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Introduction

SDS/2 2015

SDS/2 encourages collaboration among multiple steel construction disciplines from architect to fabricator by exporting and importing of 3D elements to and from IFC 2x3 files. The resulting imported elements may be used as view-only reference models or may become native structural entities in the SDS/2 model. Exported IFC files retain the exact structural organization and geometric shapes as they exist in the native SDS/2 model. SDS/2's currently certified IFC functionality exists in both versions 7.3 and 2015.

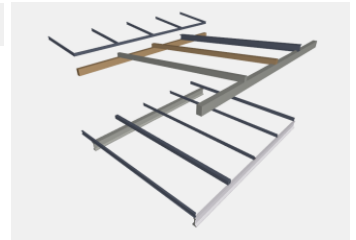
Testlist

Name test	concepts total	manually checked		
				
BeamColumn 04 / 2x3	47	13	3	31
Beam_01 / 2x3	10	2	5	3
Beam_02 / 2x3	12	1	3	8
Column 01 / 2x3	11	3	3	5
Member_01S / 2x3	10	2	4	4
PlateFastener-01 / 2x3	66	17	13	36
RandomStruc-X1 / 2x3	38	38		
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RandomStruc-X3 / 2x3	17	17		
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RandomStruc-X5 / 2x3	17	17		
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ReplacementTest_forPile-01 / 2x3	48	48		
ReplacementTest_forRampSlab-01 / 2x3	38	38		
ReplacementTest_forRebar-01 / 2x3	35	35		
ReplacementTest_forRoof-01 / 2x3	66	66		
ReplacementTest_forRoof-02 / 2x3	52	52		
ReplacementTest_forSite-01 / 2x3	21	20	1	
ReplacementTest_forSite-02 / 2x3	53	53		
ReplacementTest_forStairSlab-01 / 2x3	42	42		
ReplacementTest_forWallStandardCase-01S /	20	20		
ReplacementTest_forWallStandardCase-04S /	21	21		
ReplacementTest_forWall-01 / 2x3	46	46		
ReplacementTest_forWall-02 / 2x3	41	41		
Slab 01S / 2x3	11	4	1	6
Slab 02S / 2x3	22	5	4	13




	concepts total	manually checked
Name test		
UnitTest-01S / 2x3	3	3

Concepts

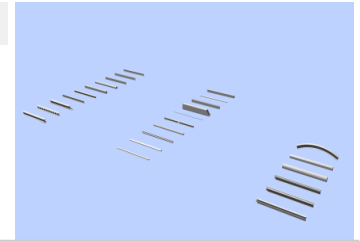
Beam_01 / 2x3





103 IfcBeam	<i>company statement</i>	<i>Beam_01 / 2x3</i>
010 Naming	■ SDS/2 has no native concept of Sites, Buildings, or Storeys, and therefore no way to assign custom names to any of these fields. They are hard coded upon export.	
020 Placement 020-2 Placement Relative	■ SDS/2 has no concept of Storeys, so all entities are located relative to the building.	
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid 030-6-2 Geometry Clipping	■ SDS/2 stores all shapes as BREPs internally. Upon export, simple, straight shapes with perpendicular end cuts are identified and exported as ExtrudedAreaSolids, but anything more complex is exported in our native BREP format. ■ SDS/2 stores all shapes as BREPs internally. It is not possible to reverse engineer arbitrary clipping planes for complex shapes upon export.	
040 Presentation 040-1 Geometric Presentation 040-2 Material Presentation	■ ■ As SDS/2 does not support styles other than the color of the physical material, material presentations are an unsupported concept.	
120 Spatial Containment	■ SDS/2 as no internal concept of a storey as a container.	

<p>200 Material</p> <p>200-1 Single Material</p>	<p> Many SDS/2 materials are exported as BREPs and not extrusions. Since BREPs have no profile information, the profile of the steel must be exported as part of the material name. Naming the material simply "steel" with no profile information would be unusably vague for applications needing to import our models.</p>
<p>210 Property Set</p> <p>210-1 Property Set IFC Common</p>	<p> Of the BeamCommon fields, SDS/2 contains native information for only Span and Slope. The remaining fields are hard coded upon export.</p>
<p>General</p>	<p><i>company statement</i></p> <p style="text-align: right;"><i>Beam_01 / 2x3</i></p>
<p><i>_G4 Remarks</i></p>	<p></p>

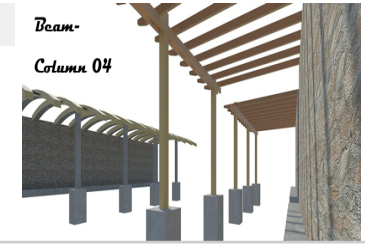
Beam_02 / 2x3



103 IfcBeam	<i>company statement</i>	<i>Beam_02 / 2x3</i>
010 Naming	<p>■ SDS/2 has no native concept of Sites, Buildings, or Storeys, and therefore no way to assign custom names to any of these fields. They are hard coded upon export.</p>	
<p>030 Geometry</p> <p><i>030-2 Geometry Axis</i></p> <p>030-6 Geometry Body</p> <p>030-6-1 Geometry SweptSolid</p> <p>030-6-2 Geometry Clipping</p> <p><i>030-6-5 Geometry Explicit</i></p>	<p>■ Since SDS/2 has no internal concept of material layers, it does not support separate geometry axes.</p> <p>■ SDS/2 stores all shapes as BREPs internally. Upon export, simple, straight shapes with perpendicular end cuts are identified and exported as ExtrudedAreaSolids, but anything more complex is exported in our native BREP format.</p> <p>■ SDS/2 stores all shapes as BREPs internally. It is not possible to reverse engineer arbitrary clipping planes for complex shapes upon export.</p> <p>■ Many of the shapes in this model cannot be represented natively by SDS/2 -- at least not in a manner that can be exported as a beam. Only those that can be represented have been exported in this file.</p>	
050 CAD Layer	<p>■ SDS/2 has no internal concept of CAD layer</p>	
<p>070 Voiding</p> <p><i>070-1 Voiding Geometry Explicit</i></p> <p><i>070-2 Voiding Geometry Mapped</i></p> <p>070-3 Voiding Geometry SweptSolid</p>	<p>■ Internally, SDS/2 includes all openings and voids as part of the material's BREP, so separate void information is not available at the time of export.</p> <p>■ Internally, SDS/2 includes all openings and voids as part of the material's BREP, so separate void information is not available at the time of export.</p> <p>■ Internally, SDS/2 includes all openings and voids as part of the material's BREP, so separate void information is not available at the time of export.</p>	
120 Spatial Containment	<p>■ SDS/2 supports project, site, and building, but not storeys.</p>	
















200 Material 200-1 Single Material	 Many SDS/2 materials are exported as BREPs and not extrusions. Since BREPs have no profile information, the profile of the steel must be exported as part of the material name. Naming the material simply "S235" with no profile information would be unusably vague for applications needing to import our models.
General	<i>company statement</i>
_G4 Remarks	

BeamColumn 04 / 2x3



BeamColumn 04 / 2x3

103 IfcBeam	<i>company statement</i>	
001 GUIDs	■	
<i>002 History</i>	■	
010 Naming	■	
020 Placement 020-2 Placement Relative	■	SDS/2 has no concept of Storeys, so all entities are located relative to the building.
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid 030-6-9 Geometry Mapped	■ ■ ■	
070 Voiding <i>070-1 Voiding Geometry Explicit</i> <i>070-2 Voiding Geometry Mapped</i> 070-3 Voiding Geometry SweptSolid	■ ■ ■	SDS/2 stores all shapes internally as BREPs, and does not store voids (except for bolt holes) separately. SDS/2 stores all shapes internally as BREPs, and does not store voids (except for bolt holes) separately. SDS/2 stores all shapes internally as BREPs, and does not store voids (except for bolt holes) separately.
130 Grouping <i>130-1 Grouping General</i>	■	SDS/2 does not provide the facility to assign arbitrary groups of members.
200 Material 200-1 Single Material	■	The requested material names are incompatible with the list of real world materials available to SDS/2.

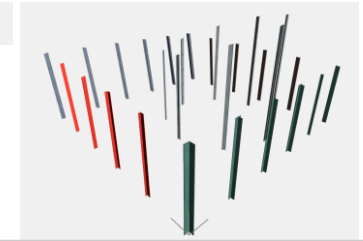
210 Property Set		
210-1 Property Set IFC Common		The fields specified by IFC are overly simplistic for structural steel construction.
210-3 Property Set User Defined		
300 Type		
300-1 Type Geometry		SDS/2 has no internal concept analogous to IFC element types.
300-2 Type Naming		SDS/2 has no internal concept analogous to IFC element types.
300-3 Type Material		SDS/2 has no internal concept analogous to IFC element types.
300-5 Type Property Set		SDS/2 has no internal concept which is compatible with IFC type property sets.
104 IfcColumn		<i>company statement</i> <i>BeamColumn 04 / 2x3</i>
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-2 Placement Relative		SDS/2 has no concept of Storeys, so all entities are located relative to the building.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-9 Geometry Mapped		
070 Voiding		
070-1 Voiding Geometry Explicit		SDS/2 stores all shapes internally as BREPs, and does not store voids (except for bolt holes) separately.
070-2 Voiding Geometry Mapped		SDS/2 stores all shapes internally as BREPs, and does not store voids (except for bolt holes) separately.
070-3 Voiding Geometry SweptSolid		SDS/2 stores all shapes internally as BREPs, and does not store voids (except for bolt holes) separately.

130 Grouping <i>130-1 Grouping General</i>	■ SDS/2 does not provide the facility to assign arbitrary groups of members.
200 Material 200-1 Single Material	■ The requested material names are incompatible with the list of real world materials available to SDS/2.
210 Property Set 210-2 Property Set IFC any	■
300 Type <i>300-1 Type Geometry</i> <i>300-2 Type Naming</i> <i>300-3 Type Material</i> <i>300-5 Type Property Set</i>	■ SDS/2 has no internal concept analogous to IFC element types. ■ SDS/2 has no internal concept analogous to IFC element types. ■ SDS/2 has no internal concept analogous to IFC element types. ■ SDS/2 has no internal concept analogous to IFC element types.
403 IfcFooting	<i>company statement</i> <i>BeamColumn 04 / 2x3</i>
001 GUIDs	■ SDS/2 has no native member type for footings.
<i>002 History</i>	■ SDS/2 has no native member type for footings.
010 Naming	■ SDS/2 has no native member type for footings.
020 Placement 020-1 Placement Relative	■ SDS/2 has no native member type for footings.
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid <i>030-6-9 Geometry Mapped</i>	■ SDS/2 has no native member type for footings. ■ SDS/2 has no native member type for footings.
130 Grouping <i>130-1 Grouping General</i>	■ SDS/2 has no native member type for footings.
200 Material 200-1 Single Material	■ SDS/2 has no native member type for footings.



210 Property Set		
210-2 Property Set IFC any	■	SDS/2 has no native member type for footings.
300 Type		
300-1 Type Geometry	■	SDS/2 has no native member type for footings.
300-2 Type Naming	■	SDS/2 has no native member type for footings.
300-3 Type Material	■	SDS/2 has no native member type for footings.
300-5 Type Property Set	■	SDS/2 has no native member type for footings.
General		<i>company statement</i>
_G4 Remarks	■	

BeamColumn 04 / 2x3

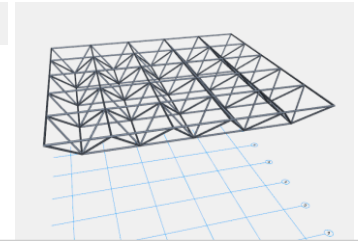
Column 01 / 2x3



IfcColumn	<i>company statement</i>
010 Naming	■
020 Placement 020-2 Placement Relative	■ SDS/2 has no concept of Storeys, so all entities are located relative to the building.
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid 030-6-2 Geometry Clipping	<p>■ SDS/2 stores all shapes as BREPs internally. Upon export, simple, straight shapes with perpendicular end cuts are identified and exported as ExtrudedAreaSolids, but anything more complex is exported in our native BREP format.</p> <p>■ SDS/2 stores all shapes as BREPs internally. It is not possible to reverse engineer arbitrary clipping planes for complex shapes upon export.</p>
040 Presentation 040-1 Geometric Presentation 040-2 Material Presentation	<p>■</p> <p>■ As SDS/2 does not support styles other than the color of the physical material, material presentations are an unsupported concept.</p>
050 CAD Layer	■ SDS/2 has no internal concept of CAD layer
120 Spatial Containment	■ SDS/2 supports project, site, and building, but not storeys.
200 Material 200-1 Single Material	■ Many SDS/2 materials are exported as BREPs and not extrusions. Since BREPs have no profile information, the profile of the steel must be exported as part of the material name. Naming the material simply "steel" with no profile information would be unusably vague for applications needing to import our models.

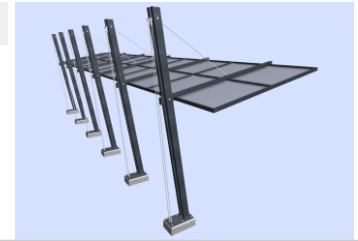
210 Property Set	
210-1 Property Set IFC Common	 Of the ColumnCommon fields, SDS/2 contains native information for only Slope. The remaining fields are hard coded upon export.
General	<i>company statement</i> Column 01 / 2x3
_G4 Remarks	

Member_01S / 2x3














IfcMember	<i>company statement</i>	<i>Member_01S / 2x3</i>
010 Naming	■	
020 Placement 020-2 Placement Relative	■ SDS/2 has no concept of Storeys, so all entities are located relative to the building.	
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid 030-6-2 Geometry Clipping	■ SDS/2 exports simple shapes as extrusions and all others as BREPs. ■ SDS/2 does not explicitly specify clips upon export.	
110 Connectivity 110-1 Connectivity Basic 110-3 Connectivity Realization 110-3-1 Connectivity Realized	■ SDS/2 exports connectivity information for only those members which have a load bearing influence. ■ No connection method was specified for this model, so no connecting material or fasteners were generated.	
120 Spatial Containment	■ Since SDS/2 has no concept of building storeys.	
200 Material 200-1 Single Material	■ SDS/2 exports material information as a combination of several aspects of the physical material.	
300 Type 300-1 Type Geometry	■ SDS/2 has no internal concept of entity types.	
General	<i>company statement</i>	<i>Member_01S / 2x3</i>
_G4 Remarks	■	














PlateFastener-01 / 2x3
















103 IfcBeam	<i>company statement</i>		<i>PlateFastener-01 / 2x3</i>
001 GUIDs	■		
<i>002 History</i>	■		
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid 030-6-9 Geometry Mapped		SDS/2 does not explicitly specify clips upon export.	
104 IfcColumn	<i>company statement</i>		<i>PlateFastener-01 / 2x3</i>
001 GUIDs	■	Welded plate assemblies cannot be interpreted as columns in SDS/2.	
<i>002 History</i>	■	Welded plate assemblies cannot be interpreted as columns in SDS/2.	
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid 030-6-9 Geometry Mapped		Welded plate assemblies cannot be interpreted as columns in SDS/2.	
100 Element Aggregation 100-2 Element Decomposition		Welded plate assemblies cannot be interpreted as columns in SDS/2.	
210 Property Set 210-3 Property Set User Defined		Welded plate assemblies cannot be interpreted as columns in SDS/2.	

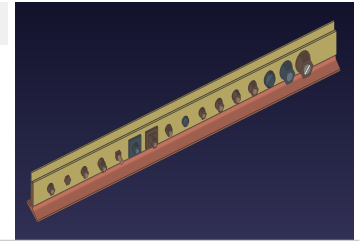
300 Type		
300-1 Type Geometry	■	Welded plate assemblies cannot be interpreted as columns in SDS/2.
300-2 Type Naming	■	Welded plate assemblies cannot be interpreted as columns in SDS/2.
300-3 Type Material	■	Welded plate assemblies cannot be interpreted as columns in SDS/2.
300-5 Type Property Set	■	Welded plate assemblies cannot be interpreted as columns in SDS/2.
401 IfcMember		<i>company statement</i> <i>PlateFastener-01 / 2x3</i>
001 GUIDs	■	
002 History	■	
020 Placement		
020-2 Placement Relative	■	SDS/2 has no concept of Storeys, so all entities are located relative to the building.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	SDS/2 does not explicitly specify clips upon export.
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
050 CAD Layer	■	SDS/2 does not provide the ability to assign specific CAD layers to individual materials.
210 Property Set		
210-1 Property Set IFC Common	■	Not all fields in the SDS/2 specification have counterparts in SDS/2.
210-3 Property Set User Defined	■	SDS/2 has no facility for user-defined property sets.
300 Type		
300-2 Type Naming	■	
300-3 Type Material	■	The members in this job do not use pre-defined material cross-sections, and therefore material types are not available for export.
300-5 Type Property Set	■	Property sets are system-defined, and may not be edited by the user prior to export.

402 IfcPlate	<i>company statement</i>		<i>PlateFastener-01 / 2x3</i>
001 GUIDs			
<i>002 History</i>			
010 Naming			
020 Placement 020-2 Placement Relative		SDS/2 has no concept of Storeys, so all entities are located relative to the building.	
030 Geometry 030-6 Geometry Body 030-6-1 Geometry SweptSolid 030-6-2 Geometry Clipping 030-6-5 Geometry Explicit		No clips are required for plates in this model SDS/2 stores all materials internally as mapped shapes.	
040 Presentation 040-1 Geometric Presentation			
050 CAD Layer		SDS/2 does not provide the ability to assign specific CAD layers to individual materials.	
070 Voiding 070-3 Voiding Geometry SweptSolid		SDS/2 stores all shapes internally as BREPs, and does not store voids (except for bolt holes) separately.	
120 Spatial Containment		SDS/2 does not provide the ability to organize entities into logical spaces.	
200 Material 200-2 Material Layer Set		SDS/2 cannot assign layered material descriptions to a single object	
210 Property Set 210-1 Property Set IFC Common 210-3 Property Set User Defined		SDS/2 does not store any of the information given by the Pset_PlateCommon fields. SDS/2 has no facility for user-defined property sets.	

300 Type		
300-1 Type Geometry		
300-2 Type Naming		Plate type names come from the real world material used, and are not user-editable.
300-3 Type Material		Since plates are not cut from standard profiles, there is no material info available.
300-5 Type Property Set		None of the fields in Pset_PlateCommon are available in SDS/2.
403 IfcFooting		<i>company statement</i> <i>PlateFastener-01 / 2x3</i>
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		SDS/2 has no native member type for footings.
030-6-2 Geometry Clipping		SDS/2 has no native member type for footings.
405 IfcFastener		<i>company statement</i> <i>PlateFastener-01 / 2x3</i>
010 Naming		SDS/2 does not allow the user to name individual fasteners.
020 Placement		
020-2 Placement Relative		SDS/2 has no concept of Storeys, so all entities are located relative to the building.
030 Geometry		
030-2 Geometry Axis		SDS/2 stores all fasteners internally as BREPs.
406 IfcMechanicalFastener		<i>company statement</i> <i>PlateFastener-01 / 2x3</i>
001 GUIDs		
002 History		
010 Naming		SDS/2 does not allow the user to name individual fasteners.
020 Placement		
020-2 Placement Relative		SDS/2 has no concept of Storeys, so all entities are located relative to the building.

<p>030 Geometry</p> <p>030-6 Geometry Body</p> <p><i>030-6-1 Geometry SweptSolid</i></p> <p>030-6-5 Geometry Explicit</p> <p>030-6-9 Geometry Mapped</p>	<p> SDS/2 does not explicitly specify clips upon export.</p> <p> SDS/2 stores all materials internally as mapped shapes.</p> <p></p>
<p>040 Presentation</p> <p>040-1 Geometric Presentation</p>	<p> Bolt color is not user-customizable in SDS/2.</p>
<p>050 CAD Layer</p>	<p> SDS/2 does not provide the ability to assign specific CAD layers to individual materials.</p>
<p>120 Spatial Containment</p>	<p> SDS/2 does not provide the ability to organize entities into logical spaces.</p>
<p>200 Material</p> <p><i>200-1 Single Material</i></p>	<p> The requested material names are incompatible with the list of real world materials available to SDS/2.</p>
<p>210 Property Set</p> <p>210-6 Property Set IFC any</p> <p>210-9 Property Set User Defined</p>	<p> The information specified in Pset_ManufacturerType is not available in SDS/2.</p> <p> SDS/2 has no facility for user-defined property sets.</p>
<p>300 Type</p> <p>300-1 Type Geometry</p> <p><i>300-2 Type Naming</i></p> <p><i>300-3 Type Material</i></p> <p><i>300-5 Type Property Set</i></p>	<p> SDS/2 does not support describing mechanical fasteners by type.</p> <p> SDS/2 does not support describing mechanical fasteners by type.</p> <p> SDS/2 does not support describing mechanical fasteners by type.</p> <p> SDS/2 does not support describing mechanical fasteners by type.</p>

RandomStruc-X1 / 2x3



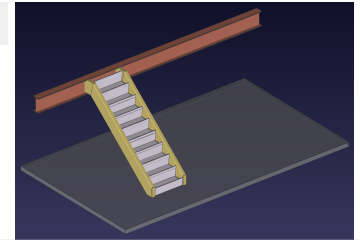
103 IfcBeam	<i>company statement</i>		<i>RandomStruc-X1 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
070 Voiding			
070-2 Voiding Geometry Mapped	■		
070-3 Voiding Geometry SweptSolid	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-1 Property Set IFC Common	■		
210-3 Property Set User Defined	■		

300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
402 IfcPlate		<i>company statement</i> <i>RandomStruc-X1 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
070 Voiding		
070-2 Voiding Geometry Mapped	■	
070-3 Voiding Geometry SweptSolid	■	
100 Element Aggregation		
100-1 Element Composition	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	

300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
406 IfcMechanicalFastener		<i>company statement</i> <i>RandomStruc-X1 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	■	
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
100 Element Aggregation		
100-1 Element Composition	■	
210 Property Set		
210-9 Property Set User Defined	■	
408 IfcElementAssembly		<i>company statement</i> <i>RandomStruc-X1 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
100 Element Aggregation		
100-2 Element Decomposition	■	

210 Property Set			
210-9 Property Set User Defined	■		
General		<i>company statement</i>	<i>RandomStruc-X1 / 2x3</i>
_G4 Remarks	■		

RandomStruc-X2 / 2x3



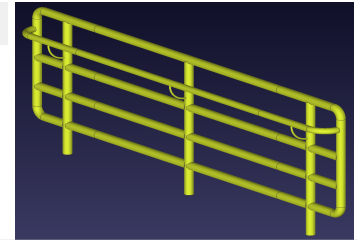
103 IfcBeam	<i>company statement</i>		<i>RandomStruc-X2 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
030-6-9 Geometry Mapped	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-1 Property Set IFC Common	■		
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-5 Type Property Set	■		
105 IfcSlab	<i>company statement</i>		<i>RandomStruc-X2 / 2x3</i>
010 Naming	■		

020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-9 Geometry Mapped	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
106 IfcStair		<i>company statement</i> <i>RandomStruc-X2 / 2x3</i>
010 Naming	■	
020 Placement		
020-1 Placement Relative	■	
100 Element Aggregation		
100-2 Element Decomposition	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
401 IfcMember		<i>company statement</i> <i>RandomStruc-X2 / 2x3</i>
010 Naming	■	

020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-5 Geometry Explicit	■	
030-6-9 Geometry Mapped	■	
100 Element Aggregation		
100-1 Element Composition	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
402 IfcPlate		<i>company statement</i>
		<i>RandomStruc-X2 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-9 Geometry Mapped	■	

100 Element Aggregation			
100-1 Element Composition	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
General		<i>company statement</i>	<i>RandomStruc-X2 / 2x3</i>
_G4 Remarks	■		

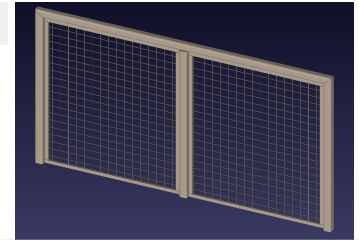
RandomStruc-X3 / 2x3



108 IfcRailing		<i>company statement</i>	<i>RandomStruc-X3 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
100 Element Aggregation			
100-2 Element Decomposition	■		
210 Property Set			
210-3 Property Set User Defined	■		
401 IfcMember		<i>company statement</i>	<i>RandomStruc-X3 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
030-6-5 Geometry Explicit	■		
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		

100 Element Aggregation			
100-1 Element Composition		■	
200 Material			
200-1 Single Material		■	
210 Property Set			
210-3 Property Set User Defined		■	
300 Type			
300-1 Type Geometry		■	
300-2 Type Naming		■	
300-5 Type Property Set		■	
General			<i>company statement</i>
_G4 Remarks		■	
			<i>RandomStruc-X3 / 2x3</i>

RandomStruc-X4 / 2x3

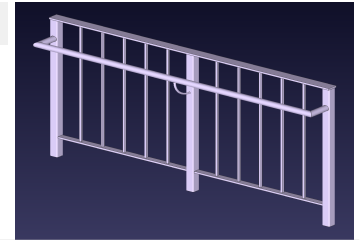


108 IfcRailing		<i>company statement</i>	<i>RandomStruc-X4 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
100 Element Aggregation			
100-2 Element Decomposition	■		
210 Property Set			
210-3 Property Set User Defined	■		
401 IfcMember		<i>company statement</i>	<i>RandomStruc-X4 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
030-6-5 Geometry Explicit	■		
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		

100 Element Aggregation		
100-1 Element Composition	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
402 IfcPlate		<i>company statement</i> <i>RandomStruc-X4 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-9 Geometry Mapped	■	
100 Element Aggregation		
100-1 Element Composition	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	

300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
General		<i>company statement</i>
_G4 Remarks	■	
		<i>RandomStruc-X4 / 2x3</i>

RandomStruc-X5 / 2x3














108 IfcRailing		<i>company statement</i>	<i>RandomStruc-X5 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
100 Element Aggregation			
100-2 Element Decomposition	■		
210 Property Set			
210-3 Property Set User Defined	■		
401 IfcMember		<i>company statement</i>	<i>RandomStruc-X5 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
030-6-5 Geometry Explicit	■		
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		

100 Element Aggregation			
100-1 Element Composition	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-5 Type Property Set	■		
General		<i>company statement</i>	<i>RandomStruc-X5 / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forBeam-03 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.

103 IfcBeam		<i>company statement</i>	<i>ReplacementTest_forBeam-03 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
104 IfcColumn		<i>company statement</i>	<i>ReplacementTest_forBeam-03 / 2x3</i>
010 Naming			

020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
401 IfcMember		<i>company statement</i> <i>ReplacementTest_forBeam-03 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	

200 Material			
200-1 Single Material		■	
210 Property Set			
210-1 Property Set IFC Common		■	
210-3 Property Set User Defined		■	
300 Type			
300-1 Type Geometry		■	
300-2 Type Naming		■	
300-5 Type Property Set		■	
402 IfcPlate	<i>company statement</i>		<i>ReplacementTest_forBeam-03 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped		■	
040 Presentation			
040-1 Geometric Presentation		■	
200 Material			
200-1 Single Material		■	
210 Property Set			
210-3 Property Set User Defined		■	











300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
407 IfcDiscreteAccessory		<i>company statement</i> <i>ReplacementTest_forBeam-03 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-9 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
408 IfcElementAssembly		<i>company statement</i> <i>ReplacementTest_forBeam-03 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	

100 Element Aggregation			
100-2 Element Decomposition	■		
210 Property Set			
210-9 Property Set User Defined	■		
General		<i>company statement</i>	<i>ReplacementTest_forBeam-03 / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forPile-01 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.

104 IfcColumn		<i>company statement</i>	<i>ReplacementTest_forPile-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
111 IfcBuildingElementProxy		<i>company statement</i>	<i>ReplacementTest_forPile-01 / 2x3</i>
010 Naming			

020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
402 IfcPlate		<i>company statement</i> <i>ReplacementTest_forPile-01 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	












070 Voiding			
070-2 Voiding Geometry Mapped		■	
200 Material			
200-1 Single Material		■	
210 Property Set			
210-3 Property Set User Defined		■	
300 Type			
300-1 Type Geometry		■	
300-2 Type Naming		■	
300-5 Type Property Set		■	
405 IfcFastener			<i>company statement</i>
			<i>ReplacementTest_forPile-01 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped		■	
040 Presentation			
040-1 Geometric Presentation		■	
210 Property Set			
210-9 Property Set User Defined		■	
406 IfcMechanicalFastener			<i>company statement</i>
			<i>ReplacementTest_forPile-01 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	

030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-9 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
408 IfcElementAssembly		<i>company statement</i> <i>ReplacementTest_forPile-01 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
100 Element Aggregation		
100-1 Element Composition	■	
210 Property Set		
210-9 Property Set User Defined	■	
General		<i>company statement</i> <i>ReplacementTest_forPile-01 / 2x3</i>
_G4 Remarks	■	

ReplacementTest_forRampSlab-01 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.

103 IfcBeam		<i>company statement</i>	<i>ReplacementTest_forRampSlab-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
401 IfcMember		<i>company statement</i>	<i>ReplacementTest_forRampSlab-01 / 2x3</i>
010 Naming			

020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
402 IfcPlate		<i>company statement</i> <i>ReplacementTest_forRampSlab-01 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
200 Material		
200-1 Single Material	■	

210 Property Set			
210-3 Property Set User Defined		■	
300 Type			
300-1 Type Geometry		■	
300-2 Type Naming		■	
300-5 Type Property Set		■	
406 IfcMechanicalFastener			<i>company statement</i> <i>ReplacementTest_forRampSlab-01 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped		■	
040 Presentation			
040-1 Geometric Presentation		■	
210 Property Set			
210-9 Property Set User Defined		■	
408 IfcElementAssembly			<i>company statement</i> <i>ReplacementTest_forRampSlab-01 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	
100 Element Aggregation			
100-2 Element Decomposition		■	
210 Property Set			
210-9 Property Set User Defined		■	

General

company statement

ReplacementTest_forRampSlab-01 / 2x3












_G4 Remarks















ReplacementTest_forRebar-01 / 2x3

Thumbnail of ApplicationSpecificTest

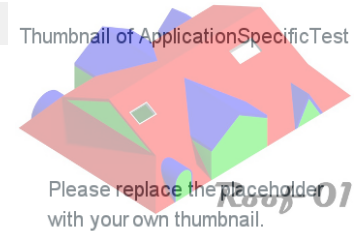
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with your own thumbnail.

401 IfcMember		<i>company statement</i>	<i>ReplacementTest_forRebar-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
070 Voiding			
070-2 Voiding Geometry Mapped			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			














402 IfcPlate		<i>company statement</i>	<i>ReplacementTest_forRebar-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
<i>030-6-9 Geometry Mapped</i>			
040 Presentation			
040-1 Geometric Presentation			
070 Voiding			
<i>070-2 Voiding Geometry Mapped</i>			
200 Material			
<i>200-1 Single Material</i>			
210 Property Set			
210-3 Property Set User Defined			
300 Type			
<i>300-1 Type Geometry</i>			
<i>300-2 Type Naming</i>			
<i>300-5 Type Property Set</i>			
406 IfcMechanicalFastener		<i>company statement</i>	<i>ReplacementTest_forRebar-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			

030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped		■	
040 Presentation			
040-1 Geometric Presentation		■	
200 Material			
200-1 Single Material		■	
210 Property Set			
210-9 Property Set User Defined		■	
300 Type			
300-1 Type Geometry		■	
300-2 Type Naming		■	
300-5 Type Property Set		■	
408 IfcElementAssembly			<i>company statement</i> <i>ReplacementTest_forRebar-01 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	
100 Element Aggregation			
100-2 Element Decomposition		■	
210 Property Set			
210-9 Property Set User Defined		■	
General			<i>company statement</i> <i>ReplacementTest_forRebar-01 / 2x3</i>
_G4 Remarks		■	

ReplacementTest_forRoof-01 / 2x3



103 IfcBeam		<i>company statement</i>	<i>ReplacementTest_forRoof-01 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
070 Voiding			
070-2 Voiding Geometry Mapped	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-1 Property Set IFC Common	■		
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-5 Type Property Set	■		

104 IfcColumn		<i>company statement</i>	<i>ReplacementTest_forRoof-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
401 IfcMember		<i>company statement</i>	<i>ReplacementTest_forRoof-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			

040 Presentation			
040-1 Geometric Presentation		■	
200 Material			
200-1 Single Material		■	
210 Property Set			
210-1 Property Set IFC Common		■	
210-3 Property Set User Defined		■	
300 Type			
300-1 Type Geometry		■	
300-2 Type Naming		■	
300-5 Type Property Set		■	
402 IfcPlate			
	<i>company statement</i>		<i>ReplacementTest_forRoof-01 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped		■	
040 Presentation			
040-1 Geometric Presentation		■	
070 Voiding			
070-2 Voiding Geometry Mapped		■	
200 Material			
200-1 Single Material		■	

210 Property Set			
210-3 Property Set User Defined		■	
300 Type			
300-1 Type Geometry		■	
300-2 Type Naming		■	
300-5 Type Property Set		■	
405 IfcFastener			<i>company statement</i> <i>ReplacementTest_forRoof-01 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped		■	
040 Presentation			
040-1 Geometric Presentation		■	
210 Property Set			
210-9 Property Set User Defined		■	
406 IfcMechanicalFastener			<i>company statement</i> <i>ReplacementTest_forRoof-01 / 2x3</i>
010 Naming		■	
020 Placement			
020-2 Placement Relative		■	
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped		■	

040 Presentation			
040-1 Geometric Presentation	■		
210 Property Set			
210-9 Property Set User Defined	■		
407 IfcDiscreteAccessory		<i>company statement</i>	<i>ReplacementTest_forRoof-01 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
070 Voiding	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-9 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-5 Type Property Set	■		
408 IfcElementAssembly		<i>company statement</i>	<i>ReplacementTest_forRoof-01 / 2x3</i>
010 Naming	■		

020 Placement			
020-2 Placement Relative	■		
100 Element Aggregation			
100-1 Element Composition	■		
210 Property Set			
210-9 Property Set User Defined	■		
General		<i>company statement</i>	<i>ReplacementTest_forRoof-01 / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forRoof-02 / 2x3

Thumbnail of ApplicationSpecificTest
Roof_02



Please replace the placeholder
with your own thumbnail.

103 IfcBeam		<i>company statement</i>	<i>ReplacementTest_forRoof-02 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-1 Property Set IFC Common	■		
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-5 Type Property Set	■		
104 IfcColumn		<i>company statement</i>	<i>ReplacementTest_forRoof-02 / 2x3</i>
010 Naming	■		

020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
401 IfcMember		<i>company statement</i> <i>ReplacementTest_forRoof-02 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	

200 Material		
200-1 Single Material	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
402 IfcPlate		<i>company statement</i> <i>ReplacementTest_forRoof-02 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	

300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
407 IfcDiscreteAccessory		<i>company statement</i> <i>ReplacementTest_forRoof-02 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-9 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
408 IfcElementAssembly		<i>company statement</i> <i>ReplacementTest_forRoof-02 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	

100 Element Aggregation	
100-2 Element Decomposition	■
210 Property Set	
210-9 Property Set User Defined	■

ReplacementTest_forSite-01 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.












103 IfcBeam	<i>company statement</i>	<i>ReplacementTest_forSite-01 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
070 Voiding		
070-2 Voiding Geometry Mapped	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	

403 IfcFooting		<i>company statement</i>	<i>ReplacementTest_forSite-01 / 2x3</i>
406 IfcMechanicalFastener		<i>company statement</i>	<i>ReplacementTest_forSite-01 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
210 Property Set			
210-9 Property Set User Defined	■		
408 IfcElementAssembly		<i>company statement</i>	<i>ReplacementTest_forSite-01 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
100 Element Aggregation			
100-2 Element Decomposition	■		
210 Property Set			
210-9 Property Set User Defined	■		
General		<i>company statement</i>	<i>ReplacementTest_forSite-01 / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forSite-02 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.

102 IfcWall		<i>company statement</i>	<i>ReplacementTest_forSite-02 / 2x3</i>
103 IfcBeam		<i>company statement</i>	<i>ReplacementTest_forSite-02 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
104 IfcColumn		<i>company statement</i>	<i>ReplacementTest_forSite-02 / 2x3</i>
010 Naming			

020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
401 IfcMember		<i>company statement</i> <i>ReplacementTest_forSite-02 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	

200 Material		
200-1 Single Material	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
402 IfcPlate		<i>company statement</i> <i>ReplacementTest_forSite-02 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	













300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
407 IfcDiscreteAccessory		<i>company statement</i> <i>ReplacementTest_forSite-02 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-9 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
408 IfcElementAssembly		<i>company statement</i> <i>ReplacementTest_forSite-02 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	

100 Element Aggregation			
100-2 Element Decomposition	■		
210 Property Set			
210-9 Property Set User Defined	■		
General		<i>company statement</i>	<i>ReplacementTest_forSite-02 / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forStairSlab-01 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.

103 IfcBeam		<i>company statement</i>	<i>ReplacementTest_forStairSlab-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid			
030-6-9 Geometry Mapped			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
105 IfcSlab		<i>company statement</i>	<i>ReplacementTest_forStairSlab-01 / 2x3</i>
002 History			
010 Naming			

030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-9 Geometry Mapped	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
106 IfcStair		<i>company statement</i> <i>ReplacementTest_forStairSlab-01 / 2x3</i>
010 Naming	■	
020 Placement		
020-1 Placement Relative	■	
100 Element Aggregation		
100-2 Element Decomposition	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
401 IfcMember		<i>company statement</i> <i>ReplacementTest_forStairSlab-01 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	












030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	■	
030-6-9 Geometry Mapped	■	
100 Element Aggregation		
100-1 Element Composition	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
402 IfcPlate		<i>company statement</i> <i>ReplacementTest_forStairSlab-01 / 2x3</i>
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-9 Geometry Mapped	■	
100 Element Aggregation		
100-1 Element Composition	■	
200 Material		
200-1 Single Material	■	

210 Property Set			
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
General		<i>company statement</i>	<i>ReplacementTest_forStairSlab-01 / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forWall-01 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.

104 IfcColumn		<i>company statement</i>	<i>ReplacementTest_forWall-01 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
401 IfcMember		<i>company statement</i>	<i>ReplacementTest_forWall-01 / 2x3</i>
010 Naming			

020 Placement	
020-2 Placement Relative	■
030 Geometry	
030-6 Geometry Body	
030-6-9 Geometry Mapped	■
040 Presentation	
040-1 Geometric Presentation	■
070 Voiding	
070-2 Voiding Geometry Mapped	■
200 Material	
200-1 Single Material	■
210 Property Set	
210-1 Property Set IFC Common	■
210-3 Property Set User Defined	■
300 Type	
300-1 Type Geometry	■
300-2 Type Naming	■
300-5 Type Property Set	■
402 IfcPlate	<i>company statement</i>
	<i>ReplacementTest_forWall-01 / 2x3</i>
010 Naming	■
020 Placement	
020-2 Placement Relative	■
030 Geometry	
030-6 Geometry Body	
030-6-9 Geometry Mapped	■










040 Presentation			
040-1 Geometric Presentation	■		
070 Voiding			
070-2 Voiding Geometry Mapped	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-5 Type Property Set	■		
405 IfcFastener		<i>company statement</i>	<i>ReplacementTest_forWall-01 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
210 Property Set			
210-9 Property Set User Defined	■		
406 IfcMechanicalFastener		<i>company statement</i>	<i>ReplacementTest_forWall-01 / 2x3</i>
010 Naming	■		

020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
200 Material			
210 Property Set			
210-9 Property Set User Defined	■		
300 Type			
408 IfcElementAssembly		<i>company statement</i>	<i>ReplacementTest_forWall-01 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
100 Element Aggregation			
100-2 Element Decomposition	■		
210 Property Set			
210-9 Property Set User Defined	■		
General		<i>company statement</i>	<i>ReplacementTest_forWall-01 / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forWall-02 / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.

104 IfcColumn		<i>company statement</i>	<i>ReplacementTest_forWall-02 / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
401 IfcMember		<i>company statement</i>	<i>ReplacementTest_forWall-02 / 2x3</i>
010 Naming			

020 Placement	
020-2 Placement Relative	■
030 Geometry	
030-6 Geometry Body	
030-6-9 Geometry Mapped	■
040 Presentation	
040-1 Geometric Presentation	■
070 Voiding	
070-2 Voiding Geometry Mapped	■
200 Material	
200-1 Single Material	■
210 Property Set	
210-1 Property Set IFC Common	■
210-3 Property Set User Defined	■
300 Type	
300-1 Type Geometry	■
300-2 Type Naming	■
300-5 Type Property Set	■
402 IfcPlate	<i>company statement</i> <i>ReplacementTest_forWall-02 / 2x3</i>
010 Naming	■
020 Placement	
020-2 Placement Relative	■
030 Geometry	
030-6 Geometry Body	
030-6-9 Geometry Mapped	■








040 Presentation			
040-1 Geometric Presentation	■		
070 Voiding			
070-2 Voiding Geometry Mapped	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-5 Type Property Set	■		
405 IfcFastener		<i>company statement</i>	<i>ReplacementTest_forWall-02 / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		
210 Property Set			
210-9 Property Set User Defined	■		
408 IfcElementAssembly		<i>company statement</i>	<i>ReplacementTest_forWall-02 / 2x3</i>
010 Naming	■		

020 Placement			
020-2 Placement Relative	■		
100 Element Aggregation			
100-1 Element Composition	■		
210 Property Set			
210-9 Property Set User Defined	■		
General		<i>company statement</i>	<i>ReplacementTest_forWall-02 / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forWallStandardCase-01S / 2x3

Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.












104 IfcColumn		<i>company statement</i>	<i>ReplacementTest_forWallStandardCase-01S / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
401 IfcMember		<i>company statement</i>	<i>ReplacementTest_forWallStandardCase-01S / 2x3</i>
010 Naming			

020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped	■		
200 Material			
200-1 Single Material	■		
210 Property Set			
210-1 Property Set IFC Common	■		
210-3 Property Set User Defined	■		
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-5 Type Property Set	■		
General		<i>company statement</i>	<i>ReplacementTest_forWallStandardCase-01S / 2x3</i>
_G4 Remarks	■		

ReplacementTest_forWallStandardCase-04S / 2x3

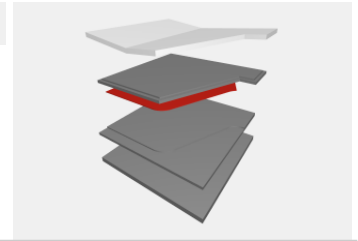
Thumbnail of ApplicationSpecificTest

Please replace the placeholder
with your own thumbnail.

103 IfcBeam		<i>company statement</i>	<i>ReplacementTest_forWallStandardCase-04S / 2x3</i>
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-9 Geometry Mapped			
040 Presentation			
040-1 Geometric Presentation			
200 Material			
200-1 Single Material			
210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined			
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-5 Type Property Set			
401 IfcMember		<i>company statement</i>	<i>ReplacementTest_forWallStandardCase-04S / 2x3</i>
010 Naming			

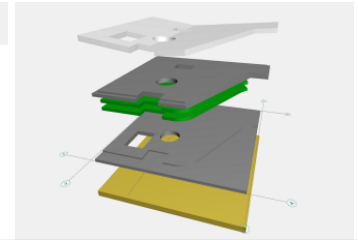
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	■	
040 Presentation		
040-1 Geometric Presentation	■	
200 Material		
200-1 Single Material	■	
210 Property Set		
210-1 Property Set IFC Common	■	
210-3 Property Set User Defined	■	
300 Type		
300-1 Type Geometry	■	
300-2 Type Naming	■	
300-5 Type Property Set	■	
General		<i>company statement</i>
_G4 Remarks	■	<i>ReplacementTest_forWallStandardCase-04S / 2x3</i>

Slab 01S / 2x3













105 IfcSlab	<i>company statement</i>		<i>Slab 01S / 2x3</i>
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■	SDS/2 stores all shapes as BREPs internally.	
030-6-2 Geometry Clipping	■	SDS/2 stores all shapes as BREPs internally.	
040 Presentation			
040-1 Geometric Presentation	■	SDS/2 does not allow setting custom attributes for concrete slabs.	
040-2 Material Presentation	■	SDS/2 does not allow setting custom attributes for concrete slabs.	
050 CAD Layer	■		
200 Material			
200-2 Material Layer Set	■	SDS/2 supports only a single material for each object.	
200-3 Material Layer Usage	■	SDS/2 supports only a single material for each object.	
210 Property Set			
210-1 Property Set IFC Common	■	None of the fields in Pset_SlabCommon represent information available in SDS/2.	
General	<i>company statement</i>		<i>Slab 01S / 2x3</i>
_G4 Remarks	■		

Slab 02S / 2x3



Slab 02S / 2x3

105 IfcSlab	<i>company statement</i>
010 Naming	■
020 Placement 020-2 Placement Relative	■
030 Geometry 030-1 Geometry Box 030-6 Geometry Body 030-6-1 Geometry SweptSolid 030-6-2 Geometry Clipping 030-6-5 Geometry Explicit 030-6-9 Geometry Mapped	<p>■ SDS/2 does not export bounding box representations for elements</p> <p>■ SDS/2 stores everything internally as BREPs, so when exporting, only unaltered extrusions can be recognized as such.</p> <p>■ SDS/2 stores everything internally as BREPs, so when exporting, only unaltered extrusions can be recognized as such.</p> <p>■ Due to SDS/2's internal storage mechanism, all geometries are mapped.</p> <p>■</p>
070 Voiding 070-1 Voiding Geometry Explicit 070-2 Voiding Geometry Mapped 070-3 Voiding Geometry SweptSolid	<p>■ SDS/2 stores everything internally as BREPs, so when exporting, only unaltered extrusions can be recognized as such.</p> <p>■ SDS/2 stores everything internally as BREPs, so when exporting, only unaltered extrusions can be recognized as such.</p> <p>■ SDS/2 stores everything internally as BREPs, so when exporting, only unaltered extrusions can be recognized as such.</p>
120 Spatial Containment	■ SDS/2 has no concept of Storeys. All elements are contained within the same building.
130 Grouping 130-1 Grouping General	■ SDS/2 does not support assigning multiple elements into a group.

<p>200 Material</p> <p><i>200-1 Single Material</i></p> <p>200-2 Material Layer Set</p>	<p> In SDS/2, material names for concrete elements are not user-editable.</p> <p> SDS/2 supports only a single material per object.</p>
<p>210 Property Set</p> <p>210-1 Property Set IFC Common</p> <p>210-2 Property Set IFC any</p> <p>210-3 Property Set User Defined</p>	<p> None of the fields in Pset_SlabCommon contain information available in SDS/2.</p> <p> SDS/2 does not allow users to specify their own property set information.</p> <p> SDS/2 does not allow users to specify their own property set information.</p>
<p>300 Type</p> <p><i>300-1 Type Geometry</i></p> <p><i>300-2 Type Naming</i></p> <p><i>300-3 Type Material</i></p> <p><i>300-5 Type Property Set</i></p>	<p></p> <p> In SDS/2, material type names for concrete elements are not user-editable.</p> <p> In SDS/2, material is specified for each element, not for each element type.</p> <p> SDS/2 exports its own system-defined information for each element type, but does not allow the user to specify their own type information.</p>
<p>General</p>	<p><i>company statement</i></p> <p style="text-align: right;"><i>Slab 02S / 2x3</i></p>
<p><i>_G4 Remarks</i></p>	<p></p>

UnitTest-01S / 2x3



501 IfcProject	<i>company statement</i>	<i>UnitTest-01S / 2x3</i>
005 Project Units		
005-1 Project Metric Units	■	
005-2 Project Imperial Units	■	
General	<i>company statement</i>	<i>UnitTest-01S / 2x3</i>
_G4 Remarks	■	