050 CAD Layer	■	CAD layer information will be imported as property "ifcPresentationLayerAssignment". A native layer concept does not exist in the way it is used in CAD applications.
080 Filling		
080-2 Is Filling	■	All objects will be imported as free standing. Property "ifcIsFilling" will be added to store the IFC GUID of the related filled opening. The RIB iTWO viewer doesn't show this relationship.
120 Spatial Containment	■	All windows will be imported as free standing objects.
200 Material		
200-1 Single Material	■	Material name will be imported as property "MaterialName".
200-5 Material List	■	Material List will not be imported, since it will not be used within the RIB iTWO business process currently.
210 Property Set		
210-1 Property Set IFC Common	■	IFC Common properties will be imported as properties.
210-2 Property Set IFC any	■	IFC "any" properties will be imported as properties.
210-3 Property Set User Defined	■	User Defined properties will be imported as properties.

300 Type		
300-1 Type Geometry		No "TypeObject" concept. The representation map will be parsed if it will be referenced by imported object instances.
300-2 Type Naming		No "TypeObject" concept. Name of type object will be collected as a property "ifcTypeObjectName" of object occurrences.
300-3 Type Material		Material from type object will be assigned to imported object instances.
300-5 Type Property Set		Type properties will and imported as properties. Properties from type object will be assigned to imported object instances.
300-6 Type Predefined Properties		
300-6-1 Type Predefined Properties Window		No "TypeObject" concept. Type predefined properties window will not be imported.
General	*company statement*	*Window 01 / 2x3*
_G4 Remarks	All necessary data will be imported from the source IFC file, such as spatial structure, geometrical data, object's color and properties. Elements with more than one body representation items will be imported as composite containers with child geometrical objects. It is a feature of RIB iTWO, that a composite container will be considered as one element. If a voiding element has multiple body representation items, the voiding element will be imported as several geometrical objects.	