CoordinationView 2.0 / Export

CV2.0-Arch

Autodesk-R

Autodesk Revit LT

08/07/2014

Table of contents

Introduction

Testlist

Concepts

Introduction

Revit LT 2014 and 2015 ship with IFC support. Users can download upgraded versions of both the exporter and the exporter UI from either the Autodesk Exchange Apps store or from SourceForge. In addition, the source code for the exporter and UI can also be downloaded from SourceForge. The certified version for Autodesk Revit LT 2014 is v3.11.0 for the exporter, and v2.11.0 for the UI; the certified version for Autodesk Revit LT 2015 is v15.1.0. The versions of the exporter and UI from the app store contain access to help documentation; additional help can be found at the Autodesk and SourceForge Wikis. Although there is currently no automatic update of the exporter and UI, all users that download the applications from the Autodesk Exchange Apps store will receive an update email with links to the current version(s).

SourceForge wiki: https://sourceforge.net/p/ifcexporter/home/Home/

Testlist

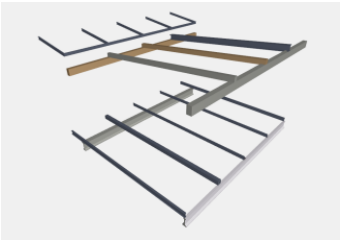
Name test	concepts total	manually checked		
		■	■	■
BeamColumn 04 / 2x3	47	23	1	23
Beam_01 / 2x3	10	6	4	
Beam_02 / 2x3	12	9		3
Beam_03 / 2x3	6	2	3	1
CharsetTest-01A / 2x3	2	2		
Column 01 / 2x3	11	6	5	
Column_02 / 2x3	6	3		3
CoveringFurnishing-01 / 2x3	57	38	2	17
CurtainWall-01 / 2x3	29	20	4	5
Door 01 / 2x3	22	19	1	2
DoorWindow-02 / 2x3	11	9	2	
Grid 01 / 2x3	11	9	1	1
Member 01A / 2x3	10	9		1
Pile 01 / 2x3	19	11	1	7
RampRailing-01 / 2x3	28	22	4	2
RandomArch-X1 / 2x3	14	7		7
RandomArch-X2 / 2x3	10	8		2
RandomArch-X3 / 2x3	9	8	1	
RandomArch-X4 / 2x3	10	6		4
RandomArch-X5 / 2x3	13	13		
Roof 01 / 2x3	15	8	1	6
Roof 02 / 2x3	12	10		2
Site 01 / 2x3	14	12	1	1
Site 02 / 2x3	13	12	1	
Slab 01A / 2x3	9	7	2	
Slab 02A / 2x3	24	10	1	13

■ Supported ■ Restricted ■ Not Supported

Name test	concepts total	manually checked		
		■	■	■
Space 01A / 2x3	12	10		2
StairSlab-01 / 2x3	19	16	2	1
UnitTest-01A / 2x3	3	3		
Wall 01 / 2x3	19	12	1	6
Wall 02 / 2x3	14	7	1	6
WallSlab 03 / 2x3	32	26	1	5
WallStandardCase 01A / 2x3	15	11	2	2
WallStandardCase 02A / 2x3	11	10	1	
WallStandardCase 03A / 2x3	9	8		1
WallStandardCase 04A / 2x3	8	6	1	1
Window 01 / 2x3	22	15	2	5

Concepts

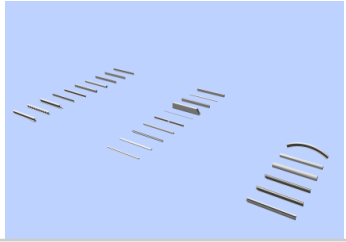
Beam_01 / 2x3



103 IfcBeam	*company statement*	*Beam_01 / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	This test case required the use of specific IfcProfileDefs for the definitions of extrusions. Revit 2014 currently supports IfcArbitraryProfileDef, IfcIShapeProfileDef, IfcRectangularProfileDef, IfcCircleProfileDef and IfcCircleHollowProfileDef on export.	
030-6-2 Geometry Clipping	Revit 2014 exports some geometries that are conceptually clipped extrusions as Breps.	
040 Presentation		
040-1 Geometric Presentation		
040-2 Material Presentation		
120 Spatial Containment		

200 Material 200-1 Single Material	In this test case, there are instructions to create a material with two different colors. In Revit 2014, this becomes two materials with two unique names. The restriction comes from having the second name.	
210 Property Set 210-1 Property Set IFC Common	In this test case, we were required to create non-load bearing beams. In Revit 2014, all beams are load bearing.	
General	*company statement*	*Beam_01 / 2x3*
_G4 Remarks		

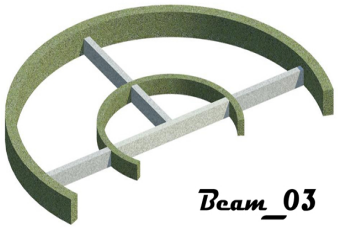
Beam_02 / 2x3



103 IfcBeam	*company statement*	*Beam_02 / 2x3*
010 Naming		
030 Geometry		
030-2 Geometry Axis		
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	In this test case, the beams with openings were exported as BReps.	
070-2 Voiding Geometry Mapped	In this test case, the beams with openings were exported as BReps.	
070-3 Voiding Geometry SweptSolid	In this test case, the beams with openings were exported as BReps.	
120 Spatial Containment		
200 Material		
200-1 Single Material		

General	*company statement*	*Beam_02 / 2x3*
_G4 Remarks		

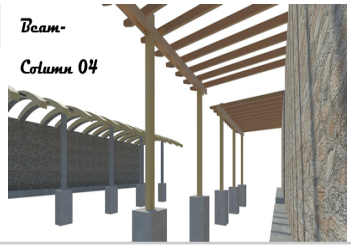
Beam_03 / 2x3



103 IfcBeam	*company statement*	*Beam_03 / 2x3*
030 Geometry		
030-1 Geometry Box	This concept was optional for this test case, and not included in the Revit 2014 export.	
030-2 Geometry Axis	Revit 2014 will occasionally place the beam axis of a sloped beam on the wrong plane. This is a limitation of the current export.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping	Revit 2014 exports some geometries that are conceptually clipped extrusions as Breps.	
300 Type		
300-5 Type Property Set		

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

BeamColumn 04 / 2x3



BeamColumn 04 / 2x3

103 IfcBeam	*company statement*
001 GUIDs	
002 History	
010 Naming	
020 Placement	
020-2 Placement Relative	
030 Geometry	
030-6 Geometry Body	
030-6-1 Geometry SweptSolid	
030-6-9 Geometry Mapped	Revit 2014 exports beams as extrusions or BReps.
070 Voiding	
070-1 Voiding Geometry Explicit	In this test case, the beams with openings were exported as BReps.
070-2 Voiding Geometry Mapped	In this test case, the beams with openings were exported as BReps.
070-3 Voiding Geometry SweptSolid	In this test case, the beams with openings were exported as BReps.
130 Grouping	
130-1 Grouping General	This concept was optional for this test case, and not included in the Revit 2014 export.
200 Material	
200-1 Single Material	

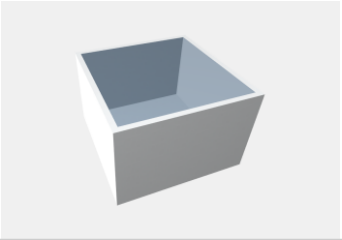
Supported Restricted Not Supported

210 Property Set			
210-1 Property Set IFC Common			
210-3 Property Set User Defined		Revit 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base export	
300 Type			
300-1 Type Geometry		Revit 2014 does not currently export IfcBeamType.	
300-2 Type Naming		Revit 2014 does not currently export IfcBeamType.	
300-3 Type Material		Revit 2014 does not currently export IfcBeamType.	
300-5 Type Property Set		Revit 2014 does not currently export IfcBeamType.	
104 IfcColumn		*company statement*	*BeamColumn 04 / 2x3*
001 GUIDs			
002 History			
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid			
030-6-9 Geometry Mapped			
070 Voiding			
070-1 Voiding Geometry Explicit		The columns with openings in this test were exported as BReps or with boolean clipping.	
070-2 Voiding Geometry Mapped		The columns with openings in this test were exported as BReps or with boolean clipping.	
070-3 Voiding Geometry SweptSolid		The columns with openings in this test were exported as BReps or with boolean clipping.	

130 Grouping		
130-1 Grouping General	This concept was optional and was not included in the 2014 LT export.	
200 Material		
200-1 Single Material		
210 Property Set		
210-2 Property Set IFC any		
300 Type		
300-1 Type Geometry	This concept was optional for this test case, and not included in the Revit 2013 export.	
300-2 Type Naming	This concept was optional for this test case, and not included in the Revit 2013 export.	
300-3 Type Material		
300-5 Type Property Set	This concept was optional for this test case, and not included in the Revit 2013 export.	
403 IfcFooting	*company statement*	*BeamColumn 04 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-1 Placement Relative		
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-9 Geometry Mapped	Revit 2014LT exports footings as BReps or extrusions.	
130 Grouping		
130-1 Grouping General	This concept was optional and was not included in the Revit 2014LT export.	

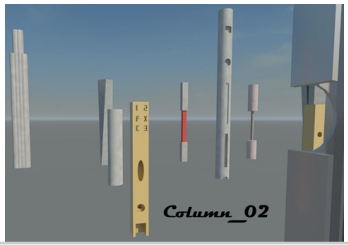
200 Material		
200-1 Single Material	■	
210 Property Set		
210-2 Property Set IFC any	■	Revit 2014 does not currently export any common property sets for IfcFooting. Revit 2013 does export internal property sets, but that option was unused in this test case.
300 Type		
300-1 Type Geometry	■	This concept was optional and was not included in the Revit 2014LT export.
300-2 Type Naming	■	This concept was optional and was not included in the Revit 2014LT export.
300-3 Type Material	■	This concept was optional and was not included in the Revit 2014LT export.
300-5 Type Property Set	■	This concept was optional and was not included in the Revit 2014LT export.
General	*company statement*	*BeamColumn 04 / 2x3*
_G4 Remarks	■	

CharsetTest-01A / 2x3



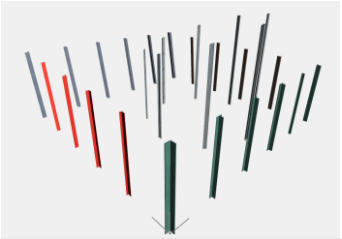
General	*company statement*	*CharsetTest-01A / 2x3*
_G1 Character sets		
_G4 Remarks		

Column_02 / 2x3



104 IfcColumn	*company statement*	*Column_02 / 2x3*
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-5 Geometry Explicit		
070 Voiding		
070-1 Voiding Geometry Explicit	RevitLT 2014 exports some geometries that have complex openings as Breps.	
070-2 Voiding Geometry Mapped	RevitLT 2014 exports some geometries that have complex openings as Breps.	
070-3 Voiding Geometry SweptSolid	RevitLT 2014 exports some geometries that have complex openings as Breps.	
General	*company statement*	*Column_02 / 2x3*
_G4 Remarks		

Column 01 / 2x3

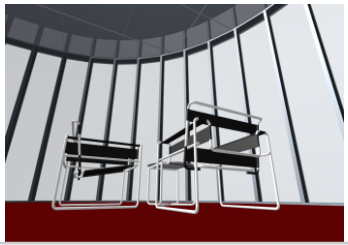


104 IfcColumn	*company statement*	*Column 01 / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative	RevitLT 2014 internally stores all coordinates relative to a global origin. On export, we create a local placement closer to the geometry and place the geometry in that local coordinate system. This is valid for all Brep representations and many extrusion representations, but does not extend to some mapped representations. This is a limitation of the current export.	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	RevitLT 2014 exports some geometries that are conceptually clipped extrusions as Breps.	
030-6-2 Geometry Clipping	RevitLT 2014 exports some geometries that are conceptually clipped extrusions as Breps.	
040 Presentation		
040-1 Geometric Presentation		
040-2 Material Presentation		
050 CAD Layer		
120 Spatial Containment		
200 Material		
200-1 Single Material	In this test case, there are instructions to create a material with two different colors. In RevitLT 2014, this becomes two materials with two unique names. The restriction comes from having the second name.	

Supported Restricted Not Supported

210 Property Set 210-1 Property Set IFC Common		In this test case, we were required to create non-load bearing steel columns. In RevitLT 2014, these columns are considered load bearing.
General	*company statement*	*Column 01 / 2x3*
_G4 Remarks		

CoveringFurnishing-01 / 2x3



CoveringFurnishing-01 / 2x3

210 IfcFlowTerminal	*company statement*
001 GUIDs	
010 Naming	
020 Placement	
020-2 Placement Relative	
030 Geometry	
030-6 Geometry Body	
030-6-5 Geometry Explicit	All IfcFlowTerminals in this test were exported as mapped representations.
030-6-9 Geometry Mapped	
040 Presentation	
040-1 Geometric Presentation	
050 CAD Layer	
120 Spatial Containment	

210 Property Set			
210-1 Property Set IFC Common		RevitLT 2014 supports Pset_FlowTerminalAirTerminal, but the information for this property set was not included in his test case.	
210-6 Property Set IFC any		RevitLT 2014 supports Pset_FlowTerminalAirTerminal, but the information for this property set was not included in his test case.	
210-9 Property Set User Defined		RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.	
300 Type			
300-1 Type Geometry			
300-2 Type Naming			
300-3 Type Material			
300-5 Type Property Set		In this test case, no property sets were included for IfcFlowTerminals.	
303 IfcCovering		*company statement*	*CoveringFurnishing-01 / 2x3*
010 Naming			
020 Placement			
020-2 Placement Relative			
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid			
030-6-9 Geometry Mapped		RevitLT 2014 exports ceilings as extrusions or Breps.	
040 Presentation			
040-1 Geometric Presentation			
050 CAD Layer			

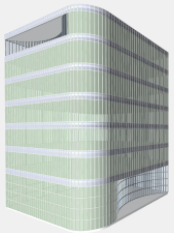
Supported Restricted Not Supported

070 Voiding			
120 Spatial Containment	■		
200 Material			
200-1 Single Material	■		
200-3 Material Layer Set	■		
210 Property Set			
210-1 Property Set IFC Common	■		
300 Type			
300-1 Type Geometry	■	RevitLT 2014 does not export IfcCoveringType.	
300-2 Type Naming	■	RevitLT 2014 does not export IfcCoveringType.	
300-3 Type Material	■	RevitLT 2014 does not export IfcCoveringType.	
300-5 Type Property Set	■	RevitLT 2014 does not export IfcCoveringType.	
304 IfcFurnishingElement		*company statement*	*CoveringFurnishing-01 / 2x3*
001 GUIDs	■		
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-5 Geometry Explicit	■	All IfcFurnishingElements in this test were exported as mapped representations.	
030-6-9 Geometry Mapped	■		
040 Presentation			
040-1 Geometric Presentation	■		

050 CAD Layer		
120 Spatial Containment		
200 Material		
200-1 Single Material	RevitLT 2014 exports materials using IfcMaterialList.	
200-5 Material List	In this test case, some of the materials were incorrectly created in the test file.	
210 Property Set		
210-6 Property Set IFC any	RevitLT 2014 supports Pset_ManufacturerTypeInformation, but the information for this property set was not included in his test case.	
210-9 Property Set User Defined	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.	
300 Type		
300-1 Type Geometry		
300-2 Type Naming		
300-3 Type Material	In this test case, there are instructions to create a material with two different colors. In RevitLT 2014, this becomes two materials with two unique names. The restriction comes from having the second name.	
300-5 Type Property Set	In this test case, no type property sets were included for IfcFurnishingElement.	
505 IfcSpace	*company statement*	*CoveringFurnishing-01 / 2x3*
030 Geometry		
030-3 Geometry FootPrint	RevitLT 2014 does not export the IfcSpace footprint.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
120 Spatial Containment		

130 Grouping			
130-3 Grouping to Zones	■		
230 Classification	■	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
508 IfcZone		*company statement*	*CoveringFurnishing-01 / 2x3*
001 GUIDs	■		
002 History	■		
010 Naming	■		
130 Grouping			
130-5 Is Group	■		
210 Property Set			
210-1 Property Set IFC Common	■	RevitLT 2014 supports Pset_ZoneCommon, but the information for this property set was not included in his test case.	
210-9 Property Set User Defined	■	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.	
General		*company statement*	*CoveringFurnishing-01 / 2x3*
_G4 Remarks	■		

CurtainWall-01 / 2x3



109 IfcCurtainWall	*company statement*	*CurtainWall-01 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-1 Placement Relative	The facade-3.1 is related to the 7th storey, but has a negative local placement z = -28.2 Each member of the curtain wall has a local placement with z = +31.6. This is due to the way the curtain walls were created – as face based systems on a mass, which is not actually level based.	
030 Geometry		
030-6 Geometry Body		
030-6-5 Geometry Explicit	In this test case, there are two places where default panels had to be used due to size and shape of the openings. This is a limitation of how the curtain wall was created in RevitLT 2014.	
030-9 Geometry By Components		
040 Presentation		
040-1 Geometric Presentation		
050 CAD Layer		
100 Element Aggregation		
100-2 Element Decomposition		
120 Spatial Containment	In this test case, the test instructions state that one of the curtain walls should be relative to Level 2. However, the curtain wall extends significantly below that level. As such, Revit relates it to the level below that. Since this is different than the test instructions, this is marked as restricted.	

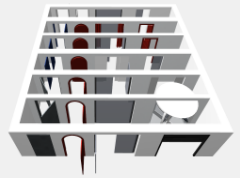
Supported Restricted Not Supported

200 Material		
200-1 Single Material		
200-5 Material List	In this test case, there are instructions to create a material with two different colors. In RevitLT 2014, this becomes two materials with two unique names. The restriction comes from having the second name.	
210 Property Set		
210-1 Property Set IFC Common		
210-3 Property Set User Defined	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.	
300 Type		
300-1 Type Geometry	Curtain wall type geometry is an optional item and was not included in the export.	
300-2 Type Naming	Export of Curtain wall type materials was an optional item and was not included in the export.	
300-3 Type Material	Export of Curtain wall type materials was an optional item and was not included in the export.	
300-5 Type Property Set	Export of curtain wall type property sets was an optional item and was not included in the export.	
501 IfcProject	*company statement*	*CurtainWall-01 / 2x3*
010 Naming		
502 IfcSite	*company statement*	*CurtainWall-01 / 2x3*
010 Naming		

Supported Restricted Not Supported

060 Location			
060-1 Geographic Location			
060-2 Address			
503 IfcBuilding		*company statement*	*CurtainWall-01 / 2x3*
010 Naming			
020 Placement			
020-2 Placement Relative			
504 IfcBuildingStorey		*company statement*	*CurtainWall-01 / 2x3*
010 Naming			
020 Placement			
020-2 Placement Relative			
060 Location			
060-4 Storey Elevation			
210 Property Set			
210-1 Property Set IFC Common			
General		*company statement*	*CurtainWall-01 / 2x3*
_G4 Remarks		There are two places where default panels had to be used due to size and shape of the openings.	

Door 01 / 2x3



302 IfcDoor	*company statement*	*Door 01 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-5 Geometry Profile	RevitLT 2014 exports Footprint information for family instances. It does not export 2D elevation profiles.	
030-6 Geometry Body		
030-6-5 Geometry Explicit		
030-6-9 Geometry Mapped		
040 Presentation		
040-1 Geometric Presentation		
050 CAD Layer		
080 Filling		
080-2 Is Filling		
120 Spatial Containment		

200 Material			
200-1 Single Material	■		
200-5 Material List	■		
210 Property Set			
210-1 Property Set IFC Common	■		
210-2 Property Set IFC any	■		
210-3 Property Set User Defined	■	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.	
300 Type			
300-1 Type Geometry	■		
300-2 Type Naming	■		
300-3 Type Material	■		
300-5 Type Property Set	■		
300-6 Type Predefined Properties			
300-6-1 Type Predefined Properties Door	■		
General		*company statement*	*Door 01 / 2x3*
_G4 Remarks	■		

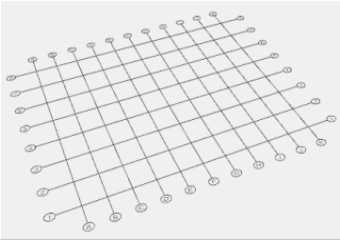
■ Supported ■ Restricted ■ Not Supported

DoorWindow-02 / 2x3

301 IfcWindow		*company statement*	*DoorWindow-02 / 2x3*
001 GUIDs	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-5 Geometry Explicit	■	Due to the window's location in the curved wall, revit makes some small adjustments which deviate slightly from the instructions for Window 2. For example, the horizontal placement of the window in the wall. Window frames could not be modeled precisely to specification.	
080 Filling			
080-2 Is Filling	■		
300 Type			
300-1 Type Geometry	■		
302 IfcDoor		*company statement*	*DoorWindow-02 / 2x3*
001 GUIDs	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-5 Geometry Explicit	■	The door position cannot be adjusted in the straight and curved walls in exactly the way the instructions require.	

080 Filling		
080-2 Is Filling	■	
300 Type		
300-1 Type Geometry	■	
General	*company statement*	*DoorWindow-02 / 2x3*
_G4 Remarks	■	

Grid 01 / 2x3

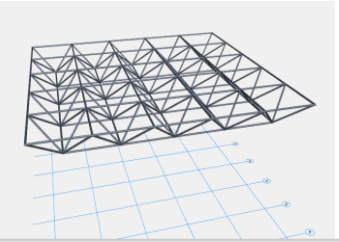


509 IfcGrid	*company statement*	*Grid 01 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-3 Geometry FootPrint		
040 Presentation		
040-1 Geometric Presentation		
050 CAD Layer		
120 Spatial Containment		
210 Property Set		
210-3 Property Set User Defined	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.	
270 Grid Usage		
270-1 Grid Axes	In this test case, the naming of the Grid axes is slightly different from those given in the instructions.	

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

_G4 Remarks	

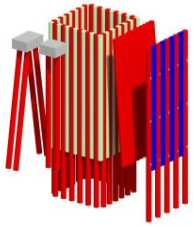
Member 01A / 2x3



401 IfcMember	*company statement*	*Member 01A / 2x3*
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
030-6-2 Geometry Clipping	■	RevitLT 2014 exports some geometries that are conceptually clipped extrusions as Breps.
040 Presentation		
040-1 Geometric Presentation	■	
040-2 Material Presentation	■	
120 Spatial Containment	■	
200 Material		
200-1 Single Material	■	
300 Type		
300-1 Type Geometry	■	

General	*company statement*	*Member 01A / 2x3*
_G4 Remarks	■	

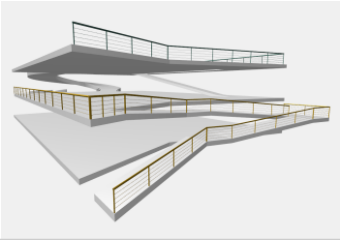
Pile 01 / 2x3



404 IfcPile	*company statement*	*Pile 01 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-1 Placement Relative		
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping	RevitLT 2014 exports piles as extrusions or Breps.	
030-6-9 Geometry Mapped	RevitLT 2014 exports piles as extrusions or Breps.	
040 Presentation		
040-1 Geometric Presentation		
040-2 Material Presentation		
050 CAD Layer		
070 Voiding		
070-3 Voiding Geometry SweptSolid	In this test case, the piles are exported as Breps. As such, the pile is not supposed to have an IfcOpeningElement associated with it.	
100 Element Aggregation		
100-2 Element Decomposition	RevitLT 2014 exports piles as extrusions or Breps.	

120 Spatial Containment		
200 Material		
200-1 Single Material		
210 Property Set		
210-3 Property Set User Defined		RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base export
300 Type		
300-1 Type Geometry		As there is no IfcPileType in IFC2x3, RevitLT 2014 does not export type information for piles.
300-3 Type Material		As there is no IfcPileType in IFC2x3, RevitLT 2014 does not export type information for piles.
300-5 Type Property Set		As there is no IfcPileType in IFC2x3, RevitLT 2014 does not export type information for piles.
General	*company statement*	*Pile 01 / 2x3*
_G4 Remarks		

RampRailing-01 / 2x3



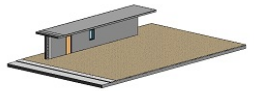
RampRailing-01 / 2x3

107 IfcRamp	*company statement*
001 GUIDs	
002 History	
010 Naming	
020 Placement	
020-1 Placement Relative	
030 Geometry	
030-6 Geometry Body	
030-6-5 Geometry Explicit	
030-9 Geometry By Components	
040 Presentation	
040-1 Geometric Presentation	
050 CAD Layer	
100 Element Aggregation	
100-2 Element Decomposition	
120 Spatial Containment	In this test case, the ramps are all exported relative to Level 1. This is because of the way they were created.
200 Material	
200-1 Single Material	

210 Property Set		
210-1 Property Set IFC Common	Restricted	The RevitLT 2014 IFC exporter does not currently export the ramp "Slope" parameter.
210-3 Property Set User Defined	Supported	
108 IfcRailing	*company statement*	*RampRailing-01 / 2x3*
001 GUIDs	Supported	
002 History	Supported	
010 Naming	Supported	
020 Placement		
020-2 Placement Relative	Restricted	All the railings except railing_PL3 are relative to level 1 (they are associated with ramps.)
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Not Supported	In this test case, all of the ramps are exported as Breps.
030-6-5 Geometry Explicit	Supported	
030-6-9 Geometry Mapped	Not Supported	In this test case, all of the ramps are exported as Breps.
040 Presentation		
040-1 Geometric Presentation	Supported	
050 CAD Layer	Supported	
120 Spatial Containment	Supported	
200 Material		
200-1 Single Material	Supported	
200-5 Material List	Supported	

210 Property Set			
210-1 Property Set IFC Common		The RevitLT 2014 IFC exporter does not currently export the Diameter parameter for round railings.	
210-3 Property Set User Defined			
General		*company statement*	*RampRailing-01 / 2x3*
_G4 Remarks			

RandomArch-X1 / 2x3



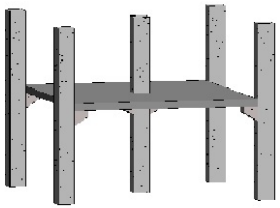
102 IfcWall	*company statement*	*RandomArch-X1 / 2x3*
070 Voiding		
070-3 Voiding Geometry SweptSolid	RevitLT 2014 exports building element parts as BReps already modeled with openings, so Revit does not export an IfcOpeningElement.	
080 Filling		
080-1 Has Filling		
080-1-1 Has Filling Door	RevitLT 2014 only relates hosted doors and windows to walls. In this case the building element parts are exported as BReps, so Revit associates the door and window directly to the level.	
080-1-2 Has Filling Window	RevitLT 2014 only relates hosted doors and windows to walls. In this case the building element parts are exported as BReps, so Revit associates the door and window directly to the level.	
100 Element Aggregation		
100-2 Element Decomposition		
200 Material		
200-1 Single Material	According #CV-2x3-120, material information for decomposed elements shall only be given at the element part level.	
200-3 Material Layer Set	According #CV-2x3-120, material information for decomposed elements shall only be given at the element part level.	
210 Property Set		
210-1 Property Set IFC Common		

105 IfcSlab	*company statement*	*RandomArch-X1 / 2x3*
100 Element Aggregation		
100-2 Element Decomposition		

Supported Restricted Not Supported

200 Material *200-1 Single Material*		According #CV-2x3-120, material information for decomposed elements shall only be given at the element part level.	
210 Property Set 210-1 Property Set IFC Common			
110 IfcRoof		*company statement*	*RandomArch-X1 / 2x3*
100 Element Aggregation 100-2 Element Decomposition			
200 Material 200-1 Single Material		According #CV-2x3-120, material information for decomposed elements shall only be given at the element part level.	
210 Property Set 210-1 Property Set IFC Common			
General		*company statement*	*RandomArch-X1 / 2x3*
_G4 Remarks			

RandomArch-X2 / 2x3

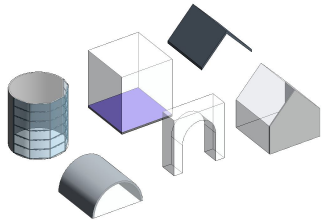


102 IfcWall		*company statement*	*RandomArch-X2 / 2x3*
104 IfcColumn		*company statement*	*RandomArch-X2 / 2x3*
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-1 Geometry Box	■		
105 IfcSlab		*company statement*	*RandomArch-X2 / 2x3*
020 Placement			
020-2 Placement Relative	■		
408 IfcElementAssembly		*company statement*	*RandomArch-X2 / 2x3*
001 GUIDs	■		
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-1 Geometry Box	■	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
030-2 Geometry Axis	■	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
100 Element Aggregation			
100-1 Element Composition	■		

■ Supported ■ Restricted ■ Not Supported

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

RandomArch-X3 / 2x3



101 IfcWallStandardCase		*company statement*	*RandomArch-X3 / 2x3*
020 Placement			
020-2 Placement Relative			
102 IfcWall		*company statement*	*RandomArch-X3 / 2x3*
020 Placement			
020-2 Placement Relative			
105 IfcSlab		*company statement*	*RandomArch-X3 / 2x3*
010 Naming			
020 Placement			
020-2 Placement Relative		In this test case, one IfcSlab has a local origin that is not close to the geometry.	
110 IfcRoof		*company statement*	*RandomArch-X3 / 2x3*
010 Naming			
020 Placement			
020-2 Placement Relative			
111 IfcBuildingElementProxy		*company statement*	*RandomArch-X3 / 2x3*
010 Naming			
503 IfcBuilding		*company statement*	*RandomArch-X3 / 2x3*
010 Naming			
General		*company statement*	*RandomArch-X3 / 2x3*
_G4 Remarks			

RandomArch-X4 / 2x3

109 IfcCurtainWall	*company statement*	*RandomArch-X4 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-1 Placement Relative		
030 Geometry		
030-6 Geometry Body		
030-6-9 Geometry Mapped	In this test case, all of the curtain walls are containers, and do not have their own geometry or materials. This is as designed.	
100 Element Aggregation		
100-1 Element Composition	This concept was optional for this test case, and not modelled.	
100-2 Element Decomposition		
200 Material		
200-1 Single Material	In this test case, all of the curtain walls are containers, and do not have their own geometry or materials. This is as designed.	

302 IfcDoor	*company statement*	*RandomArch-X4 / 2x3*
080 Filling		
080-2 Is Filling	In this test case, the door is a panel of the curtain wall, and does not cut anything. As such, it does not have the IfcRelFillsElement relation. This is as designed.	

General	*company statement*	*RandomArch-X4 / 2x3*
_G4 Remarks		

RandomArch-X5 / 2x3

106 IfcStair	*company statement*	*RandomArch-X5 / 2x3*
001 GUIDs	■	
002 History	■	
010 Naming	■	
020 Placement		
020-1 Placement Relative	■	
030 Geometry		
030-9 Geometry By Components	■	
040 Presentation		
040-1 Geometric Presentation	■	
040-2 Material Presentation	■	
120 Spatial Containment	■	
108 IfcRailing	*company statement*	*RandomArch-X5 / 2x3*
001 GUIDs	■	
002 History	■	
020 Placement		
020-2 Placement Relative	■	
040 Presentation		
040-1 Geometric Presentation	■	
General	*company statement*	*RandomArch-X5 / 2x3*

_G4 Remarks	

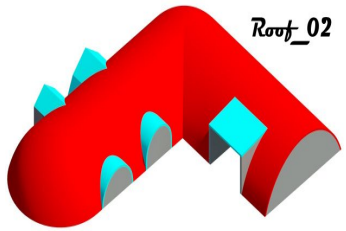
Roof 01 / 2x3

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	■	In this test case, the roofs are exported as Breps, not as a collection of IfcSlabs.	
030-6-2 Geometry Clipping	■	In this test case, the roofs are exported as Breps, not as a collection of IfcSlabs.	
030-6-9 Geometry Mapped	■	In this test case, the roofs are exported as Breps, not as a collection of IfcSlabs.	
070 Voiding			
070-3 Voiding Geometry SweptSolid	■	In this test case, the roofs are exported as Breps, not as a collection of IfcSlabs.	
080 Filling			
080-1 Has Filling			
080-1-2 Has Filling Window	■	In this test case, the roofs are exported as Breps, not as a collection of IfcSlabs. As such, the window is not supposed to have an IfcOpeningElement associated with it.	
200 Material			
200-2 Material Layer Set	■		

■ Supported ■ Restricted ■ Not Supported

110 IfcRoof	*company statement*	*Roof 01 / 2x3*
030 Geometry		
030-1 Geometry Box	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
040 Presentation		
040-1 Geometric Presentation		
040-2 Material Presentation		
100 Element Aggregation		
100-2 Element Decomposition	In this test case, the roofs are exported as Breps, not as a collection of IfcSlabs.	
120 Spatial Containment		
200 Material		
200-1 Single Material		
General	*company statement*	*Roof 01 / 2x3*
_G4 Remarks		

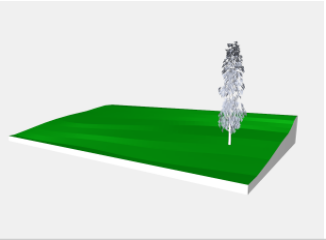
Roof 02 / 2x3



101 IfcWallStandardCase		*company statement*	*Roof 02 / 2x3*
010 Naming	■		
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
030-6-2 Geometry Clipping	■		
050 CAD Layer	■		
110 IfcRoof		*company statement*	*Roof 02 / 2x3*
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-6 Geometry Body			
030-6-5 Geometry Explicit	■		
050 CAD Layer	■		
100 Element Aggregation			
100-2 Element Decomposition	■	In this test case, the roofs are exported as Breps, not as a collection of IfcSlabs.	

210 Property Set		
210-1 Property Set IFC Common		
210-3 Property Set User Defined	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base export	
General	*company statement*	*Roof 02 / 2x3*
_G4 Remarks		

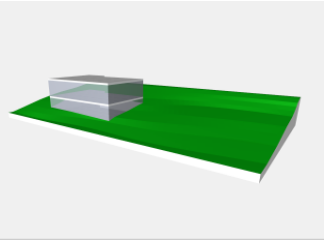
Site 01 / 2x3



502 IfcSite	*company statement*	*Site 01 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-1 Placement Absolute		
030 Geometry		
030-1 Geometry Box	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
030-3 Geometry FootPrint		
030-6 Geometry Body		
030-6-5 Geometry Explicit		
040 Presentation		
040-1 Geometric Presentation		
050 CAD Layer		
060 Location		
060-1 Geographic Location		
060-2 Address		
120 Spatial Containment	In this case, a tree was intended to be directly contained in the IfcSite. However, in RevitLT 2014, the exporter indirectly contains it via the IfcBuilding and the IfcBuildingStorey.	

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

Site 02 / 2x3

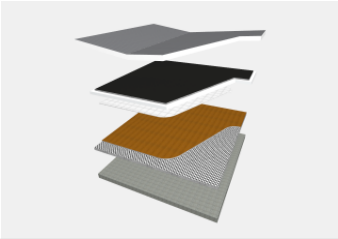


502 IfcSite	*company statement*	*Site 02 / 2x3*
010 Naming		
020 Placement		
020-1 Placement Absolute		
030 Geometry		
030-3 Geometry FootPrint		
030-6 Geometry Body		
030-6-5 Geometry Explicit		
150 Spatial Aggregation		
150-1 Spatial Composition		
150-2 Spatial Decomposition		
210 Property Set		
210-9 Property Set User Defined	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base export	

503 IfcBuilding	*company statement*	*Site 02 / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		

150 Spatial Aggregation			
150-1 Spatial Composition	■		
150-2 Spatial Decomposition	■		
210 Property Set			
210-1 Property Set IFC Common	■		
General		*company statement*	*Site 02 / 2x3*
_G4 Remarks	■		

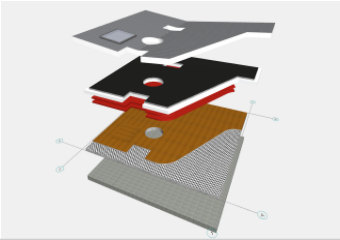
Slab 01A / 2x3



105 IfcSlab	*company statement*	*Slab 01A / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping	RevitLT 2014 exports some geometries that are conceptually clipped extrusions as Breps.	
050 CAD Layer		
200 Material		
200-2 Material Layer Set	For most entities with BRep representations, we use IfcMaterialList for the material representations.	
200-3 Material Layer Usage		
210 Property Set		
210-1 Property Set IFC Common		

General	*company statement*	*Slab 01A / 2x3*
_G4 Remarks		

Slab 02A / 2x3

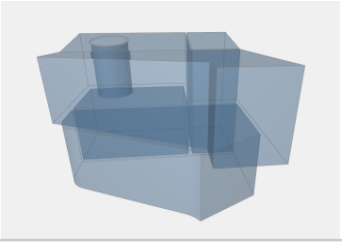


105 IfcSlab	*company statement*	*Slab 02A / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-1 Geometry Box	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping	RevitLT 2014 exports some geometries that are conceptually clipped extrusions as Breps.	
030-6-5 Geometry Explicit		
030-6-9 Geometry Mapped	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
070 Voiding		
070-1 Voiding Geometry Explicit	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
070-2 Voiding Geometry Mapped	RevitLT 2014 exports openings as extrusions or Breps.	
070-3 Voiding Geometry SweptSolid		

080 Filling		
080-1 Has Filling		
080-1-1 Has Filling Door	■	RevitLT 2014 does not support doors in floors.
080-1-2 Has Filling Window	■	RevitLT 2014 does not support windows in floors.
120 Spatial Containment	■	
130 Grouping		
130-1 Grouping General	■	This concept was optional for this test case, and not included in the RevitLT 2014 export.
200 Material		
200-1 Single Material	■	
200-2 Material Layer Set	■	
210 Property Set		
210-1 Property Set IFC Common	■	RevitLT 2014 cannot determine the "Pitch Angle" property of Pset_SlabCommon.
210-2 Property Set IFC any	■	
210-3 Property Set User Defined	■	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.
300 Type		
300-1 Type Geometry	■	RevitLT 2014 does not currently export IfcSlabType.
300-2 Type Naming	■	RevitLT 2014 does not currently export IfcSlabType.
300-3 Type Material	■	RevitLT 2014 does not currently export IfcSlabType.
300-5 Type Property Set	■	RevitLT 2014 does not currently export IfcSlabType.

General	*company statement*	*Slab 02A / 2x3*
_G4 Remarks		

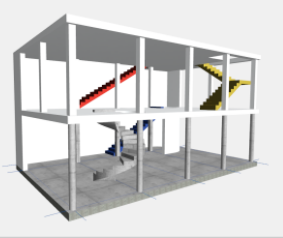
Space 01A / 2x3



505 IfcSpace	*company statement*	*Space 01A / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping	RevitLT 2014 exports space geometry as extrusions or Breps.	
040 Presentation		
040-1 Geometric Presentation	Spaces, derived from RevitLT 2014 rooms, do not have color or material information assigned to them.	
050 CAD Layer		
150 Spatial Aggregation		
150-1 Spatial Composition		
210 Property Set		
210-1 Property Set IFC Common		
210-6 Property Set IFC any		
General	*company statement*	*Space 01A / 2x3*

_G4 Remarks	

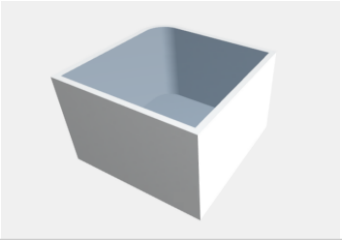
StairSlab-01 / 2x3



105 IfcSlab		*company statement*	*StairSlab-01 / 2x3*
001 GUIDs	■		
002 History	■		
030 Geometry			
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
040 Presentation			
040-1 Geometric Presentation	■		
040-2 Material Presentation	■	In this test case, there are instructions to create a material with two different colors. In RevitLT 2014, this becomes two materials with two unique names. The restriction comes from having the second name.	
070 Voiding			
070-3 Voiding Geometry SweptSolid	■		
106 IfcStair		*company statement*	*StairSlab-01 / 2x3*
001 GUIDs	■		
002 History	■		
010 Naming	■		
020 Placement			
020-1 Placement Relative	■		

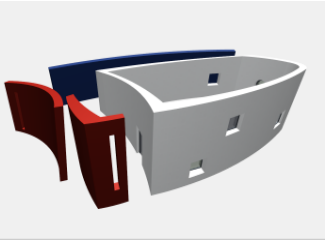
030 Geometry			
030-6 Geometry Body			
030-6-5 Geometry Explicit		In this test case, the stairs are correctly exported as a container of stair flights and landings. As such, the stair doesn't have any native geometry.	
030-9 Geometry By Components			
040 Presentation			
040-1 Geometric Presentation			
050 CAD Layer			
100 Element Aggregation			
100-2 Element Decomposition			
120 Spatial Containment			
200 Material			
200-1 Single Material		In this test case, there are instructions to create a material with two different colors. In RevitLT 2014, this becomes two materials with two unique names. The restriction comes from having the second name.	
210 Property Set			
210-1 Property Set IFC Common			
General		*company statement*	*StairSlab-01 / 2x3*
_G4 Remarks			

UnitTest-01A / 2x3



501 IfcProject	*company statement*	*UnitTest-01A / 2x3*
005 Project Units		
005-1 Project Metric Units	■	
005-2 Project Imperial Units	■	
General	*company statement*	*UnitTest-01A / 2x3*
_G4 Remarks	■	

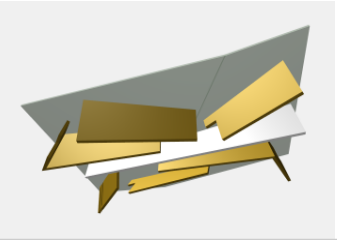
Wall 01 / 2x3



102 IfcWall	*company statement*	*Wall 01 / 2x3*
002 History	■	
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	The RevitLT 2014 IFC exporter gets the wall geometry via the API, which is represented as a BRep. In some cases, it is not able to recreate an extrusion with clippings, and exports the BRep instead.
030-6-2 Geometry Clipping	■	The RevitLT 2014 IFC exporter gets the wall geometry via the API, which is represented as a BRep. In some cases, it is not able to recreate an extrusion with clippings, and exports the BRep instead.
030-6-5 Geometry Explicit	■	
040 Presentation		
040-1 Geometric Presentation	■	
040-2 Material Presentation	■	
070 Voiding		
070-1 Voiding Geometry Explicit	■	RevitLT 2014 exports openings as extrusions or Breps.
070-3 Voiding Geometry SweptSolid	■	

080 Filling			
080-1 Has Filling			
080-1-1 Has Filling Door	🟥	In this test case, the walls are exported as BReps. As such, there is no associativity between the walls and their doors.	
080-1-2 Has Filling Window	🟥	In this test case, the walls are exported as BReps. As such, there is no associativity between the walls and their windows.	
200 Material			
200-1 Single Material	🟨	In this test case, there are instructions to create a material with two different colors. In RevitLT 2014, this becomes two materials with two unique names. The restriction comes from having the second name.	
210 Property Set			
210-1 Property Set IFC Common	🟩		
300 Type			
300-3 Type Material	🟩		
300-5 Type Property Set	🟥	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
301 IfcWindow		*company statement*	*Wall 01 / 2x3*
020 Placement			
020-2 Placement Relative	🟩		
302 IfcDoor		*company statement*	*Wall 01 / 2x3*
020 Placement			
020-2 Placement Relative	🟩		
General		*company statement*	*Wall 01 / 2x3*
_G4 Remarks	🟩		

Wall 02 / 2x3



102 IfcWall	*company statement*	*Wall 02 / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-2 Geometry Axis	Revit 2014 does not generally export the geometry axis for Brep walls. In this test case, all IfcWalls were exported with Breps.	
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	In this test case, all IfcWalls were exported with BReps.	
030-6-2 Geometry Clipping	In this test case, all IfcWalls were exported with BReps.	
030-6-5 Geometry Explicit	In this test case, all IfcWalls were exportedwith BReps. By CV2.0 convention, we do not export openings for BRep walls.	
050 CAD Layer		
070 Voiding		
070-1 Voiding Geometry Explicit	In this test case, all IfcWalls were exportedwith BReps. By CV2.0 convention, we do not export openings for BRep walls.	
070-3 Voiding Geometry SweptSolid	In this test case, all IfcWalls were exportedwith BReps. By CV2.0 convention, we do not export openings for BRep walls.	
120 Spatial Containment		

130 Grouping			
130-1 Grouping General		This concept was optional for this test case, and not included in the Revit 2013 export.	
200 Material			
200-3 Material Layer Set			
300 Type			
300-2 Type Naming		In this test case, the type names needed to have the category appended to the name.	
General	*company statement*		*Wall 02 / 2x3*
_G4 Remarks		Note that GTDS shows two warnings regarding aggregations - we submitted the RAC test with these, as it was agreed they were not applicable to the case.	

WallSlab 03 / 2x3

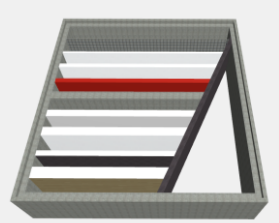
102 IfcWall	*company statement*	*WallSlab 03 / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-9 Geometry By Components	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
070 Voiding		
070-3 Voiding Geometry SweptSolid		
100 Element Aggregation		
100-2 Element Decomposition	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
210 Property Set		
210-1 Property Set IFC Common	Thermal Transmittance isn't natively supported in RevitLT 2014, but can be exported if it is contained in the file.	

105 IfcSlab	*company statement*	*WallSlab 03 / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-9 Geometry By Components	This concept was optional for this test case, and not included in the RevitLT 2014 export.	

100 Element Aggregation *100-2 Element Decomposition*	This concept was optional for this test case, and not included in the RevitLT 2014 export.	
501 IfcProject	*company statement*	*WallSlab 03 / 2x3*
001 GUIDs		
002 History		
005 Project Units 005-1 Project Metric Units		
008 Representation Context 008-1 Representation Main Context 008-2 Representation Sub Context 008-2-2 Representation Sub Context 3D		
010 Naming		
150 Spatial Aggregation 150-2 Spatial Decomposition		
503 IfcBuilding	*company statement*	*WallSlab 03 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement 020-1 Placement Absolute	RevitLT 2014 always exports the IfcBuilding local placement relative to the IfcSite.	
150 Spatial Aggregation 150-1 Spatial Composition 150-2 Spatial Decomposition		

504 IfcBuildingStorey	*company statement*	*WallSlab 03 / 2x3*
001 GUIDs	■	
002 History	■	
010 Naming	■	
020 Placement		
020-2 Placement Relative	■	
150 Spatial Aggregation		
150-1 Spatial Composition	■	
150-2 Spatial Decomposition	■	
505 IfcSpace	*company statement*	*WallSlab 03 / 2x3*
010 Naming	■	
030 Geometry		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	■	
General	*company statement*	*WallSlab 03 / 2x3*
_G4 Remarks	■	

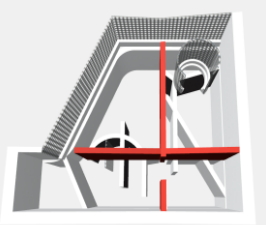
WallStandardCase 01A / 2x3



101 IfcWallStandardCase	*company statement*	*WallStandardCase 01A / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-2 Geometry Axis		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid	Revit disallows creating material layers for host objects that are less than 1/16". In this test case, one of the walls had a 1mm thick layer, which we modelled as a 1/16" (1.6mm) layer instead.	
030-6-2 Geometry Clipping	Revit exports some geometries that are conceptually clipped extrusions as Breps.	
040 Presentation		
040-1 Geometric Presentation		
040-2 Material Presentation		
050 CAD Layer		
110 Connectivity		
110-2 Connectivity Path		
120 Spatial Containment		

200 Material			
200-4 Material Layer Usage		Revit disallows creating material layers for host objects that are less than 1/16". In this test case, one of the walls had a 1mm thick layer, which we modelled as a 1/16" (1.6mm) layer instead.	
210 Property Set			
210-3 Property Set User Defined		Revit does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.	
300 Type			
300-3 Type Material			
300-5 Type Property Set		In this test case, we do not export internal Revit property sets, and there are no common property set at the type level for walls.	
General		*company statement*	*WallStandardCase 01A / 2x3*
_G4 Remarks			

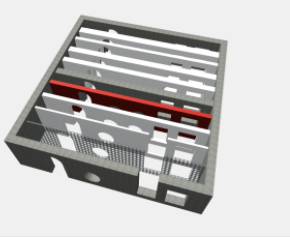
WallStandardCase 02A / 2x3



101 IfcWallStandardCase	*company statement*	*WallStandardCase 02A / 2x3*
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-2 Geometry Axis		
030-6 Geometry Body		
030-6-1 Geometry SweptSolid		
030-6-2 Geometry Clipping		
050 CAD Layer		
110 Connectivity		
110-2 Connectivity Path		
120 Spatial Containment		
200 Material		
200-4 Material Layer Usage	In this test case, there are instructions to create a material with two different colors. In Revit 2014, this becomes two materials with two unique names. The restriction comes from having the second name.	
210 Property Set		
210-1 Property Set IFC Common		

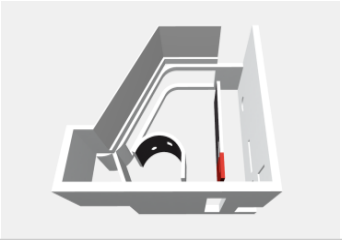
General	*company statement*	*WallStandardCase 02A / 2x3*
_G4 Remarks		

WallStandardCase 03A / 2x3



101 IfcWallStandardCase		*company statement*	*WallStandardCase 03A / 2x3*
010 Naming	■		
020 Placement			
020-2 Placement Relative	■		
030 Geometry			
030-2 Geometry Axis	■		
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	■	Revit 2014 exports openings as extrusions or Breps.	
120 Spatial Containment	■		
General		*company statement*	*WallStandardCase 03A / 2x3*
_G4 Remarks	■		

WallStandardCase 04A / 2x3



101 IfcWallStandardCase		*company statement*	*WallStandardCase 04A / 2x3*
010 Naming	■		
030 Geometry			
030-2 Geometry Axis	■		
030-6 Geometry Body			
030-6-1 Geometry SweptSolid	■		
070 Voiding			
070-1 Voiding Geometry SweptSolid	■	In this test case, there are openings that span multiple walls. Revit 2014 creates a separate IfcOpeningElement for each wall/opening pair. The test expects only one IfcOpeningElement.	
070-2 Voiding Geometry Explicit	■		
070-3 Voiding Geometry Mapped	■	Revit 2014 exports openings as extrusions or Breps.	
120 Spatial Containment	■		
General		*company statement*	*WallStandardCase 04A / 2x3*
_G4 Remarks	■		

Window 01 / 2x3

301 IfcWindow	*company statement*	*Window 01 / 2x3*
001 GUIDs		
002 History		
010 Naming		
020 Placement		
020-2 Placement Relative		
030 Geometry		
030-5 Geometry Profile	RevitLT 2014 exports Footprint information for family instances. It does not export 2D elevation profiles.	
030-6 Geometry Body		
030-6-5 Geometry Explicit	In this test case, there is a stepped window which is incorrectly exported as an extrusion, instead of two extrusions. This is a bug in our native code that can't be fixed in RevitLT 2014.	
030-6-9 Geometry Mapped		
040 Presentation		
040-1 Geometric Presentation		
050 CAD Layer		
080 Filling		
080-2 Is Filling		
120 Spatial Containment		

200 Material		
200-1 Single Material	RevitLT 2014 exports windows with IfcMaterialList, not IfcMaterial.	
200-5 Material List		
210 Property Set		
210-1 Property Set IFC Common		
210-2 Property Set IFC any		
210-3 Property Set User Defined	RevitLT 2014 does not have the capability to create user-defined parameter groups, corresponding to IFC property sets. The Open Source IFC exporter allows for the programmatic creation of user-defined property sets. A user can add these sets to the base exporter, or they can create their own exporter based on the open source version.	
300 Type		
300-1 Type Geometry	Although RevitLT 2014 exports IfcWindows with IfcMappedRepresentation, the mapped representation is not attached to the IfcWindowStyle.	
300-2 Type Naming		
300-3 Type Material		
300-5 Type Property Set	The RevitLT 2014 exporter does not currently associate type property sets with IfcWindowStyle.	
300-6 Type Predefined Properties		
300-6-1 Type Predefined Properties Window		
General	*company statement*	*Window 01 / 2x3*
_G4 Remarks	In this test case, there is a stepped window which is incorrectly exported as an extrusion, instead of two extrusions. This is a bug in our native code that can't be fixed in RevitLT 2014.	