CoordinationView 2.0 / Export

CV2.0-Struct

Tekla

Tekla Structures

27/06/2013

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Introduction

Tekla Structures can export an IFC model in the "Coordination View 1.0" and in the certified “Coordination View 2.0" formats. It is also possible to use a coordination view subset that uses only B-rep geometry and fulfills the exchange requirement called "Surface Geometry". Coordination view is ideal for data transfer between applications and surface geometry is a publishing format for viewing and design coordination.
The IFC2x3 model can be exported in the STEP IFC format or the XML-based ifcXML format. Both can be compressed or uncompressed.
The exported elements cover all Tekla Structures entities such as beams, columns, braces, footings, piles, slabs, panels (walls), plates and assembly information. It is also possible to export coverings, reinforcing bars, welds and bolts with nuts, and washers. This version of the export does not include connections to be exported into the IFC model.

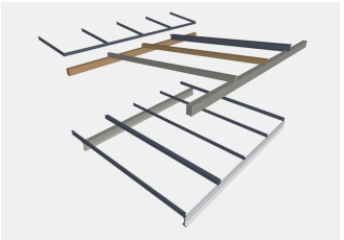
Testlist

Name test	concepts total	manually checked		
		■	■	■
BeamColumn 04 / 2x3	47	10	12	25
Beam_01 / 2x3	10	5	3	2
Beam_02 / 2x3	12	7	2	3
Beam_03 / 2x3	6	3		3
CharsetTest-01S / 2x3	2	2		
Column 01 / 2x3	11	5	4	2
Column 01 / 2x3	11	11		
Column_02 / 2x3	6	3		3
Grid 01 / 2x3	11	8	1	2
Grid 01 / 2x3	11	10		1
Member_01S / 2x3	10	3	3	4
Pile 01 / 2x3	19	7	6	6
PlateFastener-01 / 2x3	66	16	20	30
RandomStruc-X1 / 2x3	14	13		1
RandomStruc-X2 / 2x3	9	8	1	
RandomStruc-X3 / 2x3	9	8	1	
RandomStruc-X4 / 2x3	6	5	1	
RandomStruc-X5 / 2x3	13	4	1	8
Reinforcement-01 / 2x3	93	26	16	51
ReplacementTest_forRampSlab-01 / 2x3	18	2		16
ReplacementTest_forRoof-01 / 2x3	12	4	2	6
ReplacementTest_forRoof-02 / 2x3	13	4	1	8
ReplacementTest_forSite-01 / 2x3	8	8		
ReplacementTest_forSite-02 / 2x3	25	17	7	1
ReplacementTest_forStairSlab-01 / 2x3	16	7	4	5
ReplacementTest_forWall-01 / 2x3	10	8	2	

Name test	concepts total	manually checked		
		■	■	■
Slab 01S / 2x3	11	2	7	2
Slab 01S / 2x3	11	11		
Slab 02S / 2x3	22	6	3	13
UnitTest-01S / 2x3	3	1	1	1
Wall 02 / 2x3	14	6	3	5
WallStandardCase 01S / 2x3	15	3	4	8
WallStandardCase 02S / 2x3	11	5	4	2
WallStandardCase 03S / 2x3	8	3	2	3
WallStandardCase 04S / 2x3	7	4	1	2

Concepts

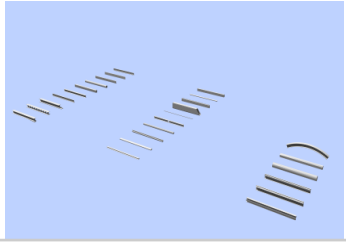
Beam_01 / 2x3



103 IfcBeam		*company statement*	*Beam_01 / 2x3*
010 Naming			
020 Placement			
020-2 Placement Relative		Local placement of storey is always set to zero elevation.	
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid			
030-6-2 Geometry Clipping			
040 Presentation			
040-1 Geometric Presentation		Predefined colors only (in this version).	
040-2 Material Presentation		Not supported.	
120 Spatial Containment			
200 Material			
200-1 Single Material		Material and grade stored to the same field because the limitation of IFC2x3	
210 Property Set			
210-1 Property Set IFC Common		Not supported, no fixed native properties available for mapping.	
General		*company statement*	*Beam_01 / 2x3*
_G4 Remarks			

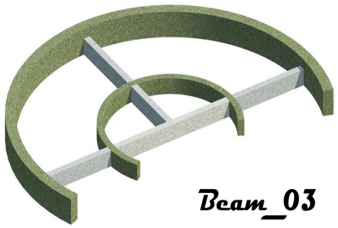
Supported Restricted Not Supported

Beam_02 / 2x3



103 IfcBeam	company statement	Beam_02 / 2x3
010 Naming		
030 Geometry		
030-2 Geometry Axis	Supported for wallstandardcase only.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping		
030-6-5 Geometry Explicit	Supported, but not needed when CSG is used.	
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_".	
070 Voiding		
070-1 Voiding Geometry Explicit		
070-2 Voiding Geometry Mapped	Supported only for bolts and rebar.	
070-3 Voiding Geometry SweptSolid		
120 Spatial Containment		
200 Material		
200-1 Single Material	Material and grade stored to the same field because the limitation of IFC2x3.	
General	*company statement*	*Beam_02 / 2x3*
_G4 Remarks		

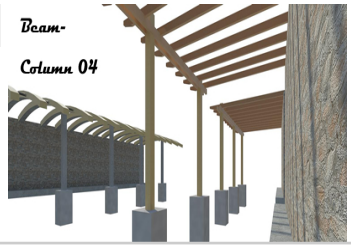
Beam_03 / 2x3



103 IfcBeam	*company statement*	*Beam_03 / 2x3*
030 Geometry		
030-1 Geometry Box	Not supported, optional data.	
030-2 Geometry Axis	Supported for wallstandardcase only.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping		
300 Type		
300-5 Type Property Set	Not supported, optional data.	

General	*company statement*	*Beam_03 / 2x3*
_G4 Remarks		

BeamColumn 04 / 2x3



103 IfcBeam		*company statement*
		BeamColumn 04 / 2x3
001 GUIDs		
002 History		Always set to added with current date.
010 Naming		
020 Placement		
020-2 Placement Relative		Local placement of storey is always set to zero elevation.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		Supported, but sometimes Brep used instead.
030-6-9 Geometry Mapped		Supported only for bolts and rebar.
070 Voiding		
070-1 Voiding Geometry Explicit		Supported, but not needed when CSG is used.
070-2 Voiding Geometry Mapped		Not supported, optional data
070-3 Voiding Geometry SweptSolid		Supported, but not needed when CSG is used.
130 Grouping		
130-1Grouping General		Not supported, optional data.
200 Material		
200-1 Single Material		Material and grade stored to the same field because the limitation of IFC2x3

210 Property Set		
210-1 Property Set IFC Common	Not supported, no fixed native properties available for mapping.	
210-3 Property Set User Defined	Supported, but not used in all test cases.	
300 Type		
300-1 Type Geometry	Not supported, optional data.	
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
104 IfcColumn	*company statement*	*BeamColumn 04 / 2x3*
001 GUIDs		
002 History	Always set to added with current date.	
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-9 Geometry Mapped	Supported only for bolts and rebar.	
070 Voiding		
070-1 Voiding Geometry Explicit	Supported, but not needed when CSG is used.	
070-2 Voiding Geometry Mapped	Not supported, optional data.	
070-3 Voiding Geometry SweptSolid	Supported, but not needed when CSG is used.	
130 Grouping		
130-1 Grouping General	Not supported, optional data.	

200 Material		
200-1 Single Material	Material and grade stored to the same field because the limitation of IFC2x3	
210 Property Set		
210-2 Property Set IFC any	Supported, but not used in all test cases.	
300 Type		
300-1 Type Geometry	Not supported, optional data.	
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
403 IfcFooting	*company statement*	*BeamColumn 04 / 2x3*
001 GUIDs		
002 History	Always set to added with current date.	
010 Naming		
020 Placement		
020-1 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-9 Geometry Mapped	Supported only for bolts and rebar.	
130 Grouping		
130-1 Grouping General	Not supported, optional data.	
200 Material		
200-1 Single Material	Material and grade stored to the same field because the limitation of IFC2x3	
210 Property Set		
210-2 Property Set IFC any	Supported, but not used in all test cases.	

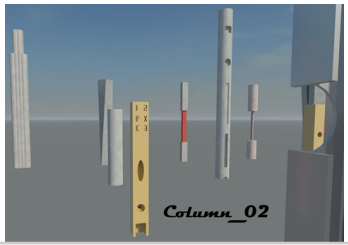
300 Type		
300-1 Type Geometry	Not supported, optional data.	
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
General	*company statement*	*BeamColumn 04 / 2x3*
_G4 Remarks		

CharsetTest-01S / 2x3



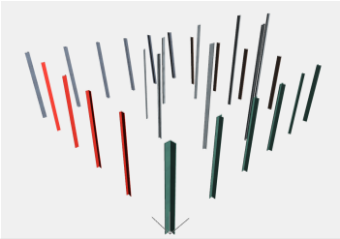
General	*company statement*	*CharsetTest-01S / 2x3*
_G1 Character sets	■	
_G4 Remarks	■	

Column_02 / 2x3



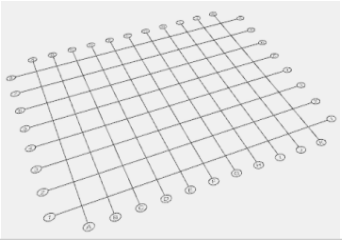
IfcColumn		company statement	Column_02 / 2x3
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
030-6-5 Geometry Explicit	■		
070 Voiding			
070-1 Voiding Geometry Explicit	■	Supported, but not needed when CSG is used.	
070-2 Voiding Geometry Mapped	■	Not supported, optional data.	
070-3 Voiding Geometry SweptSolid	■	Supported, but not needed when CSG is used.	
General		*company statement*	*Column_02 / 2x3*
_G4 Remarks	■		

Column 01 / 2x3



IfcColumn		company statement	Column 01 / 2x3
010 Naming			
020 Placement			
020-2 Placement Relative		Local placement of storey is always set to zero elevation.	
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid			
030-6-2 Geometry Clipping			
040 Presentation			
040-1 Geometric Presentation		Predefined colors only (in this version).	
040-2 Material Presentation		Not supported.	
050 CAD Layer		In this version layer names follow the pattern: prefix & number & name. Prefix "TS_".	
120 Spatial Containment			
200 Material			
200-1 Single Material		Material and grade stored to the same field because the limitation of IFC2x3.	
210 Property Set			
210-1 Property Set IFC Common		Not supported, no fixed native properties available for mapping.	
General		company statement	Column 01 / 2x3
_G4 Remarks			

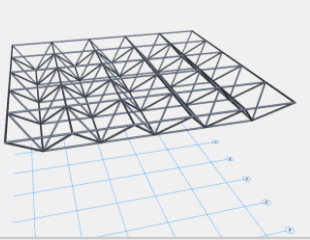
Grid 01 / 2x3



509 IfcGrid	company statement	Grid 01 / 2x3
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-3 Geometry FootPrint		
040 Presentation		
040-1 Geometric Presentation		
050 CAD Layer		
120 Spatial Containment		
210 Property Set		
210-3 Property Set User Defined	Not supported, optional data.	
270 Grid Usage		
270-1 Grid Axes		

General	company statement	Grid 01 / 2x3
_G4 Remarks		

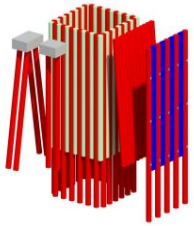
Member_01S / 2x3



IfcMember		*company statement*	*Member_01S / 2x3*
010 Naming		There is a different kind of numbering concept in Tekla Structures. The members are not numbered manually, because there is a special feature to give numbers to the members according to the the numbering series. It has it's own logic and therefore the members would not get the same numbers as in the test case instructions.	
020 Placement			
020-2 Placement Relative		Local placement of storey is always set to zero elevation.	
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid			
030-6-2 Geometry Clipping		Supported, but not needed when CSG is used.	
110 Connectivity			
110-1 Connectivity Basic		Not supported, optional data.	
110-3 Connectivity Realization			
110-3-1 Connectivity Realized		Not supported, optional data.	
120 Spatial Containment			
200 Material			
200-1 Single Material		Material and grade stored to the same field because the limitation of IFC2x3	
300 Type			
300-1 Type Geometry		Not supported, optional data.	
General		*company statement*	*Member_01S / 2x3*

_G4 Remarks	

Pile 01 / 2x3

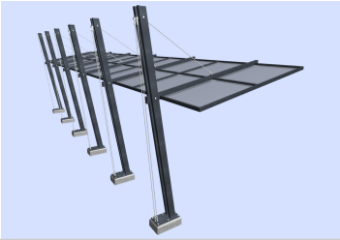


404 IfcPile	*company statement*	*Pile 01 / 2x3*
001 GUIDs		
002 History	Always set to added with current date.	
010 Naming		
020 Placement		
020-1 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping		
030-6-9 Geometry Mapped	Supported only for bolts and rebar.	
040 Presentation		
040-1 Geometric Presentation	Predefined colors only (in this version).	
040-2 Material Presentation	Not supported.	
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_"	
070 Voiding		
070-3 Voiding Geometry SweptSolid	Supported, but not needed when CSG is used.	
100 Element Aggregation		
100-2 Element Decomposition	Assemblies are supported, but not used in all test models.	
120 Spatial Containment		

Supported Restricted Not Supported

200 Material		
200-1 Single Material		
210 Property Set		
210-3 Property Set User Defined		Supported, but not used in all test cases.
300 Type		
300-1 Type Geometry		Not supported, optional data
300-3 Type Material		Not supported, optional data
300-5 Type Property Set		Not supported, optional data
General	*company statement*	*Pile 01 / 2x3*
_G4 Remarks		

PlateFastener-01 / 2x3



103 IfcBeam	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs		
002 History	Always set to added with current date.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-9 Geometry Mapped	Supported only for bolts and rebar.	
104 IfcColumn	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs		
002 History	Always set to added with current date.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-9 Geometry Mapped	Supported only for bolts and rebar.	
100 Element Aggregation		
100-2 Element Decomposition	Assemblies are supported, but not used in all test models	
210 Property Set		
210-3 Property Set User Defined	Supported, but not used in all test cases.	

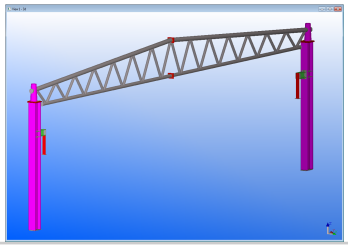
300 Type		
300-1 Type Geometry	Not supported, optional data.	
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
401 IfcMember	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs		
002 History	Always set to added with current date.	
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-9 Geometry Mapped	Supported only for bolts and rebar.	
040 Presentation		
040-1 Geometric Presentation	Predefined colors only (in this version).	
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_"	
210 Property Set		
210-1 Property Set IFC Common	Not supported, no fixed native properties available for mapping.	
210-3 Property Set User Defined	Supported, but not used in all test cases.	
300 Type		
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
402 IfcPlate	*company statement*	*PlateFastener-01 / 2x3*

001 GUIDs	■	
002 History	■	Always set to added with current date.
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	Local placement of storey is always set to zero elevation.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-2 Geometry Clipping	■	Not supported in this version.
030-6-5 Geometry Explicit	■	
040 Presentation		
040-1 Geometric Presentation	■	Predefined colors only (in this version).
050 CAD Layer	■	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_"
070 Voiding		
070-3 Voiding Geometry SweptSolid	■	Not supported in this version.
120 Spatial Containment	■	
200 Material		
200-2 Material Layer Set	■	Limitation: one layer only
210 Property Set		
210-1 Property Set IFC Common	■	Not supported, no fixed native properties available for mapping.
210-3 Property Set User Defined	■	

300 Type		
300-1 Type Geometry	Not supported, optional data.	
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
403 IfcFooting	*company statement*	*PlateFastener-01 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Supported, but sometimes Brep used instead.	
030-6-2 Geometry Clipping	Supported, but not needed when Brep solid is used.	
405 IfcFastener	*company statement*	*PlateFastener-01 / 2x3*
010 Naming	Welds are not supported in this version.	
020 Placement		
020-2 Placement Relative	Welds are not supported in this version.	
030 Geometry		
030-2 Geometry Axis	Welds are not supported in this version.	
406 IfcMechanicalFastener	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs		
002 History	Always set to added with current date.	
010 Naming	Only hardcoded names for bolts.	
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	

030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟥	Not supported for bolts.
030-6-5 Geometry Explicit	🟥	Supported, but only mapped geometry used in this model.
030-6-9 Geometry Mapped	🟩	
040 Presentation		
040-1 Geometric Presentation	🟨	Predefined colors only (in this version).
050 CAD Layer	🟨	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_"
120 Spatial Containment	🟩	
200 Material		
200-1 Single Material	🟥	Not supported, no fixed native properties available for mapping.
210 Property Set		
210-6 Property Set IFC any	🟥	Supported, but not used in all test cases.
210-9 Property Set User Defined	🟥	Supported, but not used in all test cases.
300 Type		
300-1 Type Geometry	🟩	Not supported, optional data.
300-2 Type Naming	🟨	Types supported, naming hardcoded or same as the basic entity.
300-3 Type Material	🟥	Not supported, optional data.
300-5 Type Property Set	🟥	Not supported, optional data.

RandomStruc-X1 / 2x3



103 IfcBeam	*company statement*	*RandomStruc-X1 / 2x3*
001 GUIDs	■	
010 Naming	■	
104 IfcColumn	*company statement*	*RandomStruc-X1 / 2x3*
001 GUIDs	■	
010 Naming	■	
402 IfcPlate	*company statement*	*RandomStruc-X1 / 2x3*
001 GUIDs	■	
010 Naming	■	
406 IfcMechanicalFastener	*company statement*	*RandomStruc-X1 / 2x3*
020 Placement		
030 Geometry		
030-6 Geometry Body		
040 Presentation		
200 Material		
300 Type		
408 IfcElementAssembly	*company statement*	*RandomStruc-X1 / 2x3*
001 GUIDs	■	
010 Naming	■	

020 Placement		
020-2 Placement Relative		
030 Geometry		
030-6 Geometry Body		
030-9 Geometry By Components		
040 Presentation		
100 Element Aggregation		
100-1 Element Composition		
100-2 Element Decomposition		
120 Spatial Containment		
200 Material		
General	*company statement*	*RandomStruc-X1 / 2x3*
_G4 Remarks	The entity types of default mapping can be changed by the user. For example IfcColumn can be changed to Ifcpile.	

RandomStruc-X2 / 2x3

409 IfcReinforcingBar		*company statement*	*RandomStruc-X2 / 2x3*
010 Naming	■		
030 Geometry			
030-6 Geometry Body			
030-6-4 Geometry AdvancedSweptSolid	■		
030-6-5 Geometry Explicit	■		
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
050 CAD Layer	■	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_".	
100 Element Aggregation			
100-1 Element Composition	■		
200 Material			
200-1 Single Material	■		
General		*company statement*	*RandomStruc-X2 / 2x3*
_G4 Remarks	■		

RandomStruc-X3 / 2x3

103 IfcBeam	*company statement*	*RandomStruc-X3 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-5 Geometry Explicit		
040 Presentation		
040-1 Geometric Presentation		
120 Spatial Containment		
General	*company statement*	*RandomStruc-X3 / 2x3*
_G4 Remarks		

RandomStruc-X4 / 2x3

303 IfcCovering	*company statement*	*RandomStruc-X4 / 2x3*
001 GUIDs	■	
010 Naming	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
040 Presentation		
040-1 Geometric Presentation	■	
100 Element Aggregation		
100-1 Element Composition	■	
General	*company statement*	*RandomStruc-X4 / 2x3*
_G4 Remarks	■	

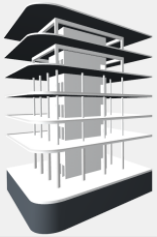
RandomStruc-X5 / 2x3

406 IfcMechanicalFastener	*company statement*	*RandomStruc-X5 / 2x3*
010 Naming	For some entity types the name is hardcoded.	
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Supported, but sometimes Brep used instead.	
030-6-5 Geometry Explicit	Bolts always use B-rep presentation in this version.	
030-6-9 Geometry Mapped		
200 Material		
200-1 Single Material	Supported, if available in the model. Material and grade stored to the same field because the limitation of IFC2x3.	
300 Type		
300-1 Type Geometry	Not supported, optional data	
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data	
300-5 Type Property Set	Not supported, optional data	
408 IfcElementAssembly	*company statement*	*RandomStruc-X5 / 2x3*
010 Naming	For some entity types the name is hardcoded.	
100 Element Aggregation		
100-2 Element Decomposition		

Supported Restricted Not Supported

General	company statement	RandomStruc-X5 / 2x3
_G4 Remarks		

Reinforcement-01 / 2x3



101 IfcWallStandardCase		*company statement*	*Reinforcement-01 / 2x3*
020 Placement			
020-2 Placement Relative	Restricted	Local placement of storey is always set to zero elevation.	
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	Supported		
120 Spatial Containment	Supported		
103 IfcBeam		*company statement*	*Reinforcement-01 / 2x3*
020 Placement			
020-2 Placement Relative	Restricted	Local placement of storey is always set to zero elevation.	
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	Supported		
120 Spatial Containment	Supported		
104 IfcColumn		*company statement*	*Reinforcement-01 / 2x3*
020 Placement			
020-2 Placement Relative	Restricted	Local placement of storey is always set to zero elevation.	
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	Supported		

120 Spatial Containment	■	
105 IfcSlab	*company statement*	*Reinforcement-01 / 2x3*
020 Placement		
020-2 Placement Relative	■	Local placement of storey is always set to zero elevation.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
120 Spatial Containment	■	
403 IfcFooting	*company statement*	*Reinforcement-01 / 2x3*
010 Naming	■	IfcFootings not used in this model.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	IfcFootings not used in this model.
040 Presentation		
040-1 Geometric Presentation	■	IfcFootings not used in this model.
050 CAD Layer	■	IfcFootings not used in this model.
120 Spatial Containment	■	IfcFootings not used in this model.
210 Property Set		
210-3 Property Set User Defined	■	IfcFootings not used in this model.
407 IfcDiscreteAccessory	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	■	IfcDiscreteAccessory not supported at all
010 Naming	■	IfcDiscreteAccessory not supported at all
020 Placement		
020-2 Placement Relative	■	IfcDiscreteAccessory not supported at all

030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	IfcDiscreteAccessory not supported at all	
030-6-9 Geometry Mapped	IfcDiscreteAccessory not supported at all	
040 Presentation		
040-1 Geometric Presentation	IfcDiscreteAccessory not supported at all	
050 CAD Layer	IfcDiscreteAccessory not supported at all	
120 Spatial Containment	IfcDiscreteAccessory not supported at all	
200 Material		
200-1 Single Material	IfcDiscreteAccessory not supported at all	
210 Property Set		
210-9 Property Set User Defined	IfcDiscreteAccessory not supported at all	
300 Type		
300-1 Type Geometry	IfcDiscreteAccessory not supported at all	
300-2 Type Naming	IfcDiscreteAccessory not supported at all	
300-3 Type Material	IfcDiscreteAccessory not supported at all	
300-5 Type Property Set	IfcDiscreteAccessory not supported at all	
408 IfcElementAssembly	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	IfcElementAssembly not supported for reinforcing entities	
010 Naming	IfcElementAssembly not supported for reinforcing entities	
020 Placement		
020-2 Placement Relative	IfcElementAssembly not supported for reinforcing entities	
030 Geometry		
030-6 Geometry Body		
030-9 Geometry By Components	IfcElementAssembly not supported for reinforcing entities	

040 Presentation		
040-1 Geometric Presentation	IfcElementAssembly not supported for reinforcing entities	
050 CAD Layer	IfcElementAssembly not supported for reinforcing entities	
100 Element Aggregation		
100-2 Element Decomposition	IfcElementAssembly not supported for reinforcing entities	
120 Spatial Containment	IfcElementAssembly not supported for reinforcing entities	
210 Property Set		
210-9 Property Set User Defined	IfcElementAssembly not supported for reinforcing entities	
409 IfcReinforcingBar	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	Supported, reinforcing bars grouped to share same GUID.	
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-4 Geometry AdvancedSweptSolid	Overlapping elements exist, which cannot be avoided when automatic reinforcing is used. Bars are flexible to fit, though.	
030-6-5 Geometry Explicit	All are SweptDiskAreaSolids. B-reps in CV2.0/Surface Geometry MVD.	
030-6-9 Geometry Mapped	Overlapping elements exist, which cannot be avoided when automatic reinforcing is used. Bars are flexible to fit, though.	
040 Presentation		
040-1 Geometric Presentation	Predefined colors only (in this version).	
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_"	
120 Spatial Containment		
200 Material		
200-1 Single Material		

Supported Restricted Not Supported

210 Property Set		
210-9 Property Set User Defined		
300 Type		
300-1 Type Geometry	Not supported, optional data.	
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
410 IfcReinforcingMesh	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
010 Naming	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
020 Placement		
020-2 Placement Relative	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
030 Geometry		
030-6 Geometry Body		
030-6-4 Geometry AdvancedSweptSolid	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
030-6-5 Geometry Explicit	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
030-6-9 Geometry Mapped	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
040 Presentation		
040-1 Geometric Presentation	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
050 CAD Layer	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
120 Spatial Containment	IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	

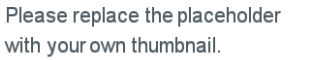
200 Material			
200-1 Single Material		IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
210 Property Set			
210-9 Property Set User Defined		IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
300 Type			
300-1 Type Geometry		IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
300-2 Type Naming		IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
300-3 Type Material		IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
300-5 Type Property Set		IfcReinforcingMesh -entity not supported, IfcReinforcingBar used insted, because it supports clipping	
501 IfcProject		*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs			
002 History		Always set to added with current date.	
005 Project Units			
005-1 Project Metric Units			
008 Representation Context			
008-1 Representation Main Context			
008-2 Representation Sub Context			
008-2-2 Representation Sub Context 3D			
010 Naming			
150 Spatial Aggregation			
150-2 Spatial Decomposition			
503 IfcBuilding		*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs			

Supported Restricted Not Supported

002 History	Restricted	Always set to added with current date.
010 Naming	Supported	
020 Placement		
020-1 Placement Absolute	Not Supported	Not supported, relative placement is always used with virtual site.
060 Location		
060-2 Address	Restricted	Provided as an address line.
150 Spatial Aggregation		
150-1 Spatial Composition	Supported	
150-2 Spatial Decomposition	Supported	
504 IfcBuildingStorey	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	Supported	
002 History	Restricted	Always set to added with current date.
010 Naming	Supported	
020 Placement		
020-2 Placement Relative	Restricted	Local placement of storey is always set to zero elevation.
060 Location		
060-4 Storey Elevation	Not Supported	Not supported, optional data.
120 Spatial Containment	Supported	
150 Spatial Aggregation		
150-1 Spatial Composition	Supported	
150-2 Spatial Decomposition	Not Supported	Supported, except to spaces

ReplacementTest_forRampSlab-01 / 2x3

Thumbnail of ApplicationSpecificTest



105 IfcSlab	*company statement*	*ReplacementTest_forRampSlab-01 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	B-rep used instead.	
040 Presentation		
040-1 Geometric Presentation		
040-2 Material Presentation	Not supported by Tekla Structures.	
070 Voiding		
070-3 Voiding Geometry SweptSolid	Not supported by Tekla Structures in this test model.	
107 IfcRamp	*company statement*	*ReplacementTest_forRampSlab-01 / 2x3*
001 GUIDs	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
002 History	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
010 Naming	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
020 Placement		
020-1 Placement Relative	IfcRamp entity is not supported in export. The slab and beam entities used instead.	

030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
030-9 Geometry By Components	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
040 Presentation		
040-1 Geometric Presentation	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
050 CAD Layer	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
100 Element Aggregation		
100-2 Element Decomposition	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
120 Spatial Containment	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
200 Material		
200-1 Single Material	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
210 Property Set		
210-1 Property Set IFC Common	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
210-3 Property Set User Defined	IfcRamp entity is not supported in export. The slab and beam entities used instead.	
General	*company statement*	*ReplacementTest_forRampSlab-01 / 2x3*
_G4 Remarks		

ReplacementTest_forRoof-01 / 2x3



102 IfcWall	*company statement*	*ReplacementTest_forRoof-01 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-2 Geometry Clipping	Supported, but not needed when CSG is used.	
030-6-5 Geometry Explicit	Supported, but not needed when CSG is used.	
105 IfcSlab	*company statement*	*ReplacementTest_forRoof-01 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping		
030-6-9 Geometry Mapped	Supported only for bolts and rebar.	
040 Presentation		
040-1 Geometric Presentation	Supported only for bolts and rebars.	
040-2 Material Presentation	Not supported.	
070 Voiding		
070-3 Voiding Geometry SweptSolid	Supported, but not needed when CSG is used.	
100 Element Aggregation		
100-2 Element Decomposition	Assemblies are supported, but not used in all test models.	
120 Spatial Containment		

200 Material		
200-1 Single Material	Material and grade stored to the same field because the limitation of IFC2x3.	
General	*company statement*	*ReplacementTest_forRoof-01 / 2x3*
_G4 Remarks		

ReplacementTest_forRoof-02 / 2x3



102 IfcWall	*company statement*	*ReplacementTest_forRoof-02 / 2x3*
010 Naming		
030 Geometry		
030-6 Geometry Body		
030-6-2 Geometry Clipping		
030-6-5 Geometry Explicit		
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_".	
105 IfcSlab	*company statement*	*ReplacementTest_forRoof-02 / 2x3*
010 Naming	IfcSlabs not used in this test model.	
020 Placement		
020-2 Placement Relative	IfcSlabs not used in this test model.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	IfcSlabs not used in this test model.	
050 CAD Layer	IfcSlabs not used in this test model.	
100 Element Aggregation		
100-2 Element Decomposition	IfcSlabs not used in this test model.	
210 Property Set		
210-3 Property Set User Defined	IfcSlabs not used in this test model.	
408 IfcElementAssembly	*company statement*	*ReplacementTest_forRoof-02 / 2x3*

010 Naming	Assemblies not used in this test model.	
100 Element Aggregation		
100-1 Element Composition	Assemblies not used in this test model.	
General	*company statement*	*ReplacementTest_forRoof-02 / 2x3*
_G4 Remarks		

ReplacementTest_forSite-01 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder with your own thumbnail.

103 IfcBeam	*company statement*	*ReplacementTest_forSite-01 / 2x3*
001 GUIDs	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
040 Presentation		
040-1 Geometric Presentation	■	
104 IfcColumn	*company statement*	*ReplacementTest_forSite-01 / 2x3*
001 GUIDs	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
040 Presentation		
040-1 Geometric Presentation	■	
402 IfcPlate	*company statement*	*ReplacementTest_forSite-01 / 2x3*
030 Geometry		
030-6 Geometry Body		
406 IfcMechanicalFastener	*company statement*	*ReplacementTest_forSite-01 / 2x3*
030 Geometry		
030 Geometry	■	
General	*company statement*	*ReplacementTest_forSite-01 / 2x3*

■ Supported ■ Restricted ■ Not Supported

_G4 Remarks	

ReplacementTest_forSite-02 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder with your own thumbnail.

102 IfcWall	*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs		
010 Naming	Wrong entity types are for purpose in this test model to provide a stress test model.	
103 IfcBeam	*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs		
010 Naming	Wrong entity types are for purpose in this test model to provide a stress test model.	
200 Material		
200-1 Single Material		
104 IfcColumn	*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs		
010 Naming	Wrong entity types are for purpose in this test model to provide a stress test model.	
200 Material		
200-1 Single Material		
105 IfcSlab	*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs		
010 Naming	Wrong entity types are for purpose in this test model to provide a stress test model.	
402 IfcPlate	*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs		
002 History		

403 IfcFooting		*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs			
010 Naming		Wrong entity types are for purpose in this test model to provide a stress test model.	
406 IfcMechanicalFastener		*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs			
010 Naming		Wrong entity types are for purpose in this test model to provide a stress test model.	
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
200 Material			
200-1 Single Material			
300 Type			
300-2 Type Naming			
408 IfcElementAssembly		*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs			
100 Element Aggregation			
100-2 Element Decomposition			
120 Spatial Containment			
409 IfcReinforcingBar		*company statement*	*ReplacementTest_forSite-02 / 2x3*
001 GUIDs			
010 Naming		Wrong entity types are for purpose in this test model to provide a stress test model.	
General		*company statement*	*ReplacementTest_forSite-02 / 2x3*
_G4 Remarks		Wrong entity types are for purpose in this test model to provide a stress test model.	

ReplacementTest_forStairSlab-01 / 2x3

Thumbnail of ApplicationSpecificTest

105 IfcSlab	*company statement*	*ReplacementTest_forStairSlab-01 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-5 Geometry Explicit	Supported, but not needed when CSG is used.	
040 Presentation		
040-1 Geometric Presentation		
040-2 Material Presentation	Not supported.	
070 Voiding		
070-3 Voiding Geometry SweptSolid	Supported, but not needed when CSG is used.	
402 IfcPlate	*company statement*	*ReplacementTest_forStairSlab-01 / 2x3*
010 Naming	System components are used for the creation of the stairs. The names are automatically added to all parts. It's possible to re-name them, but not recommended, because the re-run of the component overrules the names.	
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-5 Geometry Explicit		

040 Presentation			
040-1 Geometric Presentation			
040-2 Material Presentation		Not supported.	
050 CAD Layer		In this version layer names follow the pattern: prefix & number & name. Prefix "TS_".	
100 Element Aggregation			
100-1 Element Composition			
200 Material			
200-1 Single Material		Material and grade stored to the same field because the limitation of IFC2x3.	
408 IfcElementAssembly		*company statement*	*ReplacementTest_forStairSlab-01 / 2x3*
010 Naming		"Assembly" is the default name for assembly. It can be re-named by the user.	
General		*company statement*	*ReplacementTest_forStairSlab-01 / 2x3*
_G4 Remarks			

ReplacementTest_forWall-01 / 2x3

Thumbnail of ApplicationSpecificTest

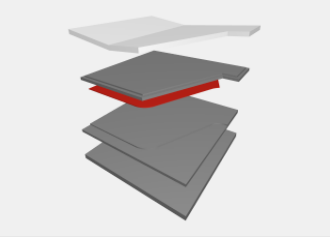
Please replace the placeholder with your own thumbnail.

102 IfcWall	*company statement*	*ReplacementTest_forWall-01 / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit		
040 Presentation		
040-1 Geometric Presentation	Predefined colors only (in this version).	
200 Material		
200-1 Single Material		
103 IfcBeam	*company statement*	*ReplacementTest_forWall-01 / 2x3*
010 Naming		
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
040 Presentation		
040-1 Geometric Presentation	Predefined colors only (in this version).	
200 Material		
200-1 Single Material		

Supported Restricted Not Supported

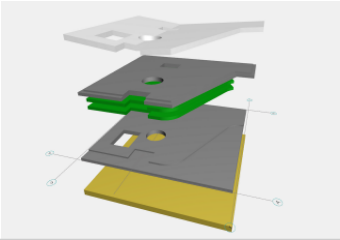
General	company statement	ReplacementTest_forWall-01 / 2x3
_G4 Remarks		

Slab 01S / 2x3



105 IfcSlab	*company statement*	*Slab 01S / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Supported, but sometimes Brep used instead.	
030-6-2 Geometry Clipping	Supported, but not needed when CSG is used.	
040 Presentation		
040-1 Geometric Presentation	Predefined colors only (in this version).	
040-2 Material Presentation	Not supported.	
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_"	
200 Material		
200-2 Material Layer Set	Limitation: one layer only	
200-3 Material Layer Usage	Limitation: one layer only	
210 Property Set		
210-1 Property Set IFC Common	Not supported, no fixed native properties available for mapping.	
General	*company statement*	*Slab 01S / 2x3*
_G4 Remarks		

Slab 02S / 2x3



105 IfcSlab	*company statement*	*Slab 02S / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-1 Geometry Box	Not supported, optional data.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Supported, but sometimes Brep used instead.	
030-6-2 Geometry Clipping	Supported, but not needed when CSG is used.	
030-6-5 Geometry Explicit		
030-6-9 Geometry Mapped	Supported only for bolts and rebar.	
070 Voiding		
070-1 Voiding Geometry Explicit	Supported, but not needed when CSG is used.	
070-2 Voiding Geometry Mapped	Not supported, optional data.	
070-3 Voiding Geometry SweptSolid	Supported, but not needed when CSG is used.	
120 Spatial Containment		
130 Grouping		
130-1 Grouping General	Not supported, optional data.	

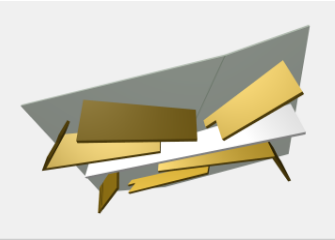
200 Material		
200-1 Single Material	Material and grade stored to the same field because the limitation of IFC2x3	
200-2 Material Layer Set	Limitation: one layer only	
210 Property Set		
210-1 Property Set IFC Common	Not supported, no fixed native properties available for mapping.	
210-2 Property Set IFC any		
210-3 Property Set User Defined		
300 Type		
300-1 Type Geometry	Not supported, optional data.	
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
General	*company statement*	*Slab 02S / 2x3*
_G4 Remarks		

UnitTest-01S / 2x3



501 IfcProject	*company statement*	*UnitTest-01S / 2x3*
005 Project Units		
005-1 Project Metric Units		
005-2 Project Imperial Units	Not supported, the imperial units can be derived from the metric units.	
General	*company statement*	*UnitTest-01S / 2x3*
_G4 Remarks	Supports only metric units (mm and rad), the imperial units can be derived from the metric units.	

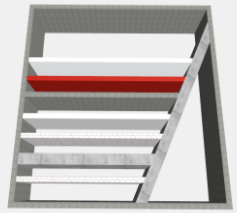
Wall 02 / 2x3



102 IfcWall	company statement	Wall 02 / 2x3
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-2 Geometry Axis	Supported for wallstandardcase only.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping		
030-6-5 Geometry Explicit		
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_".	
070 Voiding		
070-1 Voiding Geometry Explicit	Supported, but not needed when CSG is used.	
070-3 Voiding Geometry SweptSolid	Supported, but not needed when CSG is used.	
120 Spatial Containment		
130 Grouping		
130-1 Grouping General	Not supported, optional data.	
200 Material		
200-3 Material Layer Set	Limitation: one layer only.	

300 Type		
300-2 Type Naming	Types supported, naming hardcoded or same as the basic entity.	
General	*company statement*	*Wall 02 / 2x3*
_G4 Remarks		

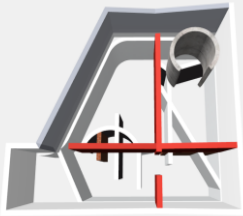
WallStandardCase 01S / 2x3



101 IfcWallStandardCase	*company statement*	*WallStandardCase 01S / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-2 Geometry Axis	Supported for wallstandardcase only.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Supported, but sometimes Brep used instead.	
030-6-2 Geometry Clipping	Supported, but not needed when CSG is used.	
040 Presentation		
040-1 Geometric Presentation	Predefined colors only (in this version).	
040-2 Material Presentation	Not supported.	
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_"	
110 Connectivity		
110-2 Connectivity Path	Not supported, no such data available.	
120 Spatial Containment		
200 Material		
200-4 Material Layer Usage	Limitation: one layer only	
210 Property Set		
210-3 Property Set User Defined	Supported, but not used in all test cases.	

300 Type		
300-3 Type Material	Not supported, optional data.	
300-5 Type Property Set	Not supported, optional data.	
General	*company statement*	*WallStandardCase 01S / 2x3*
_G4 Remarks		

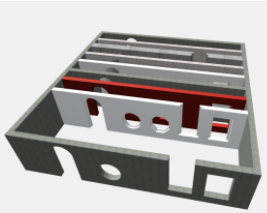
WallStandardCase 02S / 2x3



101 IfcWallStandardCase	*company statement*	*WallStandardCase 02S / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-2 Geometry Axis	Supported for wallstandardcase only.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping		
050 CAD Layer	In this version layer names follow the pattern: prefix & number & name. Prefix "TS_".	
110 Connectivity		
110-2 Connectivity Path	Not supported, no such data available.	
120 Spatial Containment		
200 Material		
200-4 Material Layer Usage	Limitation: one layer only.	
210 Property Set		
210-1 Property Set IFC Common	Not supported, no fixed native properties available for mapping.	

General	*company statement*	*WallStandardCase 02S / 2x3*
_G4 Remarks		

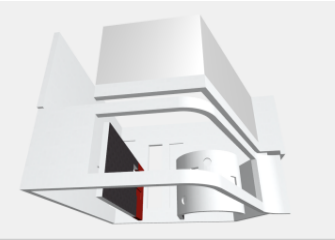
WallStandardCase 03S / 2x3



101 IfcWallStandardCase	*company statement*	*WallStandardCase 03S / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative	Local placement of storey is always set to zero elevation.	
030 Geometry		
030-2 Geometry Axis	Supported for wallstandardcase only.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
070 Voiding		
070-1 Voiding Geometry SweptSolid	Supported, but not needed when CSG is used.	
070-2 Voiding Geometry Explicit	Not supported, optional data.	
120 Spatial Containment		

General	*company statement*	*WallStandardCase 03S / 2x3*
_G4 Remarks	IfcWall needs to be used instead of IfcwallStandardcase when end clipping(s) is/are used.	

WallStandardCase 04S / 2x3



101 IfcWallStandardCase	*company statement*	*WallStandardCase 04S / 2x3*
010 Naming		
030 Geometry		
030-2 Geometry Axis	Supported for wallstandardcase only.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
070 Voiding		
070-1 Voiding Geometry SweptSolid	Supported, but not needed when CSG is used.	
070-2 Voiding Geometry Explicit	Not supported, optional data.	
120 Spatial Containment		
General	*company statement*	*WallStandardCase 04S / 2x3*
_G4 Remarks		