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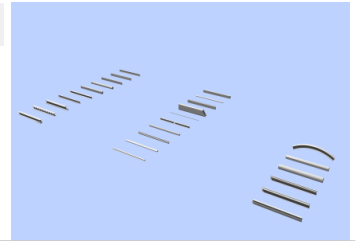
Introduction

The main purpose of import is to allow import of bearing parts of buildings, such as beams columns, walls, slabs and import of reinforcement. However Scia Engineer supports import of many different representations the best one is SweptSolid because then all entities are imported as native Scia Engineer elements. In case of Brep or CSG representation a reference model is created and all correct 3D volumes can be converted with a member recognizer into native elements. An object which is an open shell is not possible to convert into any elements.

Testlist

Name test	concepts total	manually checked		
		🟩	🟨	🟥
Beam_02 / 2x3	12	7	2	1
CharsetTest-01A / 2x3	2	2		
Column 01 / 2x3	11	7	2	2
CoveringFurnishing-01 / 2x3	57	17	5	34
CurtainWall-01 / 2x3	29	9	1	18
Door 01 / 2x3	22	7	2	13
Grid 01 / 2x3				11
Member_01S / 2x3	10	4	2	3
Pile 01 / 2x3	19	8	2	7
PlateFastener-01 / 2x3	67	25	4	35
RampRailing-01 / 2x3	28	11	4	11
RandomArch-X2 AC16 / 2x3	12	5	3	4
RandomMEP-X2 BENCH / 2x3	21	4		7
RandomStruc-X2 TS / 2x3	9	5	2	2
RandomStruc-X3 RST / 2x3	8	5	2	1
RandomStruc-X5 RST / 2x3	26	13	6	7
Reinforcement-01 / 2x3	94	38	6	36
Roof 01 / 2x3	15	5	1	5
Site 02 / 2x3				13
Slab 02A / 2x3	24	8	2	10
Space 01A / 2x3				12
StairSlab-01 / 2x3	19	9	2	8
UnitTest-01S / 2x3	3	3		
Wall 02 / 2x3	14	8	1	4
WallStandardCase 03A / 2x3	9	6	1	1
Window 01 / 2x3	22	7	2	13

🟩 Supported   🟨 Restricted   🟥 Not Supported

Concepts

Beam_02 / 2x3

| 103 IfcBeam	*company statement*	
		Beam_02 / 2x3
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.
030 Geometry		
030-2 Geometry Axis	🟥	Scia Engineer does not support import of axis geometry for 1D members.
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
030-6-2 Geometry Clipping	🟩	
030-6-5 Geometry Explicit	🟩	
050 CAD Layer	🟩	
070 Voiding		
070-1 Voiding Geometry Explicit	⬜	Explicit voids are imported correctly but internally stored as a resulting shape.
070-2 Voiding Geometry Mapped	⬜	Mapped voids are imported correctly but internally stored as a resulting shape.
070-3 Voiding Geometry SweptSolid	🟩	
120 Spatial Containment	🟩	

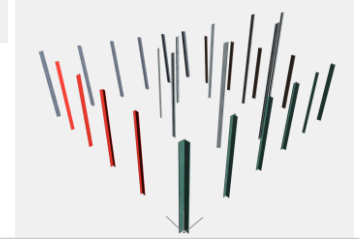🟩 Supported 🟨 Restricted 🟥 Not Supported

200 Material

    200-1 Single Material

🟨 Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.

General	*company statement*	*Beam_02 / 2x3*

    _G4 Remarks 🟩

CharsetTest-01A / 2x3
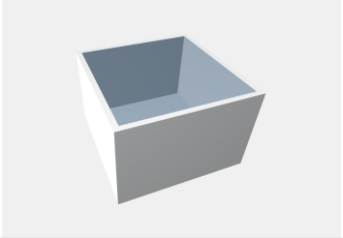
General	company statement	CharsetTest-01A / 2x3
_G1 Character sets	🟩	
_G4 Remarks	🟩	

🟩 Supported 🟨 Restricted 🟥 Not Supported

Column 01 / 2x3

104 IfcColumn	*company statement*	*Column 01 / 2x3*
010 Naming	🟨 Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement		
020-2 Placement Relative	🟩	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
030-6-2 Geometry Clipping	🟩	
040 Presentation		
040-1 Geometric Presentation	🟥 Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate column.	
040-2 Material Presentation	🟥 Material Presentation is not supported because no material presentation can be defined in Scia Engineer.	
050 CAD Layer	🟩	
120 Spatial Containment	🟩	
200 Material		
200-1 Single Material	🟨 Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.	

🟩 Supported   🟨 Restricted   🟥 Not Supported

210 Property Set		
210-1 Property Set IFC Common	🟩	
General	*company statement*	*Column 01 / 2x3*
_G4 Remarks	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported
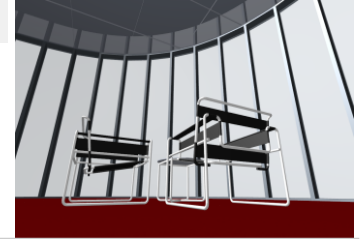
CoveringFurnishing-01 / 2x3

210 IfcFlowTerminal	*company statement*	*CoveringFurnishing-01 / 2x3*
001 GUIDs	🟩 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.	
010 Naming	🟨 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element. Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement		
020-2 Placement Relative	🟩 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	🟩 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.	
030-6-9 Geometry Mapped	🟩 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.	
040 Presentation		
040-1 Geometric Presentation	🟥 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.	
050 CAD Layer	🟩 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.	

🟩 Supported   🟨 Restricted   🟥 Not Supported

120 Spatial Containment	🟩	No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.

210 Property Set		
210-1 Property Set IFC Common	🟥	No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.
210-6 Property Set IFC any	🟥	No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.
210-9 Property Set User Defined	🟥	No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.

300 Type		
300-1 Type Geometry	🟥	No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.
300-2 Type Naming	🟥	No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.
300-3 Type Material	🟥	No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.
300-5 Type Property Set	🟥	No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.

303 IfcCovering	*company statement*	*CoveringFurnishing-01 / 2x3*
010 Naming	🟨	No covering can be defined in Scia Engineer therefore it is imported as another native element. Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.
020 Placement		
020-2 Placement Relative	🟩	No covering can be defined in Scia Engineer therefore it is imported as another native element.

🟩 Supported 🟨 Restricted 🟥 Not Supported

030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	No covering can be defined in Scia Engineer therefore it is imported as another native element.
030-6-9 Geometry Mapped	⬜	Mapped geometry will be imported as separate shapes
040 Presentation		
040-1 Geometric Presentation	🟥	No covering can be defined in Scia Engineer therefore it is imported as another native element. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩	No covering can be defined in Scia Engineer therefore it is imported as another native element.
070 Voiding		
120 Spatial Containment	🟩	No covering can be defined in Scia Engineer therefore it is imported as another native element.
200 Material		
200-1 Single Material	🟨	No covering can be defined in Scia Engineer therefore it is imported as another native element. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
200-3 Material Layer Set	🟥	No covering can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer supports only 2D members with single material. It is not possible to define layered walls or slabs.
210 Property Set		
210-1 Property Set IFC Common	🟥	No covering can be defined in Scia Engineer therefore it is imported as another native element.

🟩 Supported   🟨 Restricted   🟥 Not Supported

300 Type

300-1 Type Geometry
🟥 No covering can be defined in Scia Engineer therefore it is imported as another native element.

300-2 Type Naming
🟥 No covering can be defined in Scia Engineer therefore it is imported as another native element.

300-3 Type Material
🟥 No covering can be defined in Scia Engineer therefore it is imported as another native element.

300-5 Type Property Set
🟥 No covering can be defined in Scia Engineer therefore it is imported as another native element.

304 IfcFurnishingElement	*company statement*	*CoveringFurnishing-01 / 2x3*

001 GUIDs
🟩 No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.

010 Naming
🟨 No furnishing element can be defined in Scia Engineer therefore it is imported as another native element. Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.

020 Placement

020-2 Placement Relative
🟩 No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.

030 Geometry

030-6 Geometry Body

030-6-5 Geometry Explicit
🟩 No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.

030-6-9 Geometry Mapped
🟩 No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.

🟩 Supported   🟨 Restricted   🟥 Not Supported

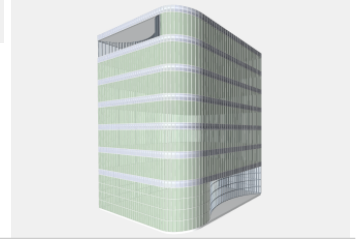| 040 Presentation		
040-1 Geometric Presentation	🟥	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.
120 Spatial Containment	🟩	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.
200 Material		
200-1 Single Material	🟨	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
200-5 Material List	🟥	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.
210 Property Set		
210-6 Property Set IFC any	🟥	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.
210-9 Property Set User Defined	🟥	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.

🟩 Supported   🟨 Restricted   🟥 Not Supported

300 Type		
300-1 Type Geometry	🟥	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.
300-2 Type Naming	🟥	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.
300-3 Type Material	🟥	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.
300-5 Type Property Set	🟥	No furnishing element can be defined in Scia Engineer therefore it is imported as another native element.

505 IfcSpace	*company statement*	*CoveringFurnishing-01 / 2x3*
030 Geometry		
030-3 Geometry FootPrint	🟥	No space can be defined in Scia Engineer.
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟥	No space can be defined in Scia Engineer.
120 Spatial Containment	🟥	No space can be defined in Scia Engineer.
130 Grouping		
130-3 Grouping to Zones	🟥	No space can be defined in Scia Engineer.
230 Classification	🟥	No space can be defined in Scia Engineer.

508 IfcZone	*company statement*	*CoveringFurnishing-01 / 2x3*
001 GUIDs	🟥	No zone can be defined in Scia Engineer.
002 History	🟥	No zone can be defined in Scia Engineer.
010 Naming	🟥	No zone can be defined in Scia Engineer.

🟩 Supported   🟨 Restricted   🟥 Not Supported

130 Grouping		
130-5 Is Group	🟥	No zone can be defined in Scia Engineer.
210 Property Set		
210-1 Property Set IFC Common	🟥	No zone can be defined in Scia Engineer.
210-9 Property Set User Defined	🟥	No zone can be defined in Scia Engineer.
General	*company statement*	*CoveringFurnishing-01 / 2x3*
_G4 Remarks	🟩	

CurtainWall-01 / 2x3

109 IfcCurtainWall	*company statement*	*CurtainWall-01 / 2x3*
001 GUIDs	🟩 No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.	
002 History	🟥 No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements. Scia Engineer does not support import of history because history of element cannot be defined.	
010 Naming	🟥 No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements. Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement		
020-1 Placement Relative	🟩 No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	⬜ No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements ("General Volume").	
030-9 Geometry By Components	🟥 No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.	

🟩 Supported   🟨 Restricted   🟥 Not Supported

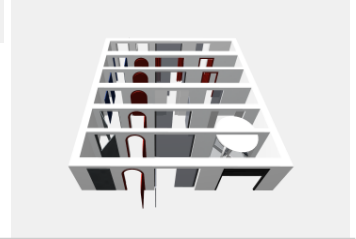|		
040 Presentation		
040-1 Geometric Presentation	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.
100 Element Aggregation		
100-2 Element Decomposition	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements. Scia Engineer does not support special decomposition for any element.
120 Spatial Containment	🟩	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.
200 Material		
200-1 Single Material	🟨	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
200-5 Material List	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.
210 Property Set		
210-1 Property Set IFC Common	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.
210-3 Property Set User Defined	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.

🟩 Supported   🟨 Restricted   🟥 Not Supported

300 Type		
300-1 Type Geometry	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.
300-2 Type Naming	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.
300-3 Type Material	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.
300-5 Type Property Set	🟥	No curtain wall can be defined in Scia Engineer therefore it is imported as other native elements.

501 IfcProject	*company statement*	*CurtainWall-01 / 2x3*
010 Naming	🟥	Import of project properties is not supported.

502 IfcSite	*company statement*	*CurtainWall-01 / 2x3*
010 Naming	🟥	No site can be defined in Scia Engineer.
060 Location		
060-1 Geographic Location	🟥	No site can be defined in Scia Engineer.
060-2 Address	🟥	No site can be defined in Scia Engineer.

503 IfcBuilding	*company statement*	*CurtainWall-01 / 2x3*
010 Naming	🟥	No building name can be input in Scia Engineer.
020 Placement		
020-2 Placement Relative	🟩	No building name can be input in Scia Engineer.

504 IfcBuildingStorey	*company statement*	*CurtainWall-01 / 2x3*
010 Naming	🟩	
020 Placement		
020-2 Placement Relative	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

060 Location		
060-4 Storey Elevation	🟩	
210 Property Set		
210-1 Property Set IFC Common	🟥	Scia Engineer does not support IFC Common Property Set for Building Storey.

General	*company statement*	*CurtainWall-01 / 2x3*
_G4 Remarks	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

Door 01 / 2x3

302 IfcDoor	*company statement*	*Door 01 / 2x3*
001 GUIDs	🟩 No door can be defined in Scia Engineer therefore it is imported as another native element.	
002 History	🟥 No door can be defined in Scia Engineer therefore it is imported as another native element.	
010 Naming	🟨 No door can be defined in Scia Engineer therefore it is imported as another native element.	
020 Placement		
020-2 Placement Relative	🟩 No door can be defined in Scia Engineer therefore it is imported as another native element.	
030 Geometry		
030-5 Geometry Profile	🟥 No door can be defined in Scia Engineer therefore it is imported as another native element.	
030-6 Geometry Body		
030-6-5 Geometry Explicit	🟩 No door can be defined in Scia Engineer therefore it is imported as another native element.	
030-6-9 Geometry Mapped	🟩 No door can be defined in Scia Engineer therefore it is imported as another native element.	

🟩 Supported   🟨 Restricted   🟥 Not Supported

040 Presentation		
040-1 Geometric Presentation	🟥	No door can be defined in Scia Engineer therefore it is imported as another native element. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩	No door can be defined in Scia Engineer therefore it is imported as another native element.
080 Filling		
080-2 Is Filling	🟥	No door can be defined in Scia Engineer therefore it is imported as another native element.
120 Spatial Containment	🟩	No door can be defined in Scia Engineer therefore it is imported as another native element.
200 Material		
200-1 Single Material	🟨	No door can be defined in Scia Engineer therefore it is imported as another native element. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
200-5 Material List	🟥	No door can be defined in Scia Engineer therefore it is imported as another native element.
210 Property Set		
210-1 Property Set IFC Common	🟥	No door can be defined in Scia Engineer therefore it is imported as another native element.
210-2 Property Set IFC any	🟥	No door can be defined in Scia Engineer therefore it is imported as another native element.
210-3 Property Set User Defined	🟥	No door can be defined in Scia Engineer therefore it is imported as another native element.

🟩 Supported   🟨 Restricted   🟥 Not Supported

300 Type

    300-1 Type Geometry

    🟥 No door can be defined in Scia Engineer therefore it is imported as another native element.

    300-2 Type Naming

    🟥 No door can be defined in Scia Engineer therefore it is imported as another native element.

    300-3 Type Material

    🟥 No door can be defined in Scia Engineer therefore it is imported as another native element.

    300-5 Type Property Set

    🟥 No door can be defined in Scia Engineer therefore it is imported as another native element.

    300-6 Type Predefined Properties

        300-6-1 Type Predefined Properties Door

    🟥 No door can be defined in Scia Engineer therefore it is imported as another native element.

General	*company statement*	*Door 01 / 2x3*

    _G4 Remarks   🟩

🟩 Supported   🟨 Restricted   🟥 Not Supported

Grid 01 / 2x3

509 IfcGrid	*company statement*	*Grid 01 / 2x3*
001 GUIDs	🟥	Import of grid is not supported in Scia Engineer.
002 History	🟥	Import of grid is not supported in Scia Engineer.
010 Naming	🟥	Import of grid is not supported in Scia Engineer.
020 Placement		
020-2 Placement Relative	🟥	Import of grid is not supported in Scia Engineer.
030 Geometry		
030-3 Geometry FootPrint	🟥	Import of grid is not supported in Scia Engineer.
040 Presentation		
040-1 Geometric Presentation	🟥	Import of grid is not supported in Scia Engineer.
050 CAD Layer	🟥	Import of grid is not supported in Scia Engineer.
120 Spatial Containment	🟥	Import of grid is not supported in Scia Engineer.
210 Property Set		
210-3 Property Set User Defined	🟥	Import of grid is not supported in Scia Engineer.
270 Grid Usage		
270-1 Grid Axes	🟥	Import of grid is not supported in Scia Engineer.
General	*company statement*	*Grid 01 / 2x3*

🟩 Supported   🟨 Restricted   🟥 Not Supported

_G4 Remarks

🟥   Import of grid is not supported in Scia Engineer.
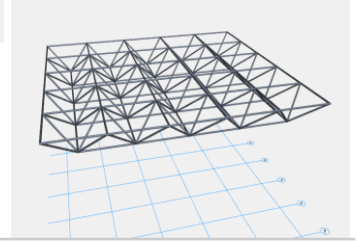
Member_01S / 2x3

401 IfcMember	company statement	Member_01S / 2x3

010 Naming — 🟨 Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.

020 Placement

020-2 Placement Relative — 🟩

030 Geometry

030-6 Geometry Body

030-6-1 Geometry SweptSolid — 🟩

030-6-2 Geometry Clipping — ⬜ Clipping is imported correctly but internally stored as a resulting shape.

110 Connectivity

110-1 Connectivity Basic — 🟥 Scia Engineer does not support general information for connectivity between members.

110-3 Connectivity Realization

110-3-1 Connectivity Realized — 🟥 Scia Engineer does not support general information for connectivity between members.

120 Spatial Containment — 🟩

200 Material

200-1 Single Material — 🟨 Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.

🟩 Supported   🟨 Restricted   🟥 Not Supported

300 Type

    300-1 Type Geometry   🟥   Scia Engineer does not support geometry types for objects.

General	*company statement*	*Member_01S / 2x3*

  _G4 Remarks   🟩

Pile 01 / 2x3
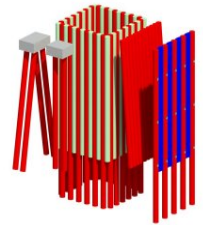
404 IfcPile	*company statement*	*Pile 01 / 2x3*
001 GUIDs	🟩 No pile element can be defined in Scia Engineer therefore it is imported as another native element.	
002 History	🟥 No pile element can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer does not support import of history because history of element cannot be defined.	
010 Naming	🟨 No pile element can be defined in Scia Engineer therefore it is imported as another native element.	
020 Placement		
020-1 Placement Relative	🟩 No pile element can be defined in Scia Engineer therefore it is imported as another native element.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩 No pile element can be defined in Scia Engineer therefore it is imported as another native element.	
030-6-2 Geometry Clipping	🟩 No pile element can be defined in Scia Engineer therefore it is imported as another native element.	
030-6-9 Geometry Mapped	🟩	

🟩 Supported 🟨 Restricted 🟥 Not Supported

040 Presentation

    040-1 Geometric Presentation

🟥 No pile element can be defined in Scia Engineer therefore it is imported as another native element. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate elements.

    040-2 Material Presentation

🟥 No pile element can be defined in Scia Engineer therefore it is imported as another native element. Material Presentation is not supported because no material presentation can be defined in Scia Engineer.

050 CAD Layer

🟩 No pile element can be defined in Scia Engineer therefore it is imported as another native element.

070 Voiding

    070-3 Voiding Geometry SweptSolid

⬜ No pile element can be defined in Scia Engineer therefore it is imported as another native element ("General Volume".)

100 Element Aggregation

    100-2 Element Decomposition

⬜ No pile element can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer does not support special decomposition for any element ("General Volume").

120 Spatial Containment

🟩 No pile element can be defined in Scia Engineer therefore it is imported as another native element.

200 Material

    200-1 Single Material

🟨 No pile element can be defined in Scia Engineer therefore it is imported as another native element. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.

210 Property Set

    210-3 Property Set User Defined

🟥 No pile element can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer does not support import of User Defined Property Set.

🟩 Supported   🟨 Restricted   🟥 Not Supported

300 Type		
300-1 Type Geometry	🟥	No pile element can be defined in Scia Engineer therefore it is imported as another native element.
300-3 Type Material	🟥	No pile element can be defined in Scia Engineer therefore it is imported as another native element.
300-5 Type Property Set	🟥	No pile element can be defined in Scia Engineer therefore it is imported as another native element.

General	*company statement*	*Pile 01 / 2x3*
_G4 Remarks	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

PlateFastener-01 / 2x3

103 IfcBeam	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs	🟩	
002 History	🟥 Scia Engineer does not support import of history because history of element cannot be defined.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
030-6-9 Geometry Mapped	⬜ Mapped geometry is imported correctly but internally stored as a single resulting shape.	

104 IfcColumn	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs	🟩	
002 History	🟥 Scia Engineer does not support import of history because history of element cannot be defined.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
030-6-9 Geometry Mapped	🟩	
100 Element Aggregation		
100-2 Element Decomposition	🟥 Scia Engineer does not support special decomposition for any element.	
210 Property Set		
210-3 Property Set User Defined	🟥 Scia Engineer does not support import of User Defined Property Set.	

🟩 Supported　🟨 Restricted　🟥 Not Supported

300 Type		
300-1 Type Geometry	🟥	Scia Engineer does not support geometry types for objects.
300-2 Type Naming	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.
300-3 Type Material	🟥	Scia Engineer does not support Type Material because no type material can be defined.
300-5 Type Property Set	🟥	Scia Engineer does not support Type Property Set because no type of properties can be defined.

401 IfcMember	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs	🟩	
002 History	🟥	Scia Engineer does not support import of history because history of element cannot be defined.
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	🟥	Scia Engineer does not support import of history because history of element cannot be defined.
050 CAD Layer	🟩	
210 Property Set		
210-1 Property Set IFC Common	🟩	
210-3 Property Set User Defined	🟥	Scia Engineer does not support import of User Defined Property Set.

🟩 Supported   🟨 Restricted   🟥 Not Supported

300 Type		
300-2 Type Naming	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.
300-3 Type Material	🟥	Scia Engineer does not support Type Material because no type material can be defined.
300-5 Type Property Set	🟥	Scia Engineer does not support Type Property Set because no type of properties can be defined.
402 IfcPlate	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs	🟩	
002 History	🟥	Scia Engineer does not support import of history because history of element cannot be defined.
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.
020 Placement		
020-2 Placement Relative	🟩	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
030-6-2 Geometry Clipping	⬜	Clipping is imported correctly but internally stored as a resulting shape.
030-6-5 Geometry Explicit	🟩	
040 Presentation		
040-1 Geometric Presentation	🟥	Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate plate.
050 CAD Layer	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

070 Voiding		
070-3 Voiding Geometry SweptSolid	⬜	Voiding Geometry SweptSolid is generally supported by Scia Engineer.
120 Spatial Containment	🟩	
200 Material		
200-2 Material Layer Set	🟨	Scia Engineer supports only 2D members with single material. It is not possible to define layered plate.
210 Property Set		
210-1 Property Set IFC Common	🟥	Scia Engineer does not support property sets for plates because it cannot be input.
210-3 Property Set User Defined	🟥	Scia Engineer does not support import of User Defined Property Set.
300 Type		
300-1 Type Geometry	🟥	Scia Engineer does not support geometry types for objects.
300-2 Type Naming	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.
300-3 Type Material	🟥	Scia Engineer does not support Type Material because no type material can be defined.
300-5 Type Property Set	🟥	Scia Engineer does not support Type Property Set because no type of properties can be defined.
403 IfcFooting	*company statement*	*PlateFastener-01 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟥	Import of fastener is not supported.
030-6-2 Geometry Clipping	🟥	Import of fastener is not supported.
405 IfcFastener	*company statement*	*PlateFastener-01 / 2x3*
010 Naming	🟥	Import of fastener is not supported.

🟩 Supported   🟨 Restricted   🟥 Not Supported

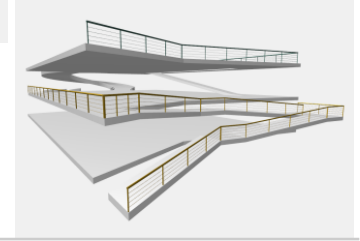|		
020 Placement		
020-2 Placement Relative	🟥	Import of fastener is not supported.
030 Geometry		
030-2 Geometry Axis	🟥	Import of fastener is not supported.
406 IfcMechanicalFastener	*company statement*	*PlateFastener-01 / 2x3*
001 GUIDs	🟩	
002 History	🟥	Scia Engineer does not support import of history because history of element cannot be defined.
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.
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	🟥	Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩	
120 Spatial Containment	🟩	

🟩 Supported 🟨 Restricted 🟥 Not Supported

200 Material		
200-1 Single Material	🟨	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
210 Property Set		
210-6 Property Set IFC any	🟥	Scia Engineer does not support import of IFC Any Property Set.
210-9 Property Set User Defined	🟥	Scia Engineer does not support import of User Defined Property Set.
300 Type		
300-1 Type Geometry	🟥	Scia Engineer does not support geometry types for objects.
300-2 Type Naming	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.
300-3 Type Material	🟥	Scia Engineer does not support Type Material because no type material can be defined.
300-5 Type Property Set	🟥	Scia Engineer does not support Type Property Set because no type of properties can be defined.
General	*company statement*	*PlateFastener-01 / 2x3*
_G4 Remarks	🟩	

RampRailing-01 / 2x3

107 IfcRamp	*company statement*	*RampRailing-01 / 2x3*
001 GUIDs	🟩 No ramp can be defined in Scia Engineer therefore it is imported as another native element.	
002 History	🟥 No ramp can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer does not support import of history because history of element cannot be defined.	
010 Naming	🟨 No ramp can be defined in Scia Engineer therefore it is imported as another native element.	
020 Placement		
020-1 Placement Relative	🟩 No ramp can be defined in Scia Engineer therefore it is imported as another native element.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	🟩 No ramp can be defined in Scia Engineer therefore it is imported as another native element.	
030-9 Geometry By Components	🟥 No ramp can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer does not support special composition for any element.	

🟩 Supported 🟨 Restricted 🟥 Not Supported

040 Presentation		
040-1 Geometric Presentation	🟥	No ramp can be defined in Scia Engineer therefore it is imported as another native element. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate elements.
050 CAD Layer	🟩	No ramp can be defined in Scia Engineer therefore it is imported as another native element.
100 Element Aggregation		
100-2 Element Decomposition	🟥	No ramp can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer does not support special decomposition for any element.
120 Spatial Containment	🟩	No ramp can be defined in Scia Engineer therefore it is imported as another native element.
200 Material		
200-1 Single Material	🟨	No ramp can be defined in Scia Engineer therefore it is imported as another native element. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
210 Property Set		
210-1 Property Set IFC Common	🟥	No ramp can be defined in Scia Engineer therefore it is imported as another native element.
210-3 Property Set User Defined	🟥	No ramp can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer does not support import of User Defined Property Set.

108 IfcRailing	*company statement*	*RampRailing-01 / 2x3*
001 GUIDs	🟩	No railing can be defined in Scia Engineer therefore it is imported as another native element.
002 History	🟥	No railing can be defined in Scia Engineer therefore it is imported as another

🟩 Supported   🟨 Restricted   🟥 Not Supported

native element. Scia Engineer does not support import of history because history of element cannot be defined.

010 Naming	🟨	No railing can be defined in Scia Engineer therefore it is imported as another native element.
020 Placement		
020-2 Placement Relative	🟩	No railing can be defined in Scia Engineer therefore it is imported as another native element.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	⬜	No railing can be defined in Scia Engineer therefore it is imported as another native element ("General Volume").
030-6-5 Geometry Explicit	🟩	No railing can be defined in Scia Engineer therefore it is imported as another native element.
030-6-9 Geometry Mapped	⬜	No railing can be defined in Scia Engineer therefore it is imported as another native element ("General Volume").
040 Presentation		
040-1 Geometric Presentation	🟥	No railing can be defined in Scia Engineer therefore it is imported as another native element. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate elements.
050 CAD Layer	🟩	No railing can be defined in Scia Engineer therefore it is imported as another native element.
120 Spatial Containment	🟩	No railing can be defined in Scia Engineer therefore it is imported as another native element.

🟩 Supported   🟨 Restricted   🟥 Not Supported

200 Material

    200-1 Single Material

🟨 No railing can be defined in Scia Engineer therefore it is imported as another native element. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.

    200-5 Material List

🟥 No railing can be defined in Scia Engineer therefore it is imported as another native element.

210 Property Set

    210-1 Property Set IFC Common

🟥 No railing can be defined in Scia Engineer therefore it is imported as another native element.

    210-3 Property Set User Defined

🟥 No railing can be defined in Scia Engineer therefore it is imported as another native element. Scia Engineer does not support import of User Defined Property Set.

General	*company statement*	*RampRailing-01 / 2x3*

  _G4 Remarks

🟩 If the solid is not properly closed, Scia Engineer is trying to close it, which allows for further work with that element. However, the result of this operation cannot be predicted, even though the algorithm gives in most cases satisfactory result. In the RampRailing-01_RAC.ifc test case the geometry of the upper railing is so complex that it is not quite clear how to correct the open shell.
On the other hand, the railing is not a native element in Scia Engineer and it is imported only to have the comprehensive image of the model.

RandomArch-X2 AC16 / 2x3

101 IfcWallStandardCase	*company statement*	*RandomArch-X2 AC16 / 2x3*
001 GUIDs	🟩	
002 History	🟥 Scia Engineer does not support import of history because history of element cannot be defined.	
010 Naming	🟨 Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
030 Geometry		
030-2 Geometry Axis	🟥 Import of Geometry Axis is not supported. No wall axis entity exists in Scia Engineer.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
210 Property Set		
210-2 Property Set IFC any	🟥 Scia Engineer does not support import of IFC Any Property Set.	

105 IfcSlab	*company statement*	*RandomArch-X2 AC16 / 2x3*
001 GUIDs	🟩	
002 History	🟥 Scia Engineer does not support import of history because history of element cannot be defined.	
010 Naming	🟨	
050 CAD Layer	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

200 Material		
200-1 Single Material	🟨	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.

General	*company statement*	*RandomArch-X2 AC16 / 2x3*
_G4 Remarks	🟩	

RandomMEP-X2 BENCH / 2x3

206 IfcFlowFitting	*company statement*	*RandomMEP-X2 BENCH / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	🟩 No flow fitting can be defined in Scia Engineer therefore it is imported as another native element.	
100 Element Aggregation		
100-4 Port Assignment	🟥 No flow fitting can be defined in Scia Engineer therefore it is imported as another native element.	
110 Connectivity		
110-5 Connectivity by Ports	🟥 No flow fitting can be defined in Scia Engineer therefore it is imported as another native element.	

207 IfcFlowMovingDevice	*company statement*	*RandomMEP-X2 BENCH / 2x3*
010 Naming	⬜ No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.	
020 Placement		
020-2 Placement Relative	⬜ No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.	

🟩 Supported   🟨 Restricted   🟥 Not Supported

030 Geometry

030-6 Geometry Body

030-6-5 Geometry Explicit

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

030-6-9 Geometry Mapped

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

040 Presentation

040-1 Geometric Presentation

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

050 CAD Layer

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

100 Element Aggregation

100-4 Port Assignment

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

110 Connectivity

110-5 Connectivity by Ports

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

120 Spatial Containment

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

200 Material

200-1 Single Material

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

210 Property Set

210-9 Property Set User Defined

No flow moving device can be defined in Scia Engineer therefore it is imported as another native element.

030 Geometry

  030-6 Geometry Body

    030-6-9 Geometry Mapped 🟩 No flow segment can be defined in Scia Engineer therefore it is imported as another native element.

100 Element Aggregation

  100-4 Port Assignment 🟥 No flow segment can be defined in Scia Engineer therefore it is imported as another native element.

110 Connectivity

  110-5 Connectivity by Ports 🟥 No flow segment can be defined in Scia Engineer therefore it is imported as another native element.

210 IfcFlowTerminal — *company statement* — *RandomMEP-X2 BENCH / 2x3*

030 Geometry

  030-6 Geometry Body

    030-6-9 Geometry Mapped 🟩 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.

100 Element Aggregation

  100-4 Port Assignment 🟥 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.

110 Connectivity

  110-5 Connectivity by Ports 🟥 No flow terminal can be defined in Scia Engineer therefore it is imported as another native element.

General — *company statement* — *RandomMEP-X2 BENCH / 2x3*

  _G4 Remarks 🟩

🟩 Supported   🟨 Restricted   🟥 Not Supported

RandomStruc-X2 TS / 2x3

409 IfcReinforcingBar		*company statement*	*RandomStruc-X2 TS / 2x3*
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
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	🟥	Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.	
050 CAD Layer	🟩		
100 Element Aggregation			
100-1 Element Composition	🟥	Scia Engineer does not support special decomposition for any element.	
200 Material			
200-1 Single Material	🟨	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.	
General		*company statement*	*RandomStruc-X2 TS / 2x3*
_G4 Remarks	🟩		

🟩 Supported   🟨 Restricted   🟥 Not Supported

RandomStruc-X3 RST / 2x3

410 IfcReinforcingMesh	*company statement*	*RandomStruc-X3 RST / 2x3*
001 GUIDs	🟩	
002 History	🟥 Scia Engineer does not support import of history because history of element cannot be defined.	
010 Naming	🟨 Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement		
020-2 Placement Relative	🟩	
050 CAD Layer	🟩	
120 Spatial Containment	🟩	
200 Material		
200-1 Single Material	🟨 Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.	
General	*company statement*	*RandomStruc-X3 RST / 2x3*
_G4 Remarks	🟩	

🟩 Supported 🟨 Restricted 🟥 Not Supported

RandomStruc-X5 RST / 2x3

103 IfcBeam	*company statement*	*RandomStruc-X5 RST / 2x3*
001 GUIDs	🟩	
002 History	🟥 Scia Engineer does not support import of history because history of element cannot be defined.	
010 Naming	🟨 Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement		
020-2 Placement Relative	🟩	
050 CAD Layer	🟩	
120 Spatial Containment	🟩	
200 Material		
200-1 Single Material	🟨 Import of general material is not supported. Scia Engineer supports import only material with the proper material code name	

104 IfcColumn	*company statement*	*RandomStruc-X5 RST / 2x3*
001 GUIDs	🟩	
002 History	🟥 Scia Engineer does not support import of history because history of element cannot be defined.	
010 Naming	🟨 Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	

🟩 Supported   🟨 Restricted   🟥 Not Supported

020 Placement		
020-2 Placement Relative	🟩	
050 CAD Layer	🟩	
120 Spatial Containment	🟩	
200 Material		
200-1 Single Material	🟨	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name

403 IfcFooting	*company statement*	*RandomStruc-X5 RST / 2x3*
001 GUIDs	🟩	
002 History	🟥	Scia Engineer does not support import of history because history of element cannot be defined.
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.
020 Placement		
020-1 Placement Relative	🟩	
050 CAD Layer	🟩	
120 Spatial Containment	🟩	
200 Material		
200-1 Single Material	🟨	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name

408 IfcElementAssembly	*company statement*	*RandomStruc-X5 RST / 2x3*
001 GUIDs	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
002 History	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.

🟩 Supported   🟨 Restricted   🟥 Not Supported

010 Naming	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
020 Placement		
020-2 Placement Relative	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
General	*company statement*	*RandomStruc-X5 RST / 2x3*
_G4 Remarks	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

Reinforcement-01 / 2x3

101 IfcWallStandardCase	*company statement*	*Reinforcement-01 / 2x3*
020 Placement		
020-2 Placement Relative	🟩	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
120 Spatial Containment	🟩	
103 IfcBeam	*company statement*	*Reinforcement-01 / 2x3*
020 Placement		
020-2 Placement Relative	🟩	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟨	Import of RevolvedAreaSolid is not supported.
120 Spatial Containment	🟩	
104 IfcColumn	*company statement*	*Reinforcement-01 / 2x3*
020 Placement		
020-2 Placement Relative	🟩	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	

🟩 Supported 🟨 Restricted 🟥 Not Supported

120 Spatial Containment	🟩	
105 IfcSlab	*company statement*	*Reinforcement-01 / 2x3*
020 Placement		
020-2 Placement Relative	🟩	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
120 Spatial Containment	🟩	
403 IfcFooting	*company statement*	*Reinforcement-01 / 2x3*
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
040 Presentation		
040-1 Geometric Presentation	🟥	Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩	
120 Spatial Containment	🟩	
210 Property Set		
210-3 Property Set User Defined	🟥	Scia Engineer does not support import of User Defined Property Set.
407 IfcDiscreteAccessory	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	⬜	Import of Discrete Accessory is generally supported by Scia Engineer.
010 Naming	⬜	Import of Discrete Accessory is generally supported by Scia Engineer.

🟩 Supported   🟨 Restricted   🟥 Not Supported

020 Placement		
020-2 Placement Relative	▪	Import of Discrete Accessory is generally supported by Scia Engineer.
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	▪	Import of Discrete Accessory is generally supported by Scia Engineer.
030-6-9 Geometry Mapped	▪	Import of Discrete Accessory is generally supported by Scia Engineer.
040 Presentation		
040-1 Geometric Presentation	▪	Import of Geometric Presentation is not supported.
050 CAD Layer	▪	Import of Discrete Accessory is generally supported by Scia Engineer.
120 Spatial Containment	▪	Import of Discrete Accessory is generally supported by Scia Engineer.
200 Material		
200-1 Single Material	▪	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name
210 Property Set		
210-9 Property Set User Defined	▪	Scia Engineer does not support import of User Defined Property Set.
300 Type		
300-1 Type Geometry	▪	Scia Engineer does not support geometry types for objects.
300-2 Type Naming	▪	Scia Engineer does not support Type Naming because no type naming can be defined.
300-3 Type Material	▪	Scia Engineer does not support Type Material because no type material can be defined.
300-5 Type Property Set	▪	Scia Engineer does not support Type Property Set because no type of properties can be defined.
408 IfcElementAssembly	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.

🟩 Supported   🟨 Restricted   🟥 Not Supported

010 Naming	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
020 Placement		
020-2 Placement Relative	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
030 Geometry		
030-6 Geometry Body		
030-9 Geometry By Components	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
040 Presentation		
040-1 Geometric Presentation	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
050 CAD Layer	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
100 Element Aggregation		
100-2 Element Decomposition	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
120 Spatial Containment	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
210 Property Set		
210-9 Property Set User Defined	🟥	All elements from element assembly are always imported to Scia Engineer as separate elements.
409 IfcReinforcingBar	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	🟩	
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name

🟩 Supported   🟨 Restricted   🟥 Not Supported

and the others are imported with the name + number.

020 Placement		
020-2 Placement Relative	🟩	
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	🟥	Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩	
120 Spatial Containment	🟩	
200 Material		
200-1 Single Material	🟨	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
210 Property Set		
210-9 Property Set User Defined	🟥	Scia Engineer does not support import of User Defined Property Set.

🟩 Supported   🟨 Restricted   🟥 Not Supported

300 Type		
300-1 Type Geometry	🟥	Scia Engineer does not support geometry types for objects.
300-2 Type Naming	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.
300-3 Type Material	🟥	Scia Engineer does not support Type Material because no type material can be defined.
300-5 Type Property Set	🟥	Scia Engineer does not support Type Property Set because no type of properties can be defined.

410 IfcReinforcingMesh	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	🟩	
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.
020 Placement		
020-2 Placement Relative	🟩	
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	🟥	Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩	
120 Spatial Containment	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

200 Material		
200-1 Single Material	🟨	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
210 Property Set		
210-9 Property Set User Defined	🟥	Scia Engineer does not support import of User Defined Property Set.
300 Type		
300-1 Type Geometry	🟥	Scia Engineer does not support geometry types for objects.
300-2 Type Naming	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.
300-3 Type Material	🟥	Scia Engineer does not support Type Material because no type material can be defined.
300-5 Type Property Set	🟥	Scia Engineer does not support Type Property Set because no type of properties can be defined.

501 IfcProject	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	🟩	
002 History	🟥	Scia Engineer does not support import of history because history of element cannot be defined.
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	🟥	Import of project properties is not supported.

🟩 Supported		🟨 Restricted		🟥 Not Supported	

150 Spatial Aggregation		
150-2 Spatial Decomposition	🟥	Import of project properties is not supported.

503 IfcBuilding	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	🟥	No building name can be input in Scia Engineer.
002 History	🟥	No building name can be input in Scia Engineer.
010 Naming	🟥	No building name can be input in Scia Engineer.
020 Placement		
020-1 Placement Absolute	🟥	No building name can be input in Scia Engineer.
060 Location		
060-2 Address	🟥	No building name can be input in Scia Engineer.
150 Spatial Aggregation		
150-1 Spatial Composition	🟥	No building name can be input in Scia Engineer.
150-2 Spatial Decomposition	🟥	No building name can be input in Scia Engineer.

504 IfcBuildingStorey	*company statement*	*Reinforcement-01 / 2x3*
001 GUIDs	🟩	
002 History	🟥	Scia Engineer does not support import of history because history of element cannot be defined.
010 Naming	🟩	
020 Placement		
020-2 Placement Relative	🟩	
060 Location		
060-4 Storey Elevation	🟩	
120 Spatial Containment	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

150 Spatial Aggregation		
150-1 Spatial Composition	🟥	Scia Engineer does not support special composition for building storey.
150-2 Spatial Decomposition	🟥	Scia Engineer does not support special decomposition for building storey.

General	*company statement*	*Reinforcement-01 / 2x3*
_G4 Remarks	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

Roof 01 / 2x3

101 IfcWallStandardCase	*company statement*	*Roof 01 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
030-6-2 Geometry Clipping	🟩	
105 IfcSlab	*company statement*	*Roof 01 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	⬜	SweptSolids are imported as native slabs.
030-6-2 Geometry Clipping	⬜	Clippings are imported as native slabs with the resulting shape.
030-6-9 Geometry Mapped	⬜	Mapped geometr is imported as native slabs with seperate resulting shapes.
070 Voiding		
070-3 Voiding Geometry SweptSolid	🟩	
080 Filling		
080-1 Has Filling		
080-1-2 Has Filling Window	🟥	Not supported because no window element exists in Scia Engineer.
200 Material		
200-2 Material Layer Set	🟥	Scia Engineer supports only 2D members with single material. It is not possible to define layered walls or slabs.
110 IfcRoof	*company statement*	*Roof 01 / 2x3*

🟩 Supported 🟨 Restricted 🟥 Not Supported

030 Geometry

    030-1 Geometry Box

■ No roof can be defined in Scia Engineer therefore it is imported as a slab. Scia Engineer does not support geometry box.

040 Presentation

    040-1 Geometric Presentation

■ No roof can be defined in Scia Engineer therefore it is imported as a slab. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.

    040-2 Material Presentation

■ No roof can be defined in Scia Engineer therefore it is imported as a slab. Material Presentation is not supported because no material presentation can be defined in Scia Engineer.

100 Element Aggregation

    100-2 Element Decomposition

■ No roof can be defined in Scia Engineer therefore it is imported as a slab. Scia Engineer does not support special decomposition for any element.

120 Spatial Containment

■ No roof can be defined in Scia Engineer therefore it is imported as a slab.

200 Material

    200-1 Single Material

■ No roof can be defined in Scia Engineer therefore it is imported as a slab. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.

General	*company statement*	
		Roof 01 / 2x3

_G4 Remarks

■

■ Supported   ■ Restricted   ■ Not Supported

Site 02 / 2x3

502 IfcSite	*company statement*
	Site 02 / 2x3
010 Naming	🟥 No site can be defined in Scia Engineer.
020 Placement	
020-1 Placement Absolute	🟥 No site can be defined in Scia Engineer.
030 Geometry	
030-3 Geometry FootPrint	🟥 No site can be defined in Scia Engineer.
030-6 Geometry Body	
030-6-5 Geometry Explicit	🟥 No site can be defined in Scia Engineer.
150 Spatial Aggregation	
150-1 Spatial Composition	🟥 No site can be defined in Scia Engineer.
150-2 Spatial Decomposition	🟥 No site can be defined in Scia Engineer.
210 Property Set	
210-9 Property Set User Defined	🟥 No site can be defined in Scia Engineer.
503 IfcBuilding	*company statement*
	Site 02 / 2x3
010 Naming	🟥 No building can be input in Scia Engineer.
020 Placement	
020-2 Placement Relative	🟥 No building can be input in Scia Engineer.

🟩 Supported   🟨 Restricted   🟥 Not Supported

150 Spatial Aggregation		
150-1 Spatial Composition	🟥	No building can be input in Scia Engineer.
150-2 Spatial Decomposition	🟥	No building can be input in Scia Engineer.
210 Property Set		
210-1 Property Set IFC Common	🟥	No building can be input in Scia Engineer.

General	*company statement*	*Site 02 / 2x3*
_G4 Remarks	🟥 No site can be defined in Scia Engineer.	

Slab 02A / 2x3
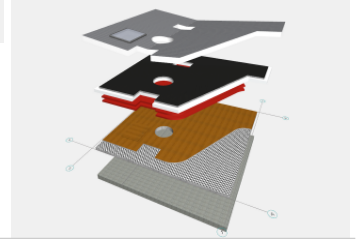
105 IfcSlab		*company statement*	*Slab 02A / 2x3*
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement			
020-2 Placement Relative	🟩		
030 Geometry			
030-1 Geometry Box	⬜	Scia Engineer does not support geometry box.	
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	🟩		
030-6-2 Geometry Clipping	⬜	Clippings are imported correctly but internally stored as a resulting shape.	
030-6-5 Geometry Explicit	🟩		
030-6-9 Geometry Mapped	⬜	Mapped geometry is imported correctly but internally stored as a single resulting shape.	
070 Voiding			
070-1 Voiding Geometry Explicit	🟩		
070-2 Voiding Geometry Mapped	⬜	Mapped voiding geometry is imported correctly but internally stored as a resulting shape.	
070-3 Voiding Geometry SweptSolid	🟩		

🟩 Supported   🟨 Restricted   🟥 Not Supported

080 Filling		
080-1 Has Filling		
080-1-1 Has Filling Door	🟥	Not supported because no door element exists in Scia Engineer.
080-1-2 Has Filling Window	🟥	Not supported because no window element exists in Scia Engineer.
120 Spatial Containment	🟩	
130 Grouping		
130-1 Grouping General	🟥	Scia Engineer does not support any kind of grouping.
200 Material		
200-1 Single Material	🟨	Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.
200-2 Material Layer Set	🟥	Scia Engineer supports only 2D members with single material. It is not possible to define layered walls or slabs.
210 Property Set		
210-1 Property Set IFC Common	🟩	
210-2 Property Set IFC any	🟥	Scia Engineer does not support import of IFC Any Property Set.
210-3 Property Set User Defined	🟥	Scia Engineer does not support import of User Defined Property Set.
300 Type		
300-1 Type Geometry	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.
300-2 Type Naming	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.
300-3 Type Material	🟥	Scia Engineer does not support Type Material because no type material can be defined.
300-5 Type Property Set	🟥	Scia Engineer does not support Type Property Set because no type of properties can be defined.

🟩 Supported   🟨 Restricted   🟥 Not Supported

General	company statement	Slab 02A / 2x3

_G4 Remarks   🟩

🟩 Supported   🟨 Restricted   🟥 Not Supported
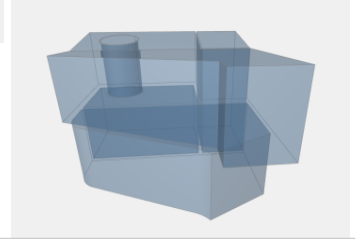
Space 01A / 2x3

505 IfcSpace	*company statement*	*Space 01A / 2x3*
001 GUIDs	🟥	No space can be defined in Scia Engineer.
002 History	🟥	No space can be defined in Scia Engineer.
010 Naming	🟥	No space can be defined in Scia Engineer.
020 Placement		
020-2 Placement Relative	🟥	No space can be defined in Scia Engineer.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟥	No space can be defined in Scia Engineer.
030-6-2 Geometry Clipping	🟥	No space can be defined in Scia Engineer.
040 Presentation		
040-1 Geometric Presentation	🟥	No space can be defined in Scia Engineer.
050 CAD Layer	🟥	No space can be defined in Scia Engineer.
150 Spatial Aggregation		
150-1 Spatial Composition	🟥	No space can be defined in Scia Engineer.

🟩 Supported   🟨 Restricted   🟥 Not Supported

210 Property Set		
210-1 Property Set IFC Common	🟥	No space can be defined in Scia Engineer.
210-6 Property Set IFC any	🟥	No space can be defined in Scia Engineer.
General	*company statement*	*Space 01A / 2x3*
_G4 Remarks	🟥	No space can be defined in Scia Engineer.

StairSlab-01 / 2x3

105 IfcSlab	*company statement*	
		StairSlab-01 / 2x3
001 GUIDs	🟩	
002 History	🟥	Scia Engineer does not support import of history because history of element cannot be defined.
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
040 Presentation		
040-1 Geometric Presentation	🟥	Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate slab.
040-2 Material Presentation	🟥	Material Presentation is not supported because no material presentation can be defined in Scia Engineer.
070 Voiding		
070-3 Voiding Geometry SweptSolid	🟩	

106 IfcStair	*company statement*	
		StairSlab-01 / 2x3
001 GUIDs	🟩	No stair element can be defined in Scia Engineer therefore it is imported as other native elements.
002 History	🟥	No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Scia Engineer does not support import of history because history of element cannot be defined.
010 Naming	🟨	No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one

🟩 Supported 🟨 Restricted 🟥 Not Supported

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is imported with the name and the others are imported with the name + number.

020 Placement	
020-1 Placement Relative	🟩 No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Imported as other Scia Engineer elements.
030 Geometry	
030-6 Geometry Body	
030-6-5 Geometry Explicit	🟩 No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Imported as other Scia Engineer elements.
030-9 Geometry By Components	🟥 No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Scia Engineer does not support special composition for any element.
040 Presentation	
040-1 Geometric Presentation	🟥 No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.
050 CAD Layer	🟩 No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Imported as other Scia Engineer elements.
100 Element Aggregation	
100-2 Element Decomposition	🟥 No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Scia Engineer does not support special decomposition for any element.
120 Spatial Containment	🟩 No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Imported as other Scia Engineer elements.
200 Material	
200-1 Single Material	🟨 No stair element can be defined in Scia Engineer therefore it is imported as other native elements. Import of general material is not supported. Scia Engineer supports import only material with the proper material code name

🟩 Supported   🟨 Restricted   🟥 Not Supported

210 Property Set		
210-1 Property Set IFC Common	🟥	No stair element can be defined in Scia Engineer therefore it is imported as other native elements.

General	*company statement*	*StairSlab-01 / 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	🟩	
General	*company statement*	*UnitTest-01S / 2x3*
_G4 Remarks	🟩	

Wall 02 / 2x3
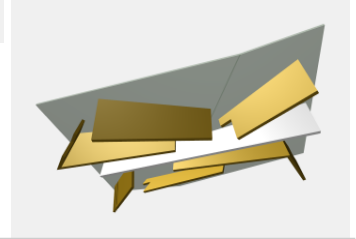
102 IfcWall		*company statement*	*Wall 02 / 2x3*
010 Naming	🟨	Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement			
020-2 Placement Relative	🟩		
030 Geometry			
030-2 Geometry Axis	🟥	Import of Geometry Axis is not supported. No wall axis entity exists in Scia Engineer.	
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	🟩		
030-6-2 Geometry Clipping	🟩		
030-6-5 Geometry Explicit	🟩		
050 CAD Layer	🟩		
070 Voiding			
070-1 Voiding Geometry Explicit	⬜	Explicit Voids are imported correctly but internally stored as a resulting shape	
070-3 Voiding Geometry SweptSolid	🟩		
120 Spatial Containment	🟩		
130 Grouping			
130-1 Grouping General	🟥	Scia Engineer does not support any kind of grouping.	

🟩 Supported   🟨 Restricted   🟥 Not Supported

200 Material		
200-3 Material Layer Set	🟥	Scia Engineer supports only 2D members with single material. It is not possible to define layered walls or slabs.
300 Type		
300-2 Type Naming	🟥	Scia Engineer does not support Type Naming because no type naming can be defined.

General	*company statement*	
		Wall 02 / 2x3
_G4 Remarks	🟩	

WallStandardCase 03A / 2x3
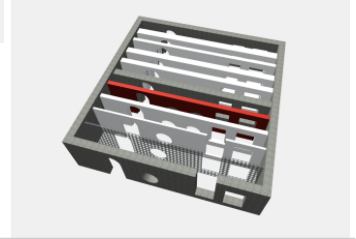
101 IfcWallStandardCase	*company statement*	*WallStandardCase 03A / 2x3*
010 Naming	🟨 Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement		
020-2 Placement Relative	🟩	
030 Geometry		
030-2 Geometry Axis	🟥 Import of Geometry Axis is not supported. No wall axis entity exists in Scia Engineer.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	🟩	
070 Voiding		
070-1 Voiding Geometry SweptSolid	🟩	
070-2 Voiding Geometry Explicit	🟩	
070-3 Voiding Geometry Mapped	⬜ Voiding Geometry Mapped is generally supported by Scia Engineer.	
120 Spatial Containment	🟩	
General	*company statement*	*WallStandardCase 03A / 2x3*
_G4 Remarks	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported

Window 01 / 2x3

301 IfcWindow	*company statement*	*Window 01 / 2x3*
001 GUIDs	🟩 No window can be defined in Scia Engineer therefore it is imported as another native element.	
002 History	🟥 No window can be defined in Scia Engineer therefore it is imported as another native element.	
010 Naming	🟨 No window can be defined in Scia Engineer therefore it is imported as another native element. Each element has to have a unique name in Scia Engineer. If in IFC file two or more entities have identical name, only the first one is imported with the name and the others are imported with the name + number.	
020 Placement		
020-2 Placement Relative	🟩 No window can be defined in Scia Engineer therefore it is imported as another native element.	
030 Geometry		
030-5 Geometry Profile	🟥 No window can be defined in Scia Engineer therefore it is imported as another native element.	
030-6 Geometry Body		
030-6-5 Geometry Explicit	🟩 No window can be defined in Scia Engineer therefore it is imported as another native element.	
030-6-9 Geometry Mapped	🟩 No window can be defined in Scia Engineer therefore it is imported as another native element.	

🟩 Supported   🟨 Restricted   🟥 Not Supported

040 Presentation

    040-1 Geometric Presentation

🟥 No window can be defined in Scia Engineer therefore it is imported as another native element.
Import of Geometric Presentation is not supported. Scia Engineer does not support individual colours for each separate element.

050 CAD Layer

🟩 No window can be defined in Scia Engineer therefore it is imported as another native element.

080 Filling

    080-2 Is Filling

🟥 No window can be defined in Scia Engineer therefore it is imported as another native element.

120 Spatial Containment

🟩 No window can be defined in Scia Engineer therefore it is imported as another native element.

200 Material

    200-1 Single Material

🟨 No window can be defined in Scia Engineer therefore it is imported as another native element.
Import of general material is not supported. Scia Engineer supports import only material with the proper material code name.

    200-5 Material List

🟥 No window can be defined in Scia Engineer therefore it is imported as another native element.

🟩 Supported   🟨 Restricted   🟥 Not Supported

210 Property Set

    210-1 Property Set IFC Common   🟥   No window can be defined in Scia Engineer therefore it is imported as another native element.

    210-2 Property Set IFC any   🟥   No window can be defined in Scia Engineer therefore it is imported as another native element.

    210-3 Property Set User Defined   🟥   No window can be defined in Scia Engineer therefore it is imported as another native element.

300 Type

    300-1 Type Geometry   🟥   No window can be defined in Scia Engineer therefore it is imported as another native element.

    300-2 Type Naming   🟥   No window can be defined in Scia Engineer therefore it is imported as another native element.

    300-3 Type Material   🟥   No window can be defined in Scia Engineer therefore it is imported as another native element.

    300-5 Type Property Set   🟥   No window can be defined in Scia Engineer therefore it is imported as another native element.

    300-6 Type Predefined Properties

        300-6-1 Type Predefined Properties Window   🟥   No window can be defined in Scia Engineer therefore it is imported as another native element.

General	*company statement*	*Window 01 / 2x3*
_G4 Remarks	🟩	

🟩 Supported   🟨 Restricted   🟥 Not Supported