

Autodesk® Building Design Suite 2015 Premium and Ultimate Editions

What's New in Autodesk® Revit® 2015



New features and enhancements

Autodesk® Revit® 2015, Autodesk® Revit® Architecture 2015, Autodesk® Revit® Structure 2015, & Autodesk® Revit® MEP 2015

Platform & architectural enhancements

- Sketchy lines
- Anti-aliasing improvements
- Ray trace usability improvements
- Enhanced schedules/material takeoffs
- Views on sheets
- Duplicate views
- View references
- Assembly code settings
- IFC imports
- Keynoting settings
- Shared parameters in view titles
- Enhanced hidden lines
- Revision improvements

- Images in schedules
- Building element analysis
- IFC linking
- Manage links dialog
- Pinned element enhancements
- Family parameter order adjustments
- Tooltips for family parameters
- Tag improvements
- Assembly code setting

Structural engineering enhancements

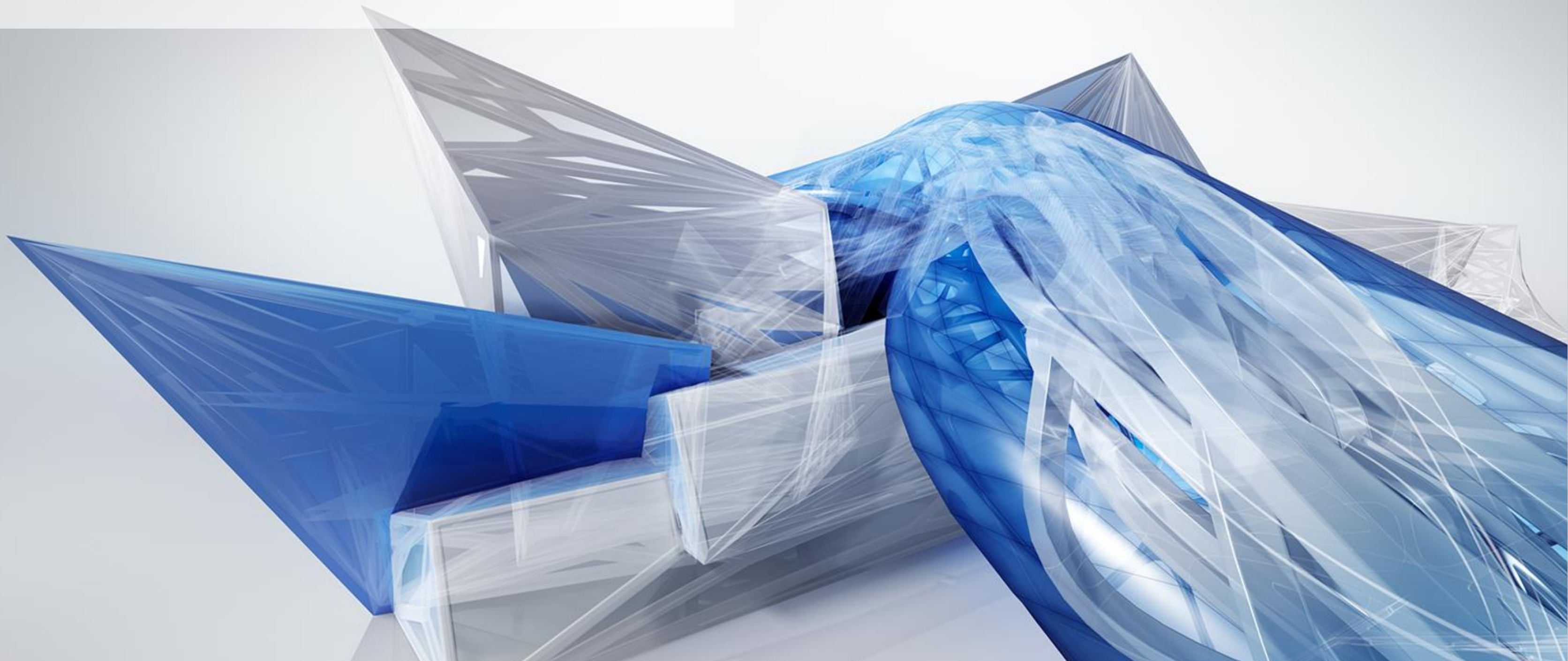
- Enhanced analytical model
- Reinforcements for parts

- Reinforcement numbering
- Single fabric sheet placement
- Presentation rebar sets
- Enhanced multi-rebar annotation
- Greater accuracy of as-built model definition
- Structural section properties

Mechanical, electrical, and plumbing (MEP) engineering enhancements

- Calculation methods for pressure drop
- Tapped duct and pipe tags
- Electrical API enhancements
- Japan Autodesk® Revit® MEP software electrical content
- US AWWA content

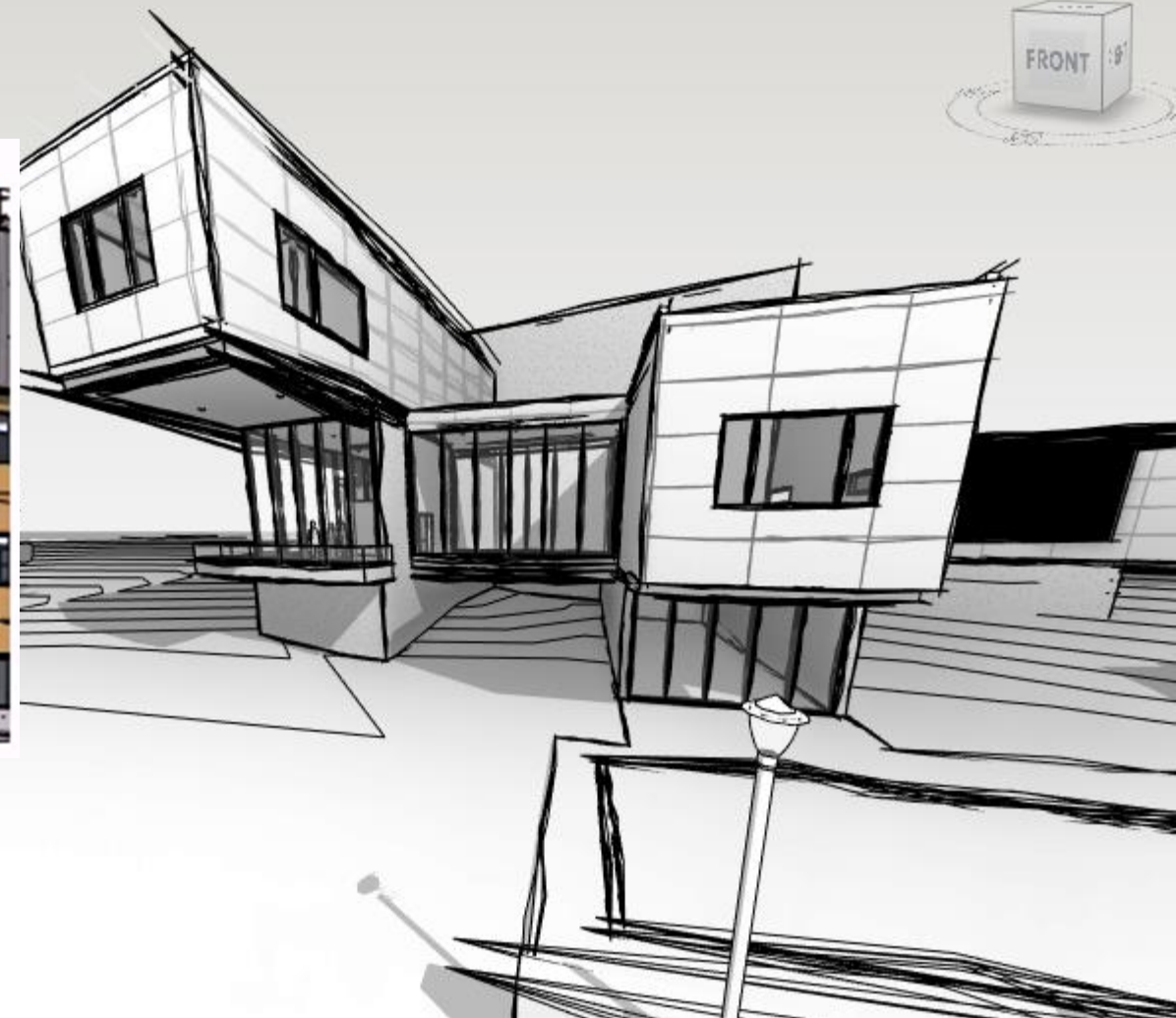
Platform & for architects



Architectural enhancements

Autodesk® Revit® 2015

- Visualization tools
 - Sketchy lines
 - Anti-aliasing improvements
 - Ray trace usability improvements



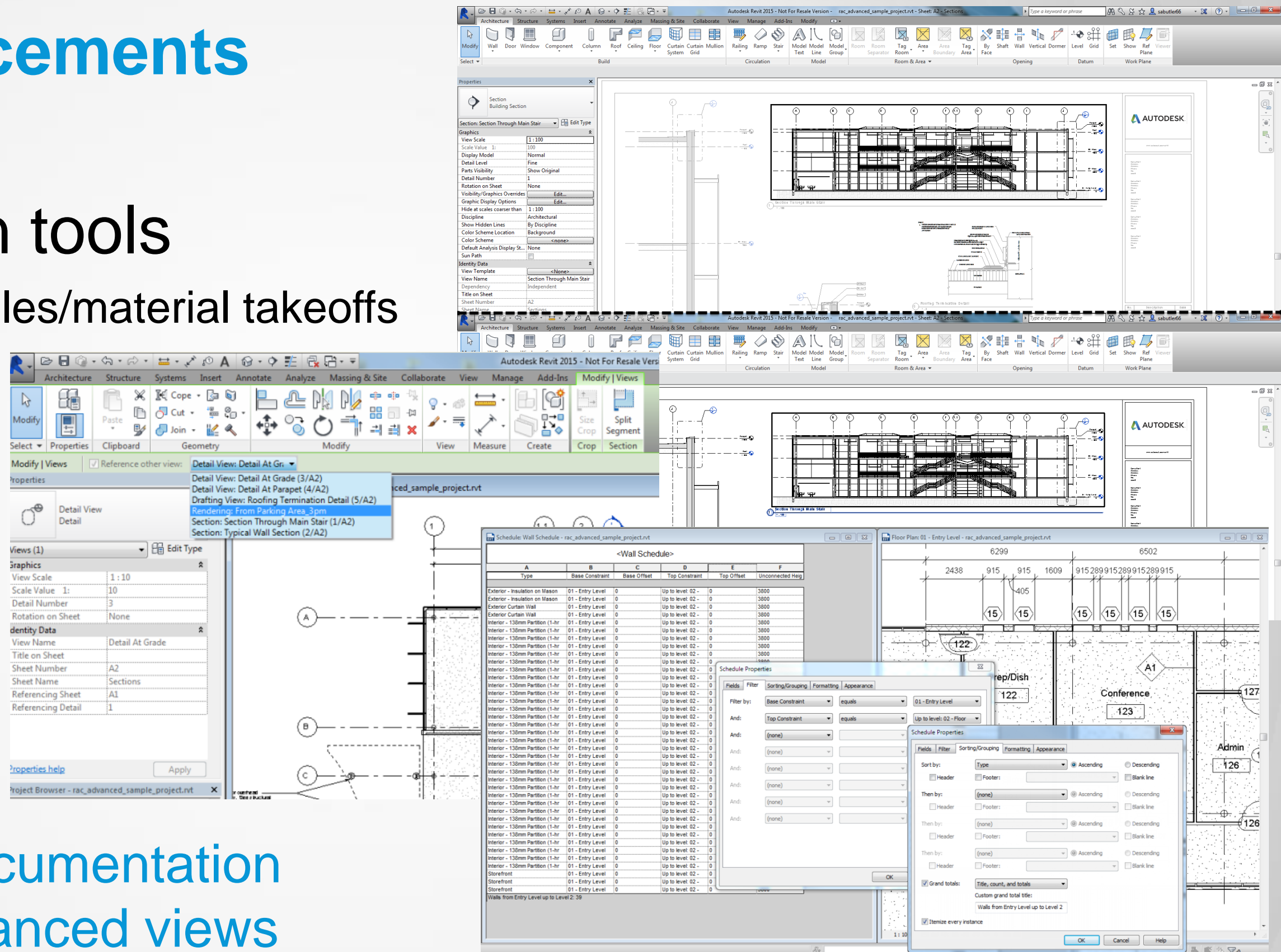
Create hand-drawn and near-photorealistic content from your project

Platform enhancements

Autodesk® Revit® 2015

- Documentation tools
 - Enhanced schedules/material takeoffs
 - Views on sheets
 - Duplicate views
 - View references

Improve schedule documentation with images and enhanced views

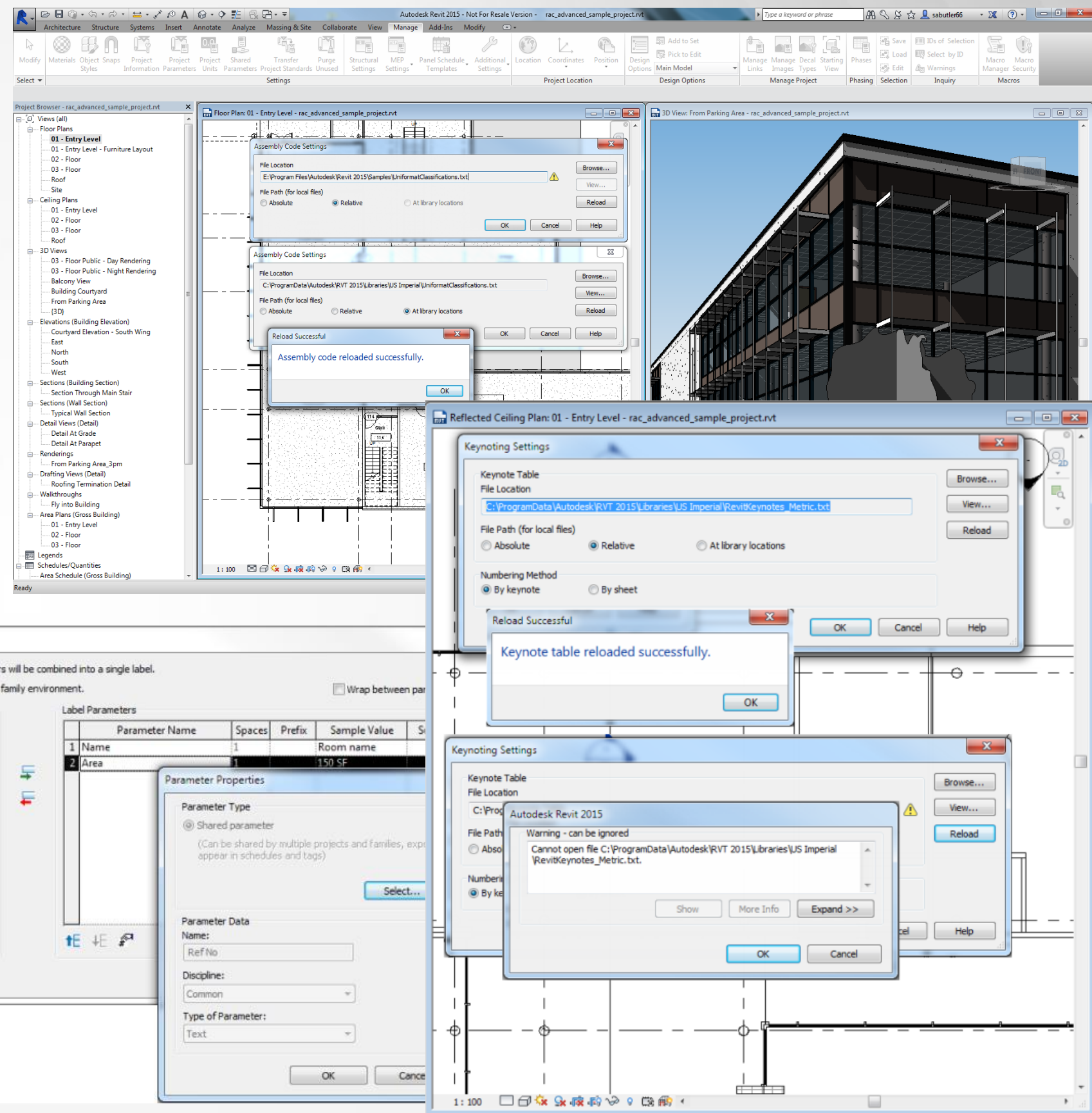


Platform enhancements

Autodesk® Revit® 2015

- Documentation tools
 - Assembly code settings
 - IFC imports
 - Keynoting settings
 - Shared parameters in view titles

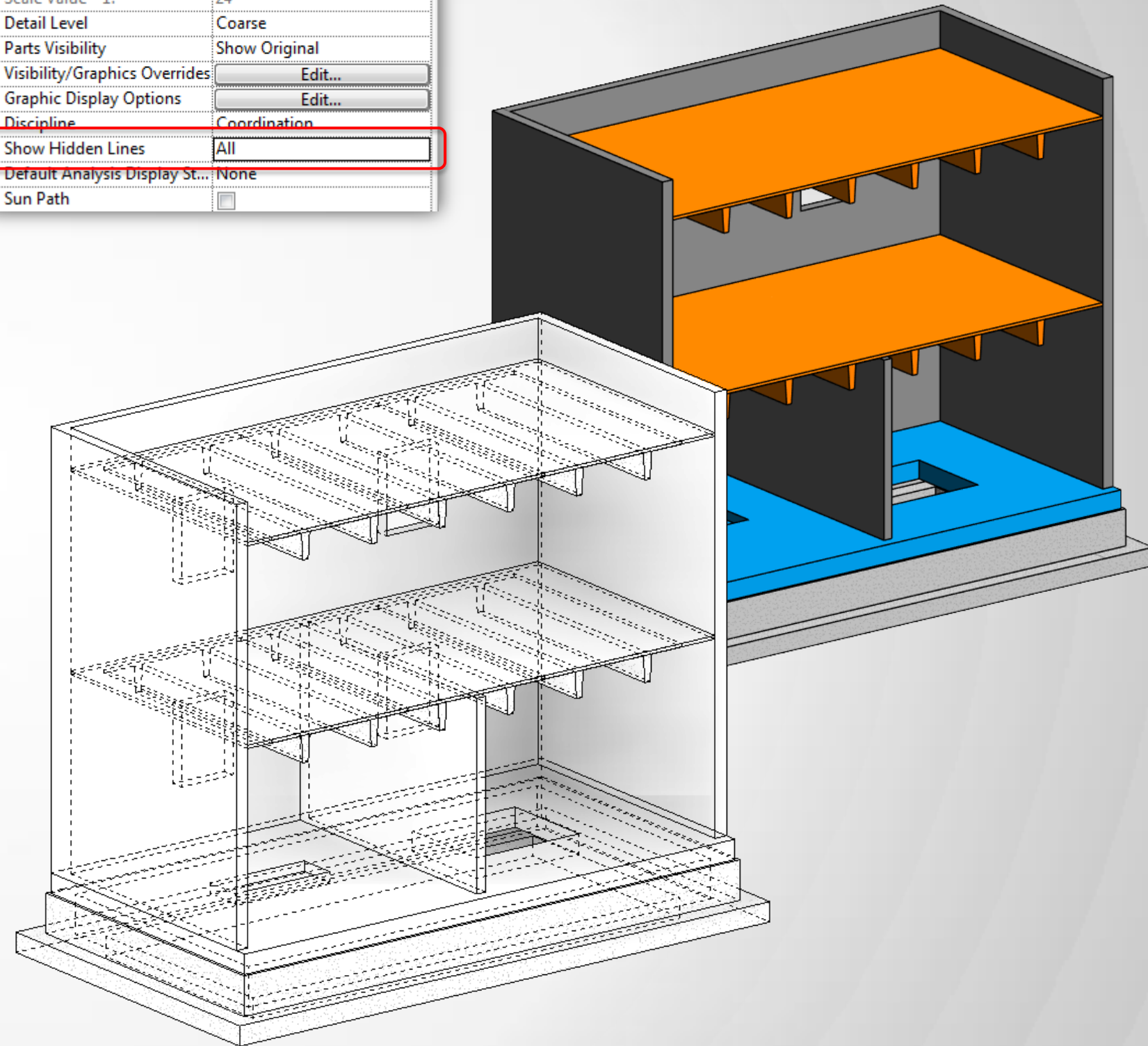
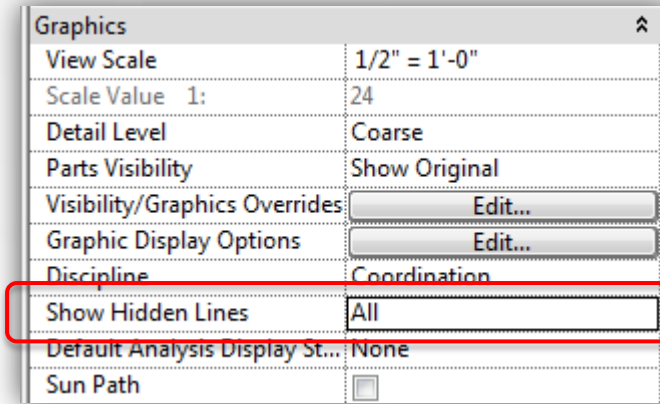
Improve visual fidelity and performance



Platform enhancements

Autodesk® Revit® 2015

- Enhanced hidden lines
 - New parameter to control the visibility of hidden lines
 - Display all hidden lines automatically

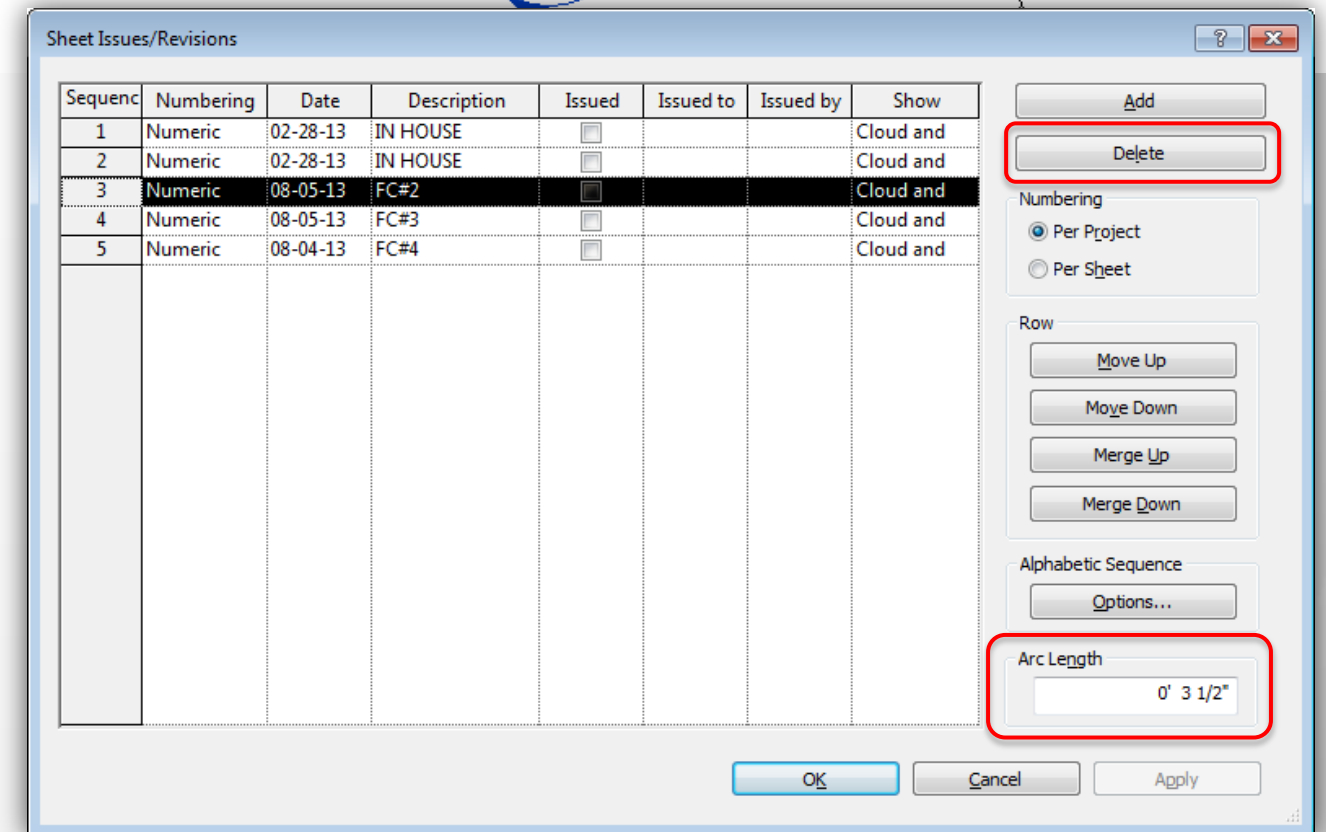
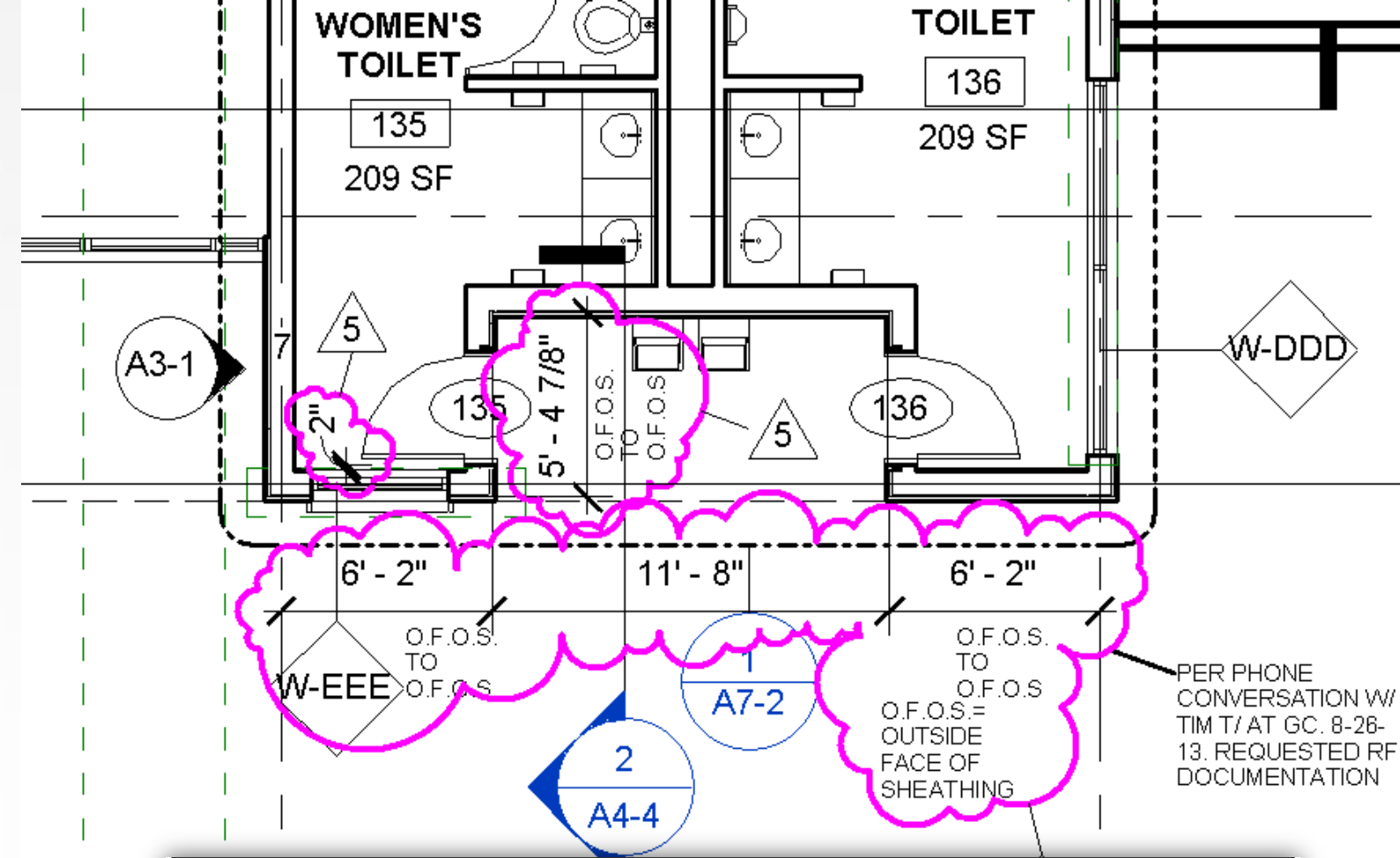
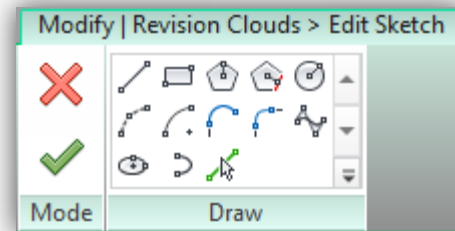


Create more accurate and readable documentation

Platform enhancements

Autodesk® Revit® 2015

- Revision improvements
 - Deletion of revisions
 - More tools to sketch the revision cloud shape
 - Minimum arc length for revision clouds






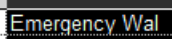
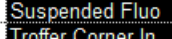
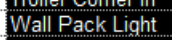
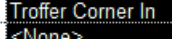


Gain greater control of changes in your project documentation

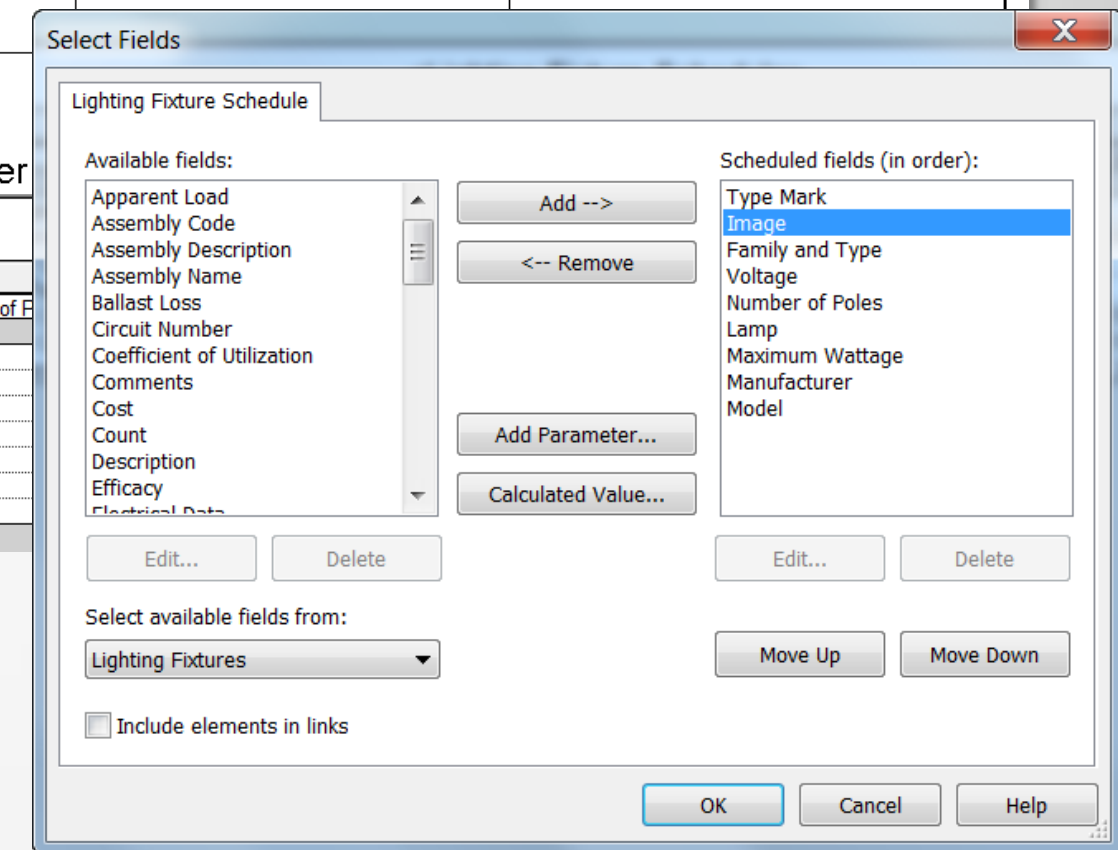
Platform enhancements

Autodesk® Revit® 2015

- Images in schedules
 - Image instance property
 - Type image type property

Type Mark	Type Image	Manufacturer	Model	Comments
A		Lightolier	40740SNC	
B		Lightolier	1101FDICMX1	
C		Lightolier		

A	B	C	D	E
Type Mark	Image	Family and Type	Voltage	Number of Poles
		Emergency Wall Light: 120V	120 V	1
		Suspended Fluorescent Strip - Non-Hosted: Exterior Strip Light 1	120 V	1
		Troffer Corner Insert: 2x2 3 Lamp Emergency	120 V	1
		Wall Pack Light - Exterior: 120V	120 V	1
A1		Troffer Corner Insert: 2x2 3Lamp	120 V	1
A2	<None>	Troffer Corner Insert: 2x2 3Lamp High Profile	120 V	1
B		Suspended Fluorescent Strip - Non-Hosted: Strip Light 1x4 - 120	120 V	1
Grand total: 239				



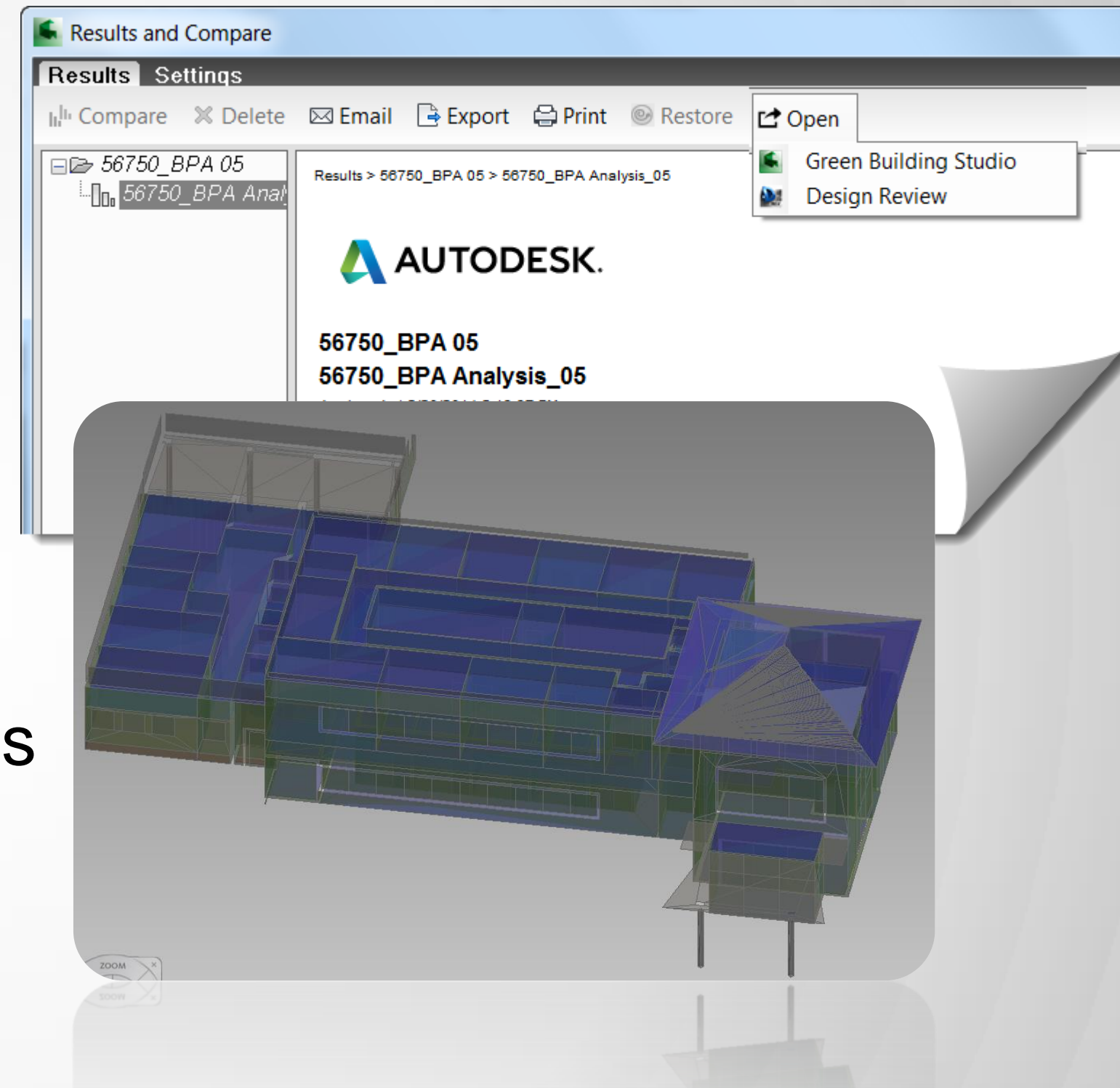
Improve documentation using images to graphically represent Revit elements

Platform enhancements

Autodesk® Revit® 2015

- Building element energy analysis*
 - Improved algorithm
 - Greater analytical surface precision
 - Better handling of Revit elements

Gain greater precision, handling, and recognition of your energy analytical model

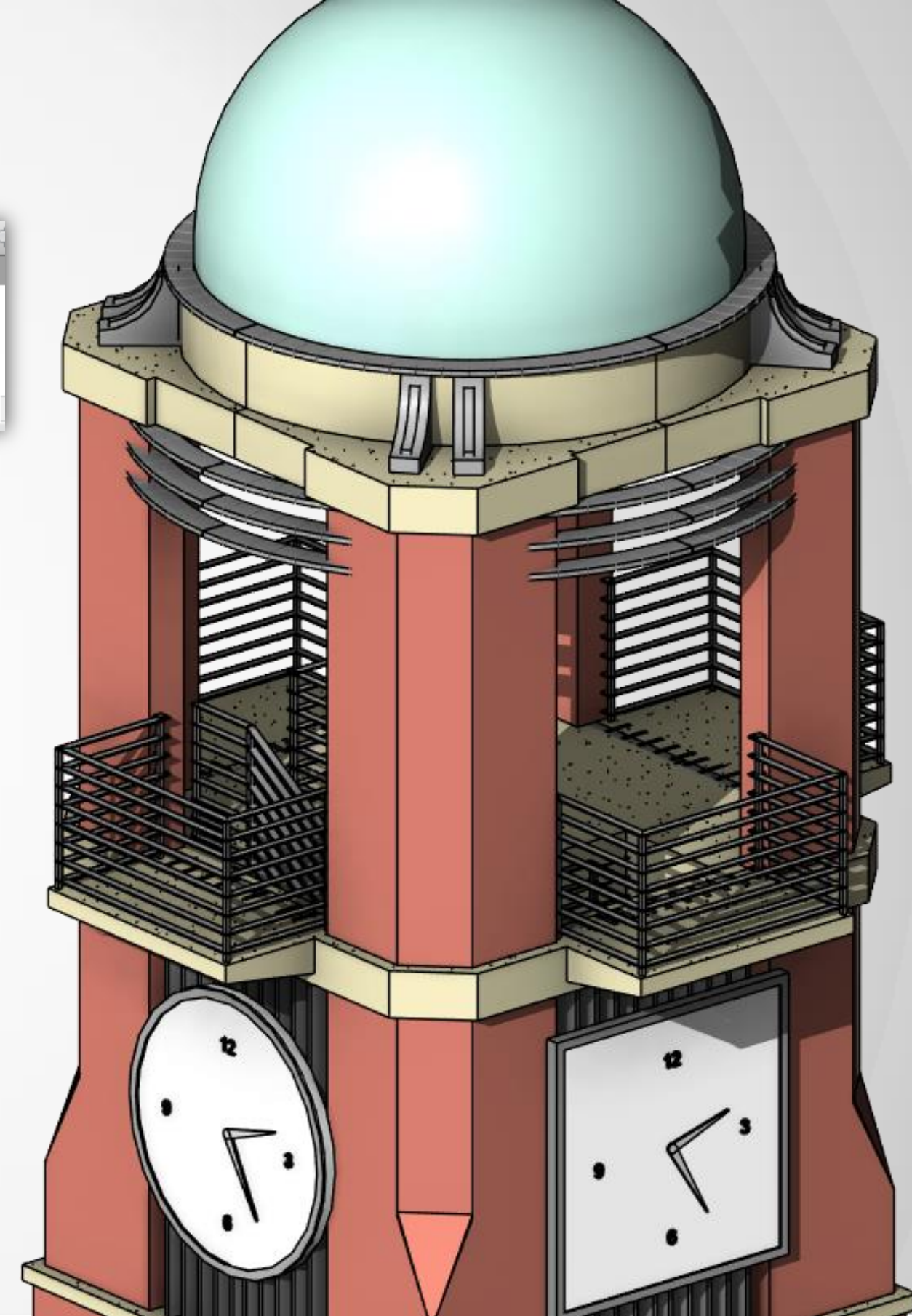
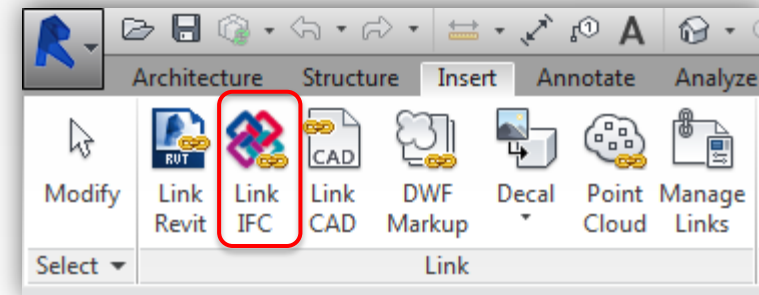


*Web-based energy analysis is available to Autodesk Subscription customers of editions of suites which contain Autodesk Revit software during the term of their Subscription.

Platform enhancements

Autodesk® Revit® 2015

- IFC linking
 - New Link IFC tool
 - IFC tab in Manage Links dialog box
 - Ability to reference IFC geometry without overhead of conversion to Revit
 - Improved geometry handling and performance

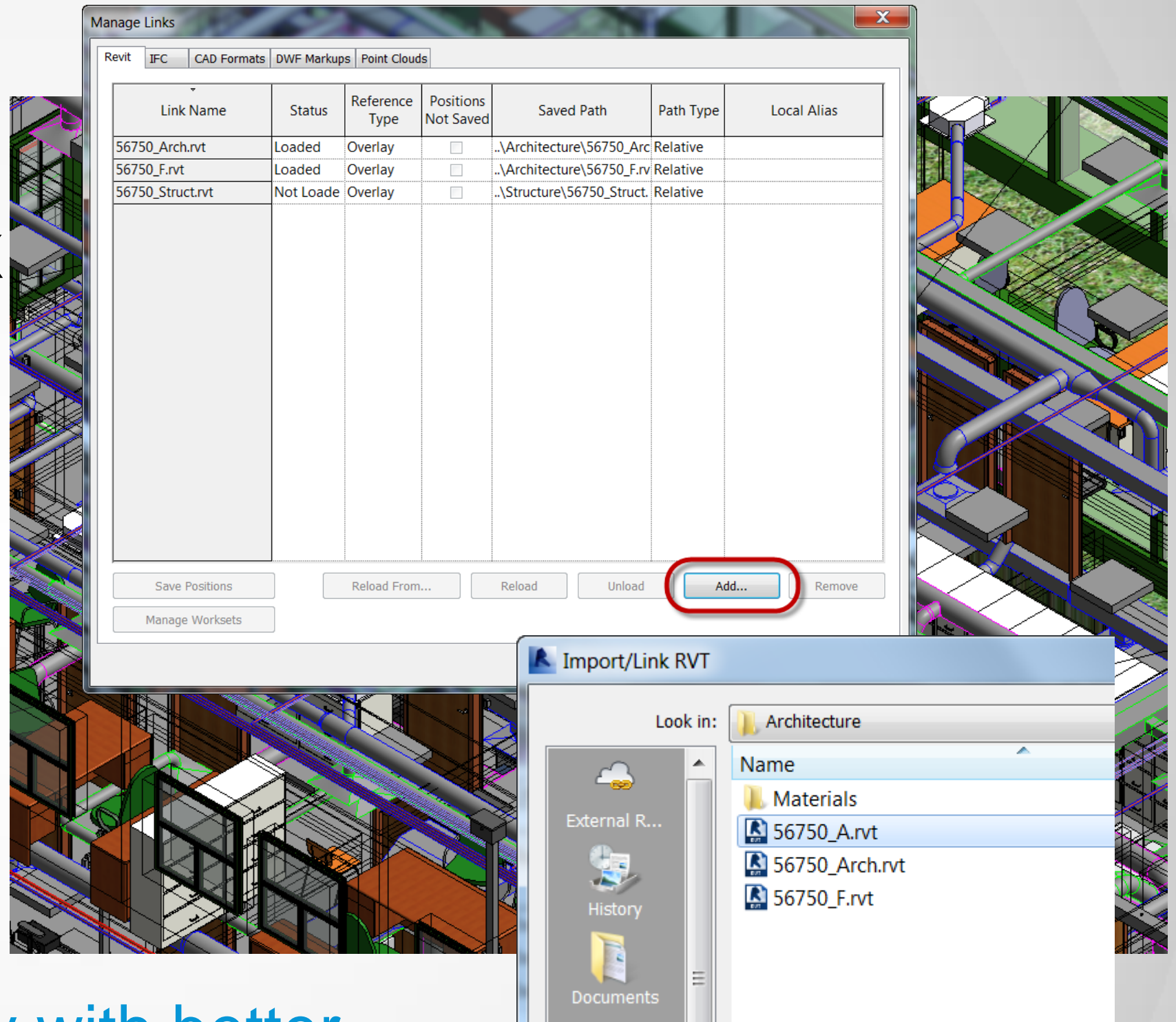


Collaborate more effectively with enhanced interoperability between technologies

Platform enhancements

Autodesk® Revit® 2015

- Manage Links dialog box
 - Add from Manage Links
 - Revit models
 - CAD files
 - Point clouds



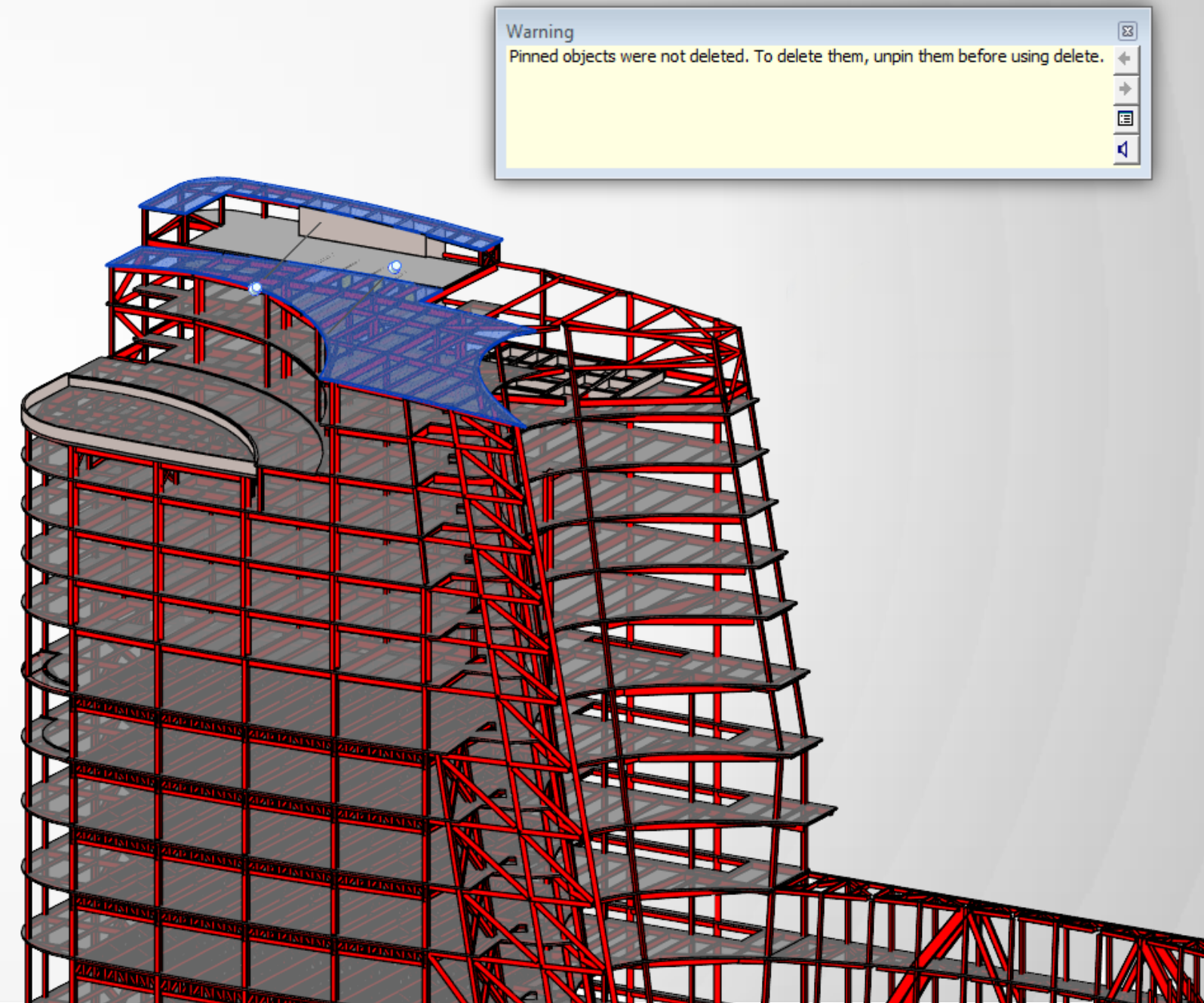
Improve productivity and efficiency with better control to manage links

Platform enhancements

Autodesk® Revit® 2015

- Pinned elements enhancements
 - Prevent pinned elements from being deleted
 - Delete elements by unpinning them first
 - Delete objects in a non-graphical context

Better control the behavior of pinned elements

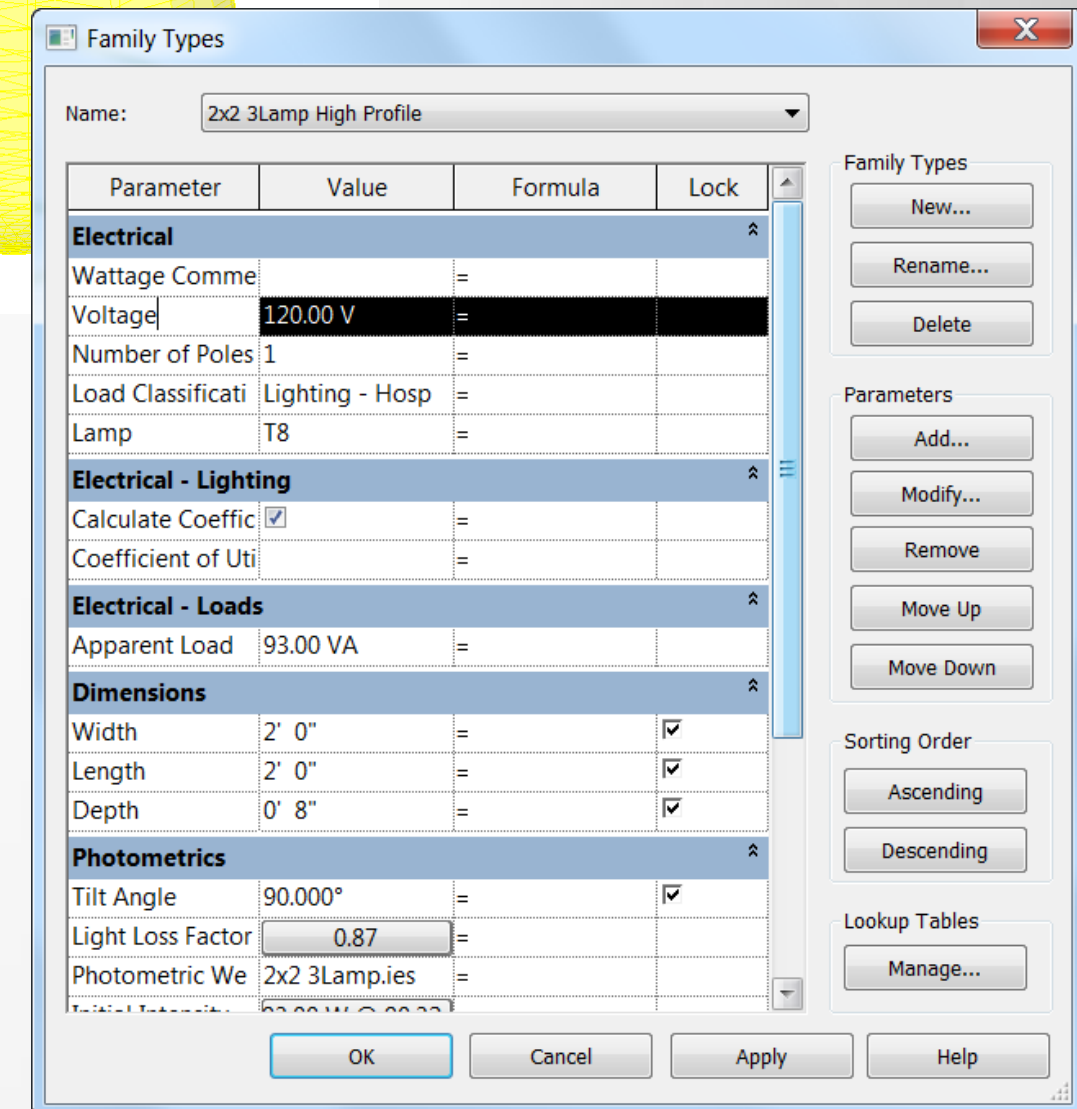
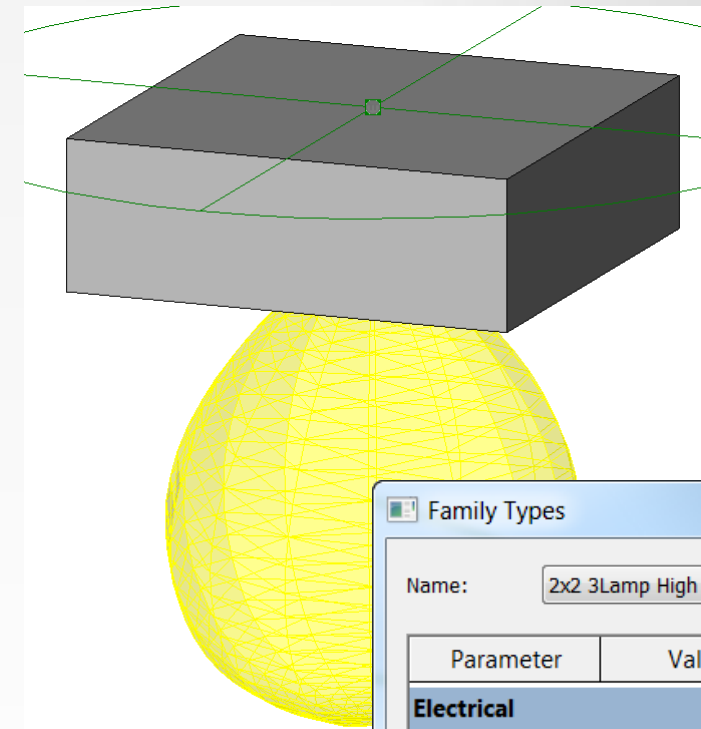


Platform enhancements

Autodesk® Revit® 2015

- Family parameter order adjustment
 - Move parameters within parameter group
 - New parameters added to end of group
 - Customer request

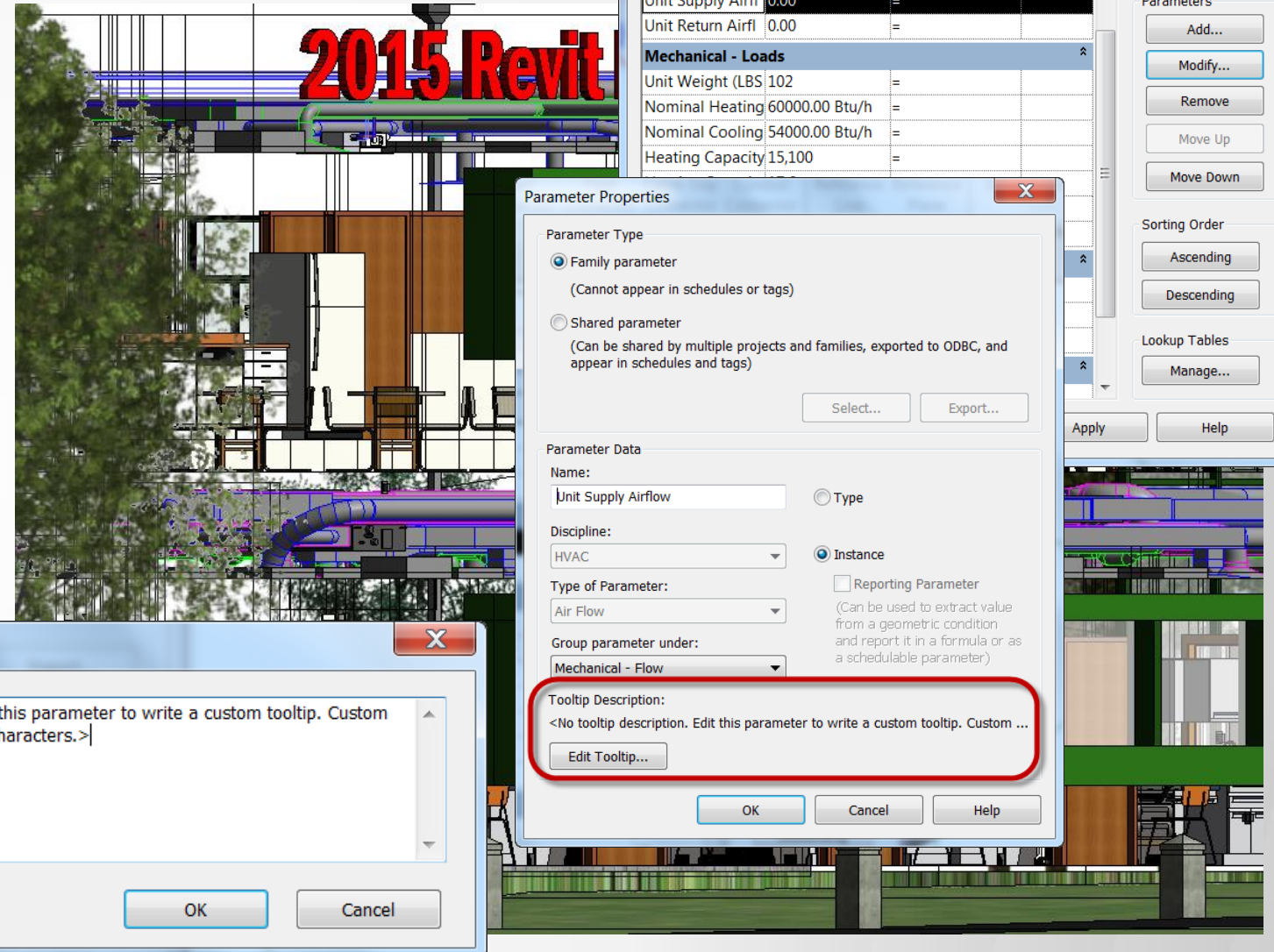
Improve control of family parameter orders to help meet company standards for better efficiency



Platform enhancements

Autodesk® Revit® 2015

- Tooltips for family parameters
 - Customize tooltips
 - Write intended use, key info, etc.
 - 250 characters



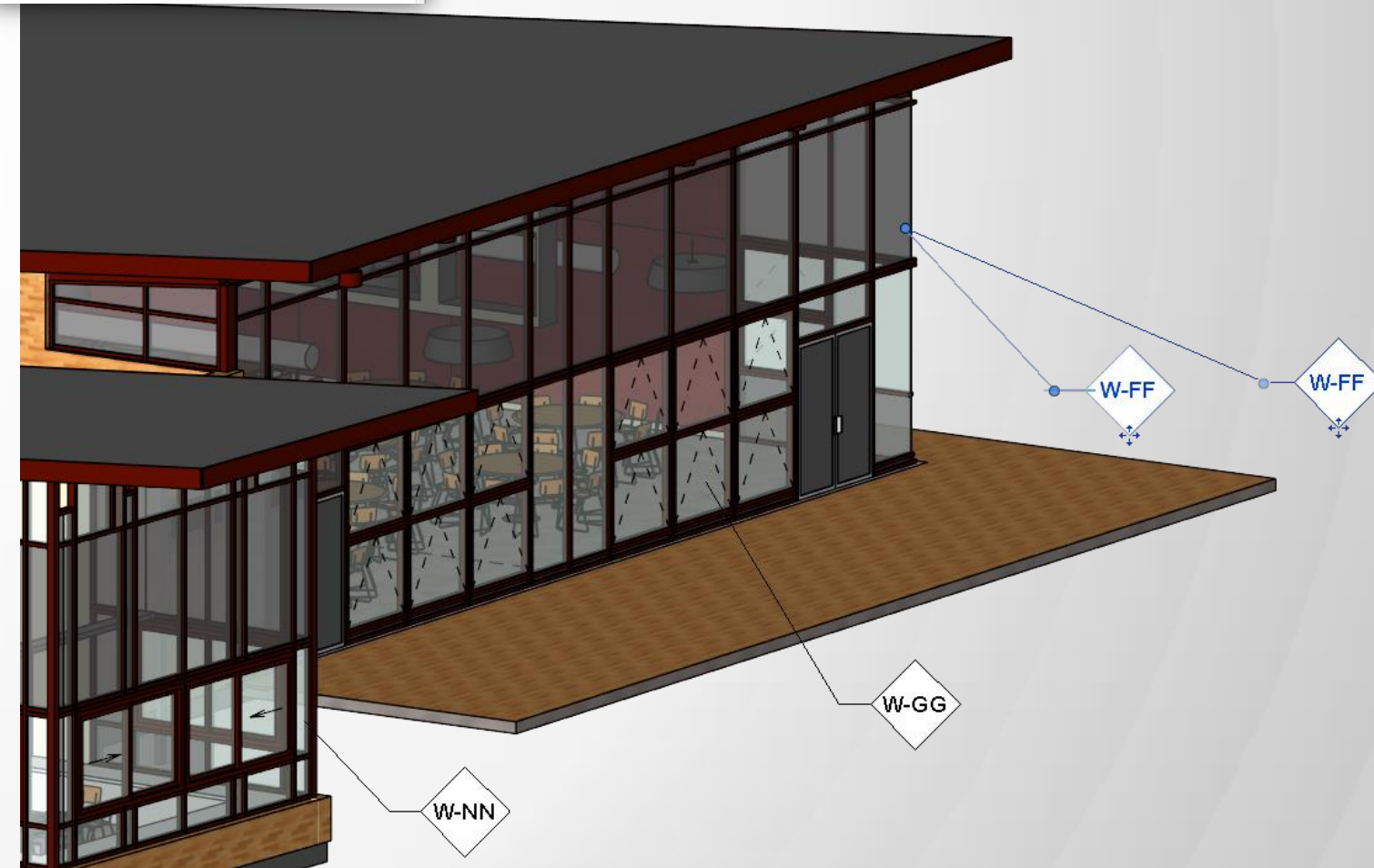
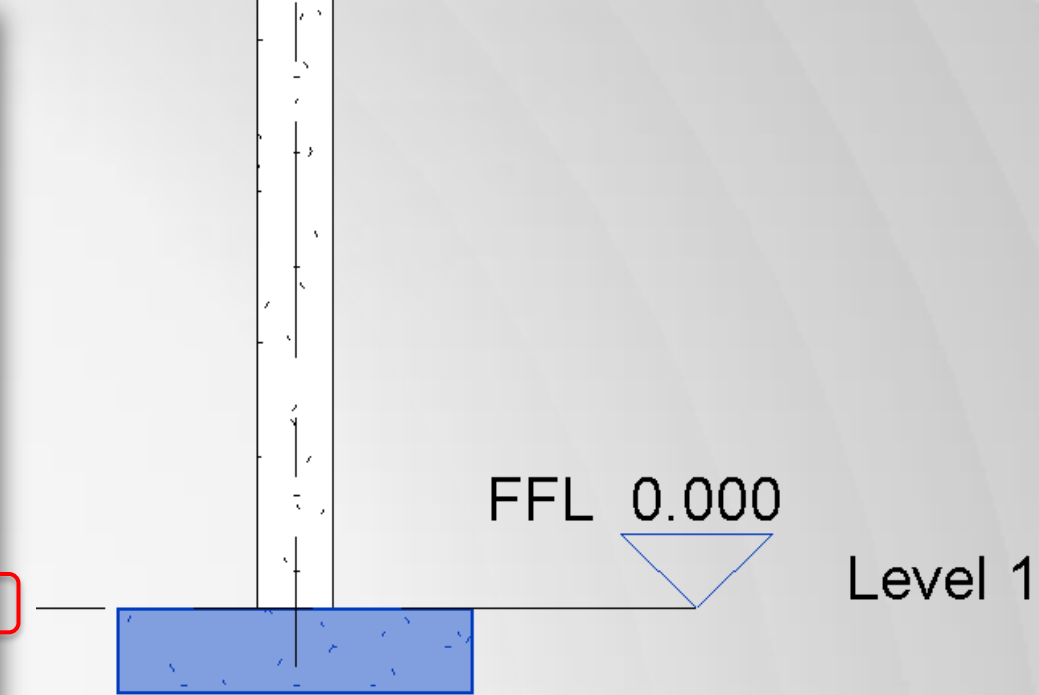
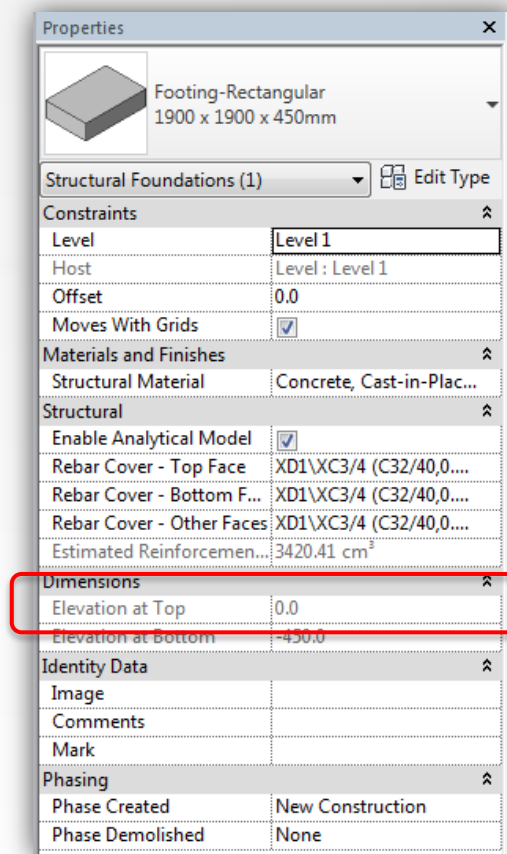
Improve learnability by customizing
tooltips for Revit family parameters

Platform enhancements

Autodesk® Revit® 2015

- Tag improvements
 - Consistency with text leaders
 - New parameter 'Elevation at Top'

Greater consistency and accuracy of project documentation



For structural engineers

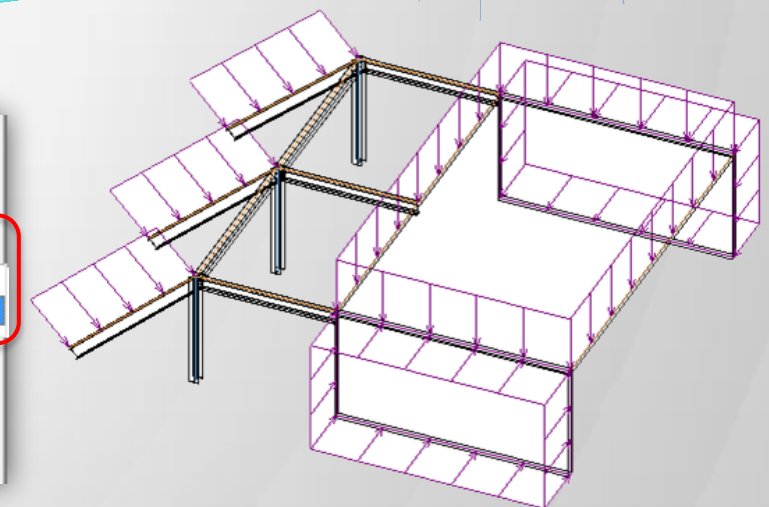
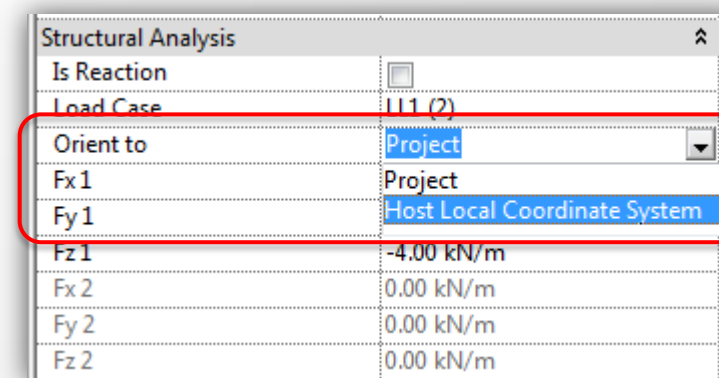
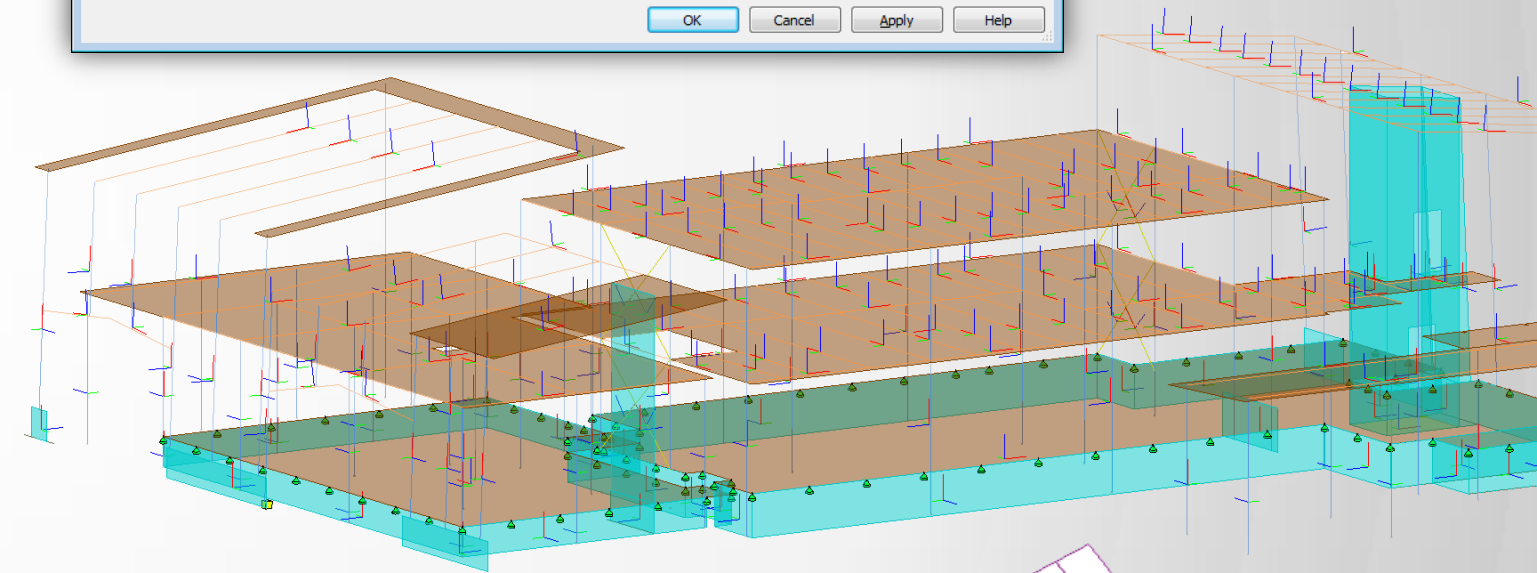
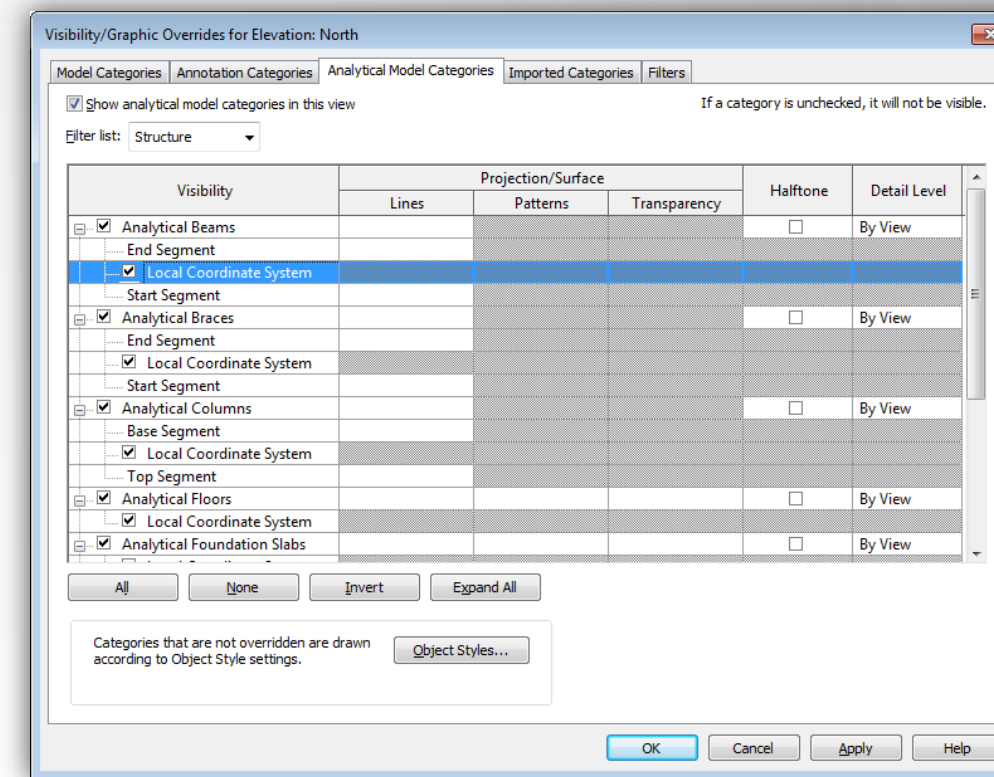


For structural engineers

Autodesk® Revit® 2015

- Enhanced analytical model
 - Display local coordinate system (LCS) widgets
 - Loads and boundary conditions orientation according to LCS
 - Improved analytical links

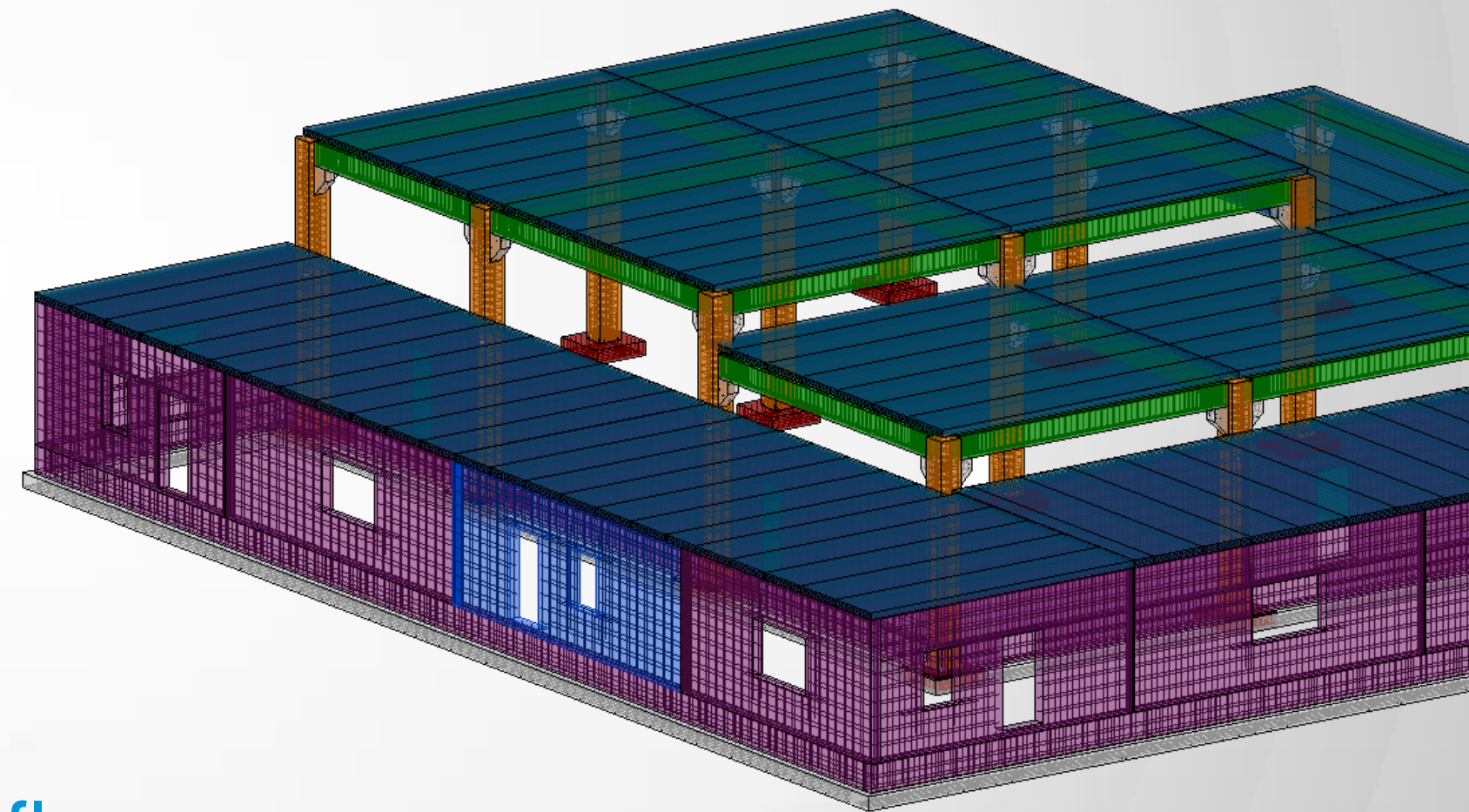
More flexibility and usability for analytical model visibility and adjustments



For structural engineers

Autodesk® Revit® 2015

- Reinforcement for parts
 - Surface part elements can host rebar
 - Rebars follows parts' shapes and changes
 - New parameters 'Can-host-rebar' for parts and 'Host category' for reinforcement



Enhanced design-to-fabrication workflow
for precast

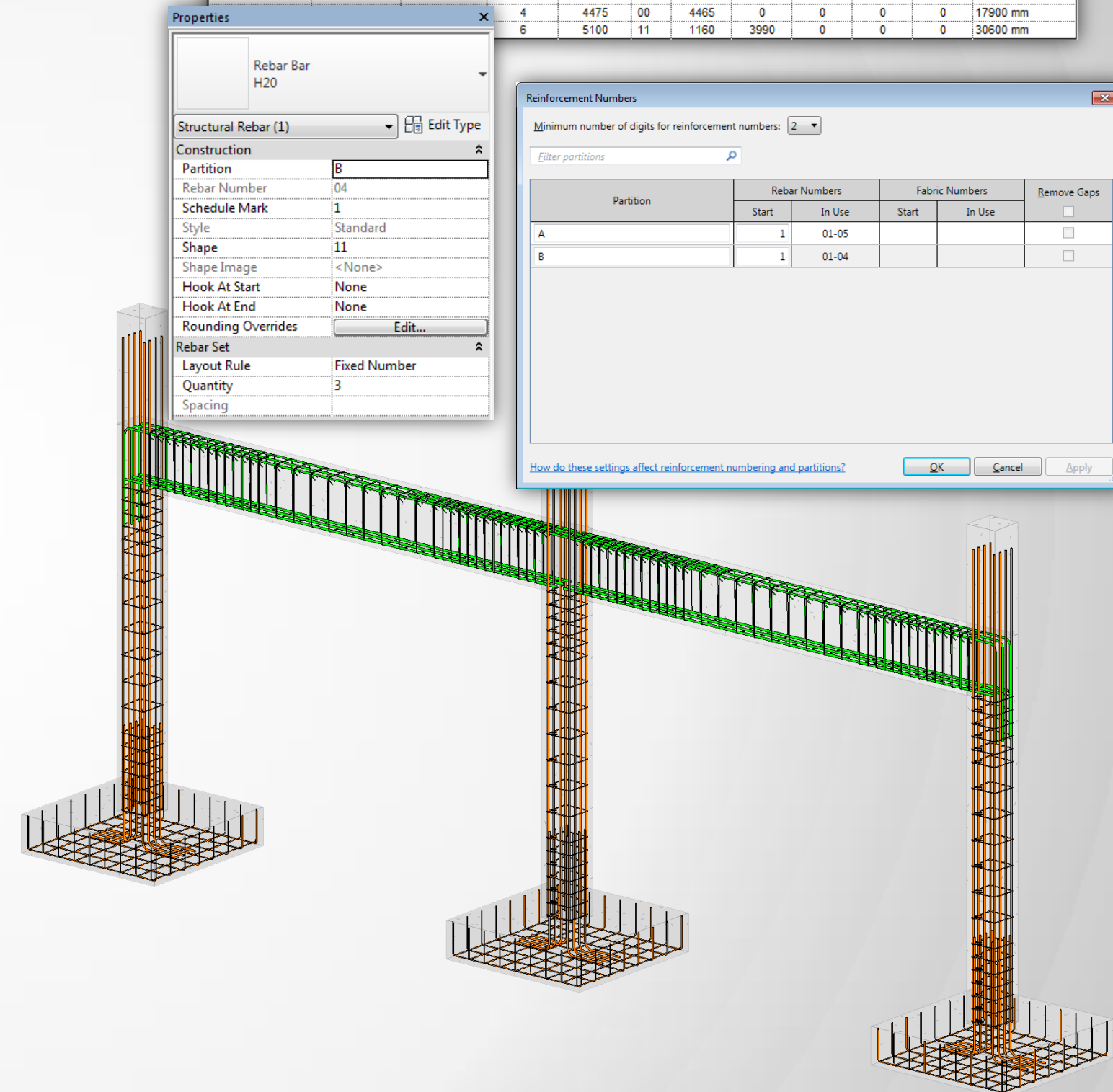
For structural engineers

Autodesk® Revit® 2015

- Reinforcement numbering
 - Numbering automation & customization
 - Annotating for shop drawings
 - Rebar scheduling
 - Pouring sequencing

More accurate schedules and shop drawings

A	B	C	D	E	F	G	H	I	J	K	L
Partition	Rebar Number	Type and size	Quantity	Length of ea	Shape	A* mm	B* mm	C* mm	D* mm	E* mm	Total Bar Length
A	01	H8	57	1500	51	340	340	115	115	0	88350 mm
A	02	H20	24	5500	00	5490	0	0	0	0	132000 mm
A	03	H10	24	2575	21	390	1840	390	0	0	61800 mm
A	04	H10	27	2550	21	380	1840	380	0	0	68850 mm
A	05	H20	24	1850	11	510	1390	0	0	0	44400 mm
B	01	H8	74	2000	51	640	290	115	115	0	151700 mm
B	02	H25	6	6150	00	6150	0	0	0	0	36900 mm
			4	4475	00	4465	0	0	0	0	17900 mm
			6	5100	11	1160	3990	0	0	0	30600 mm

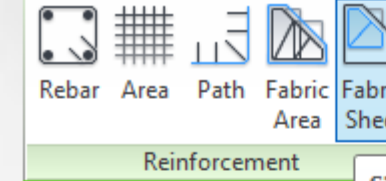


For structural engineers

Autodesk® Revit® 2015

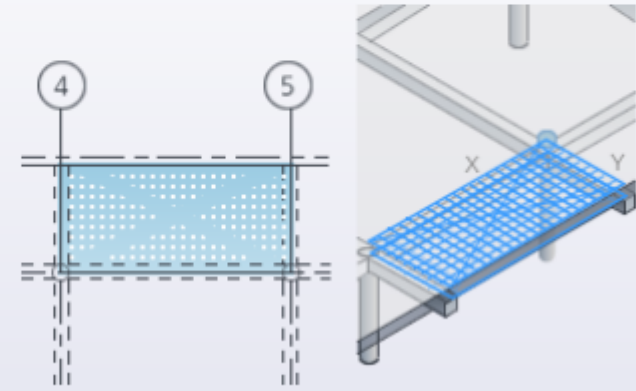
- Single fabric sheet placement
 - New tool in the Reinforcement panel
 - Manual positioning
 - Ability to extend outside of the host cover and edges

Greater flexibility in modeling and precise placement of reinforcement

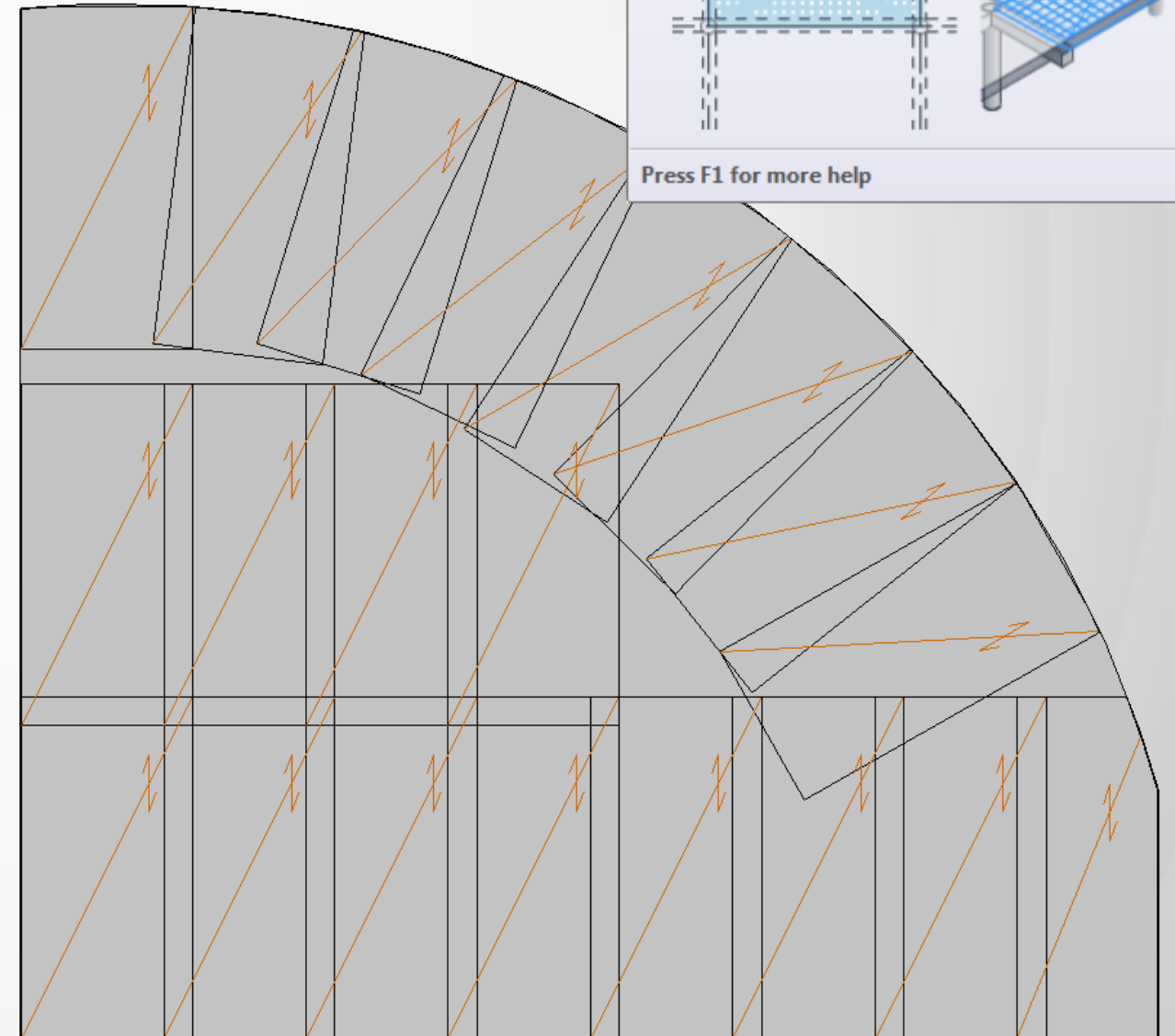


Single Fabric Sheet Placement
Places a single fabric sheet on floors, walls, and foundation slabs.

When you place subsequent fabric sheets on the same host, you can use object snaps to lap-splice the sheets. Fabric sheets are placed parallel to the span direction of slabs and placed horizontally for walls.



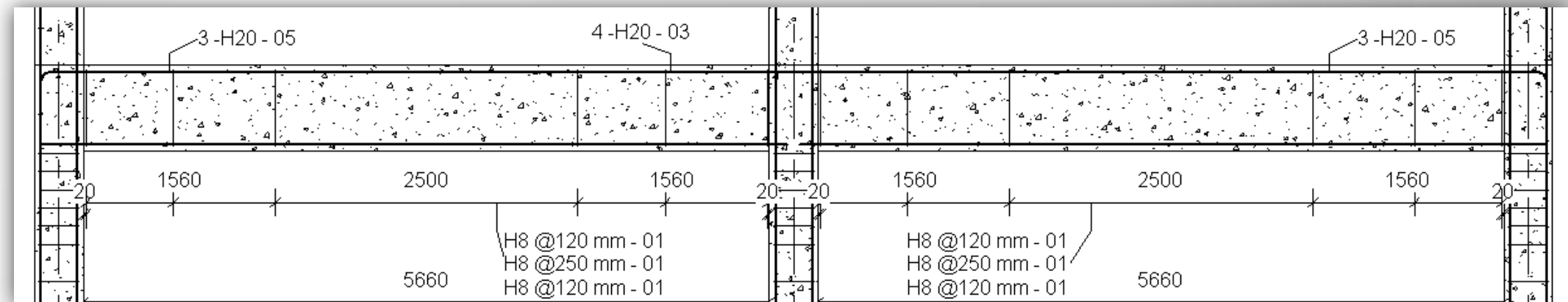
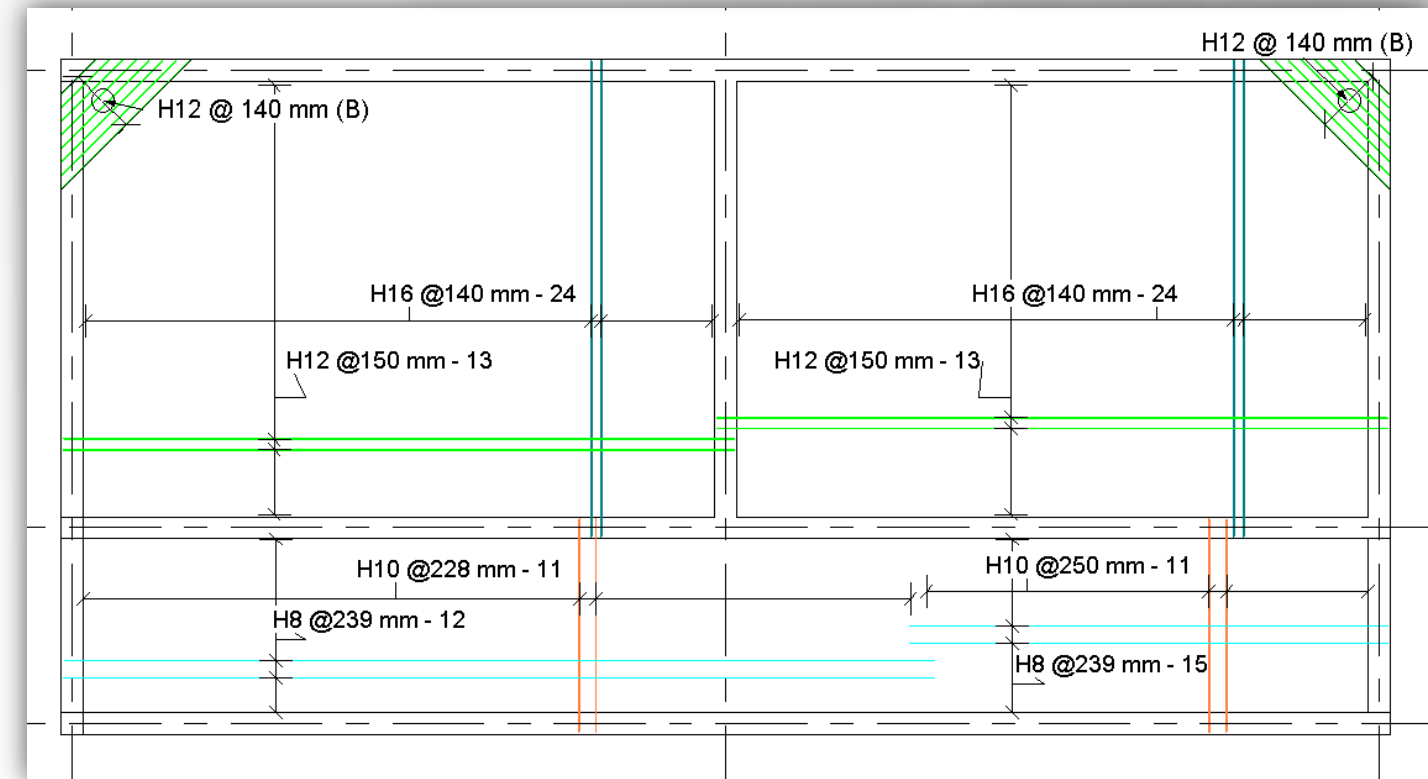
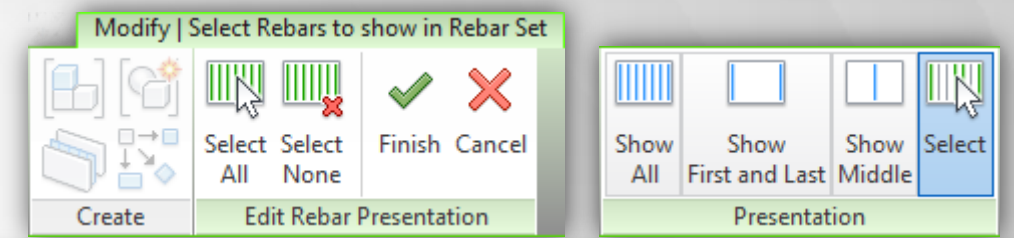
Press F1 for more help



For structural engineers

Autodesk® Revit® 2015

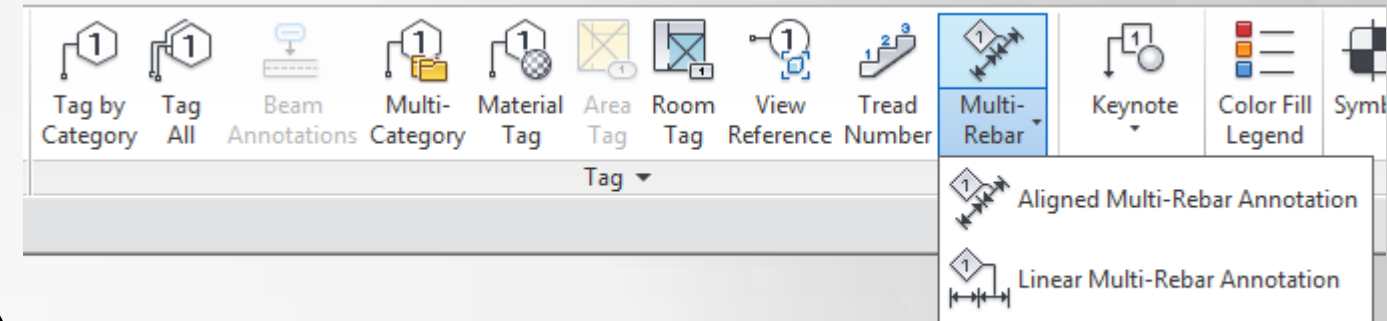
- Presentation for rebar sets
 - Showing a representative subset
 - Different bar presentation for a rebar set in each separate view



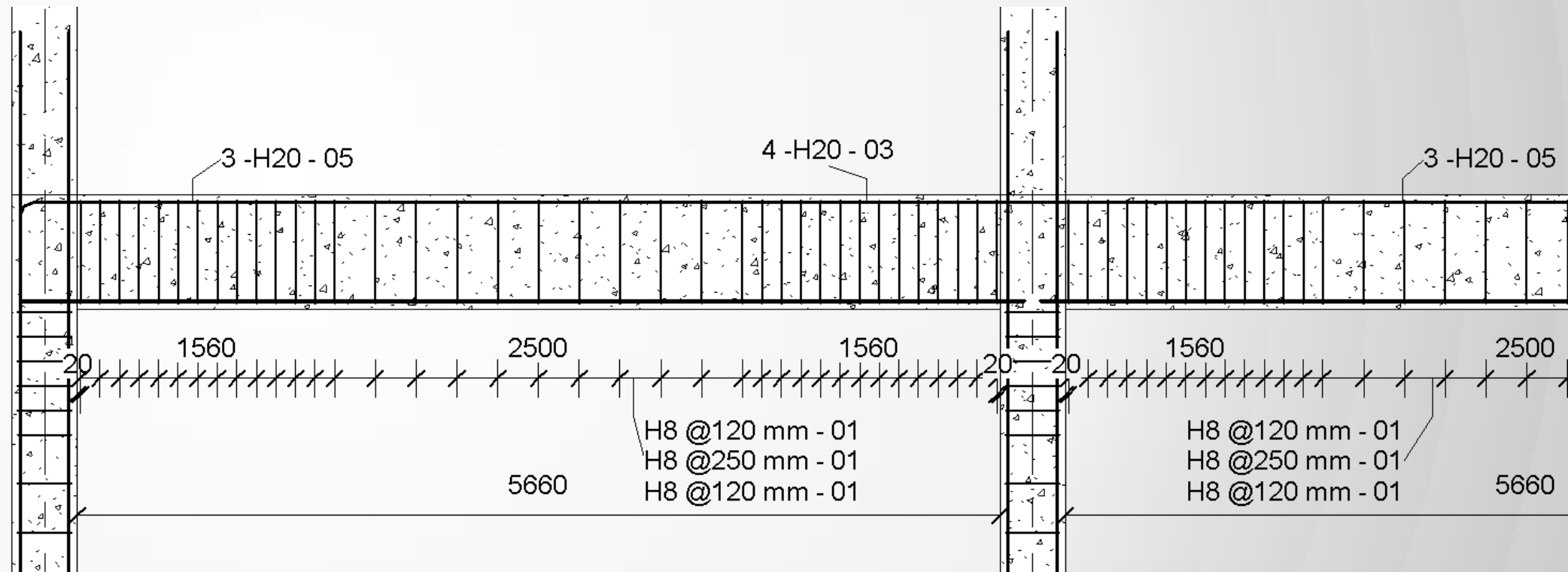
More accurate and readable reinforced concrete shop drawings

For structural engineers

Autodesk® Revit® 2015



- Enhanced multi-rebar annotation
 - Grouping and sorting
 - Annotation update



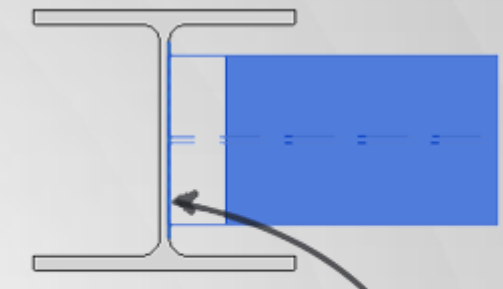
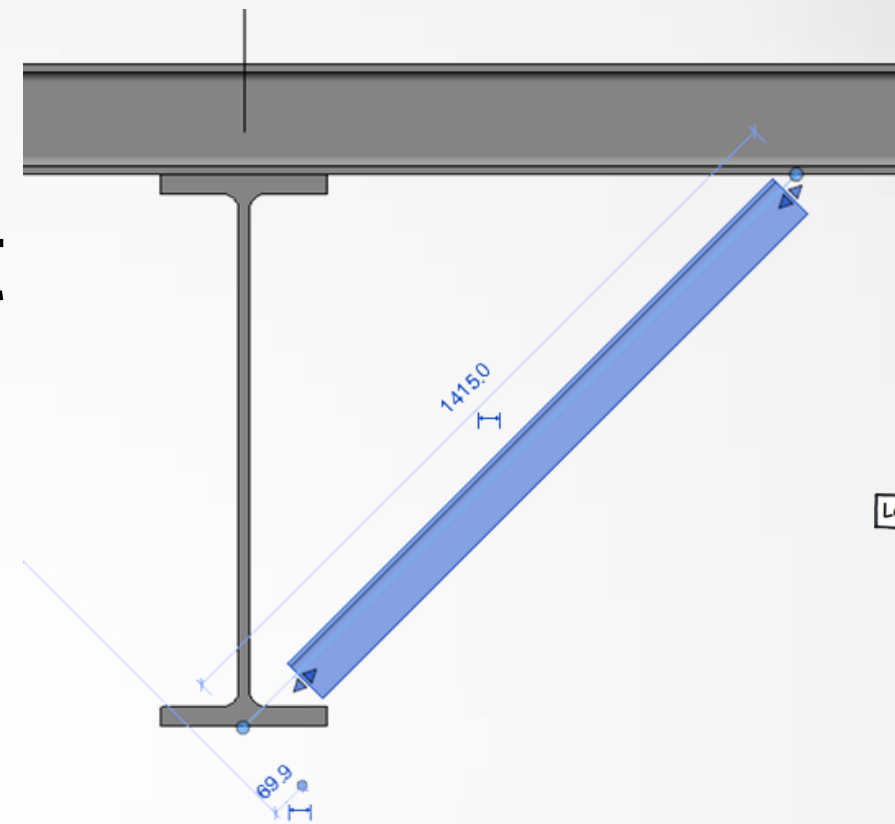
Greater support of reinforced concrete documentation

For structural engineers

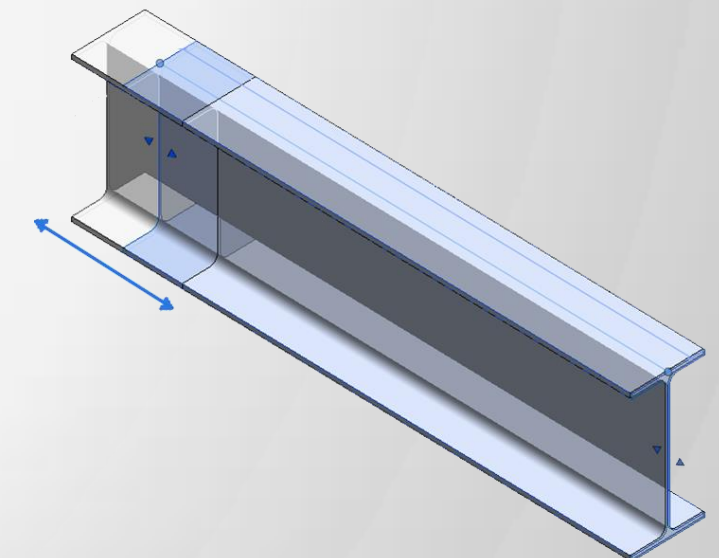
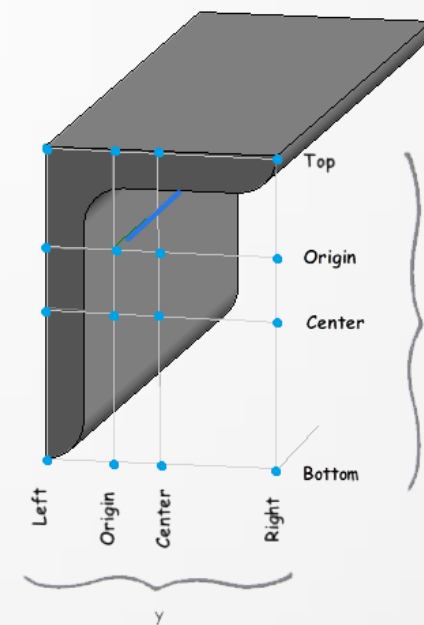
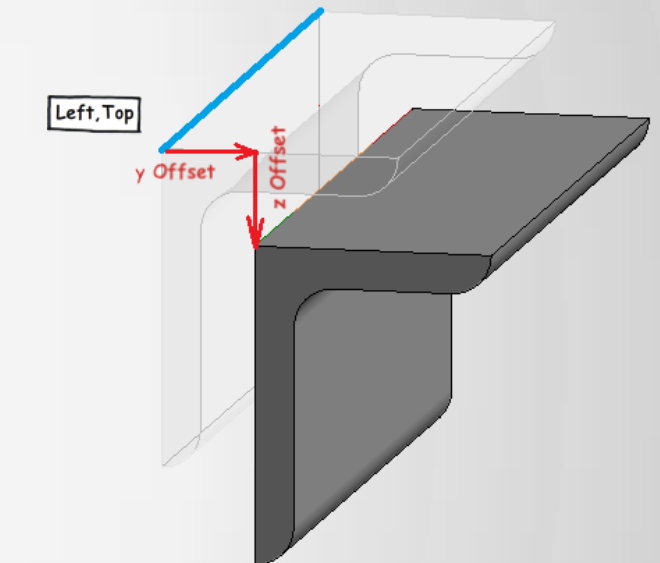
Autodesk® Revit® 2015

- Greater accuracy of as-built model definition
 - Location line visibility
 - Graphical justification
 - Shape handles & snapping improvements
 - Setback improvements
 - Switching on/off Auto-Join

Better interoperability with steel detailing software



Snap to web face of column

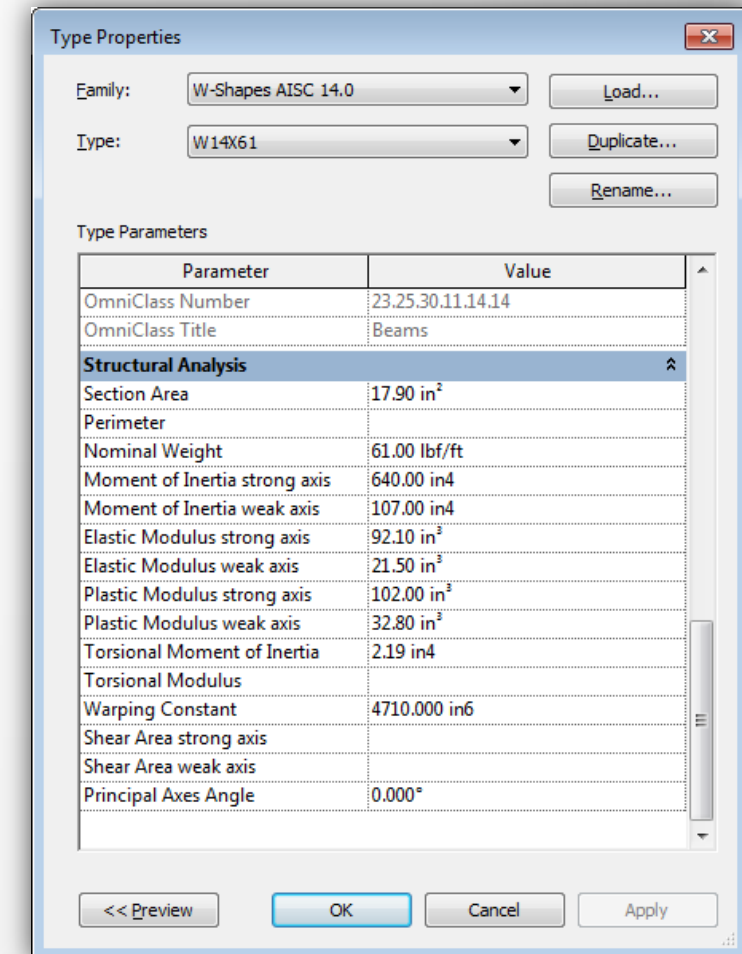
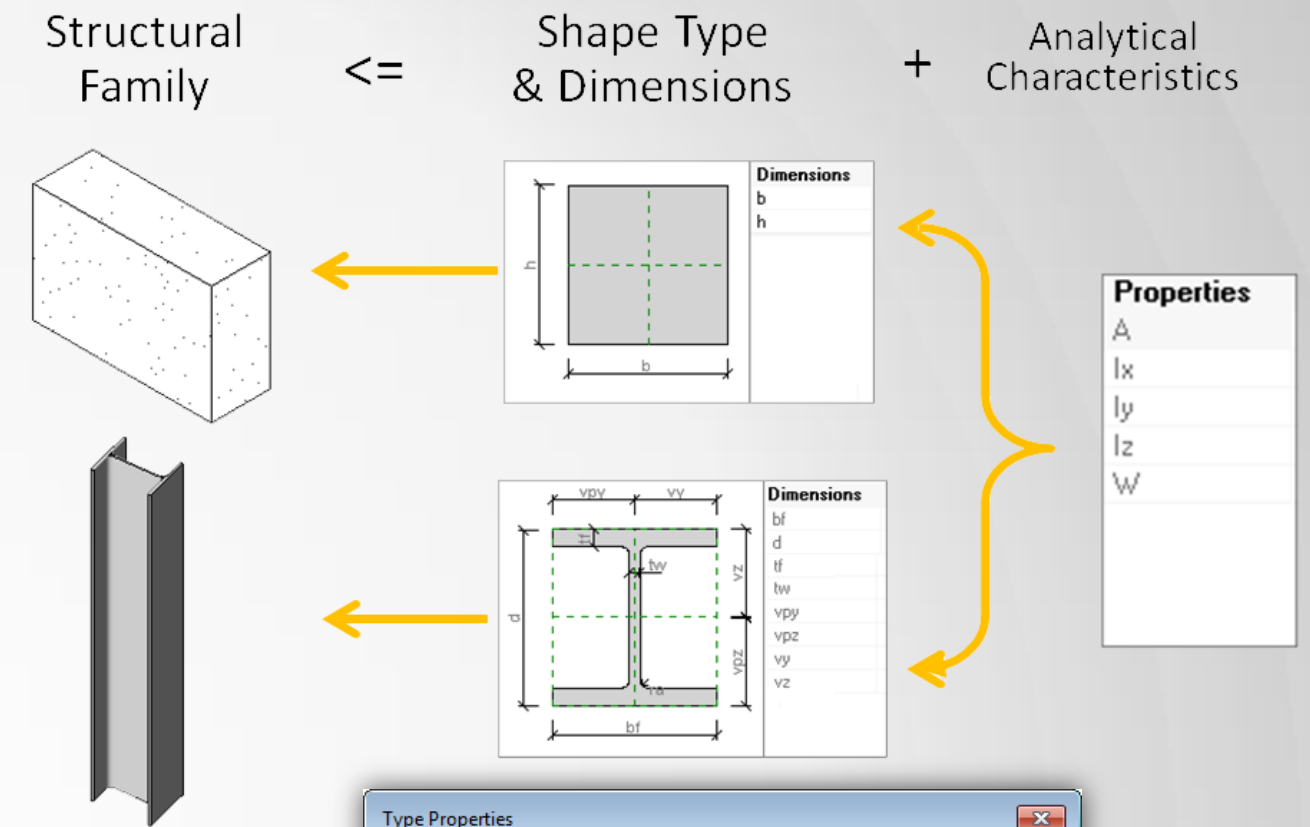


For structural engineers

Autodesk® Revit® 2015

- Structural section properties
 - Catalog profiles
 - More accurate quantities
 - Analysis and code check directly from Revit models

Improved integration of simulation products within BIM workflows



For MEP engineers

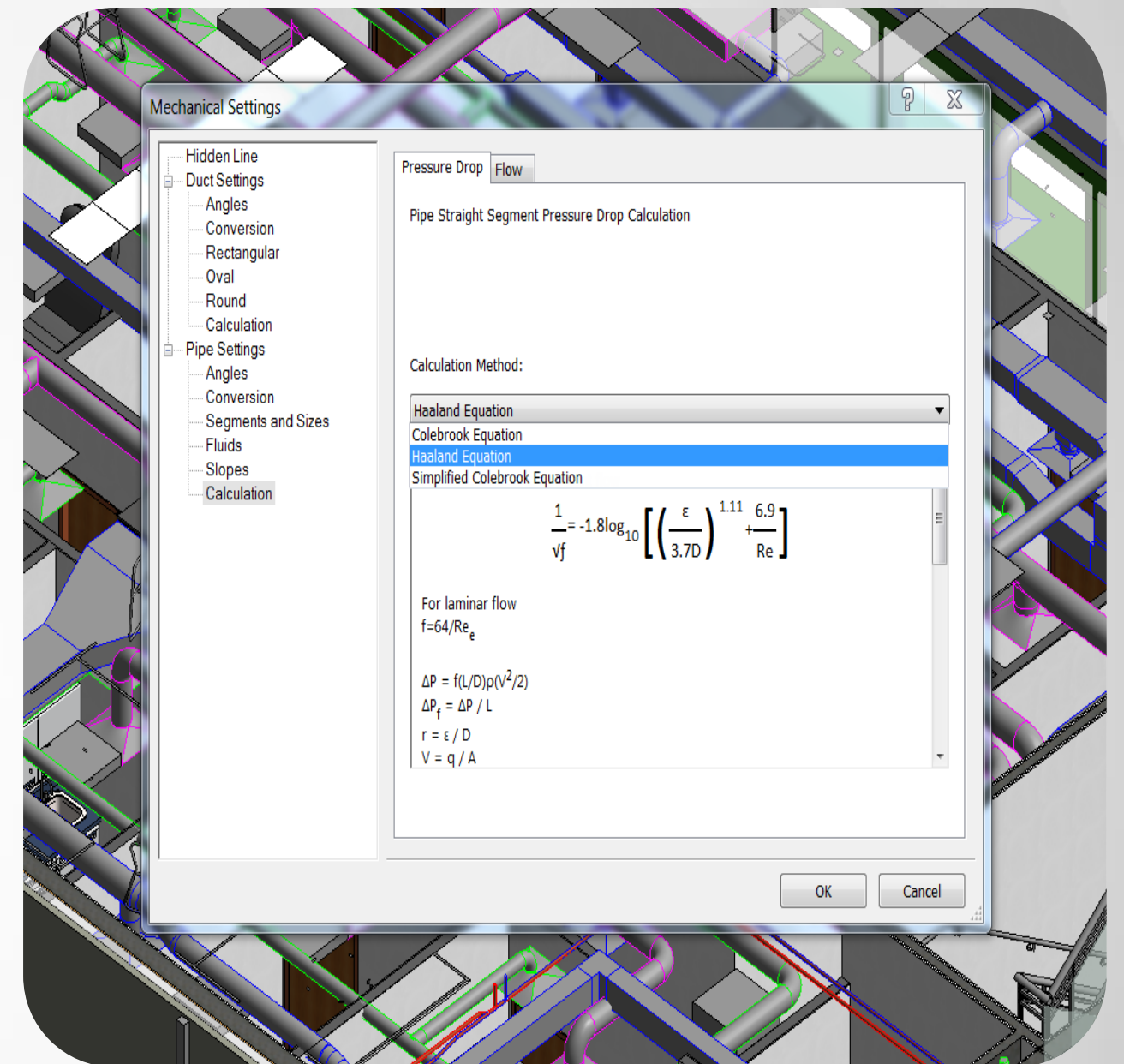


MEP engineering enhancements

Autodesk® Revit® 2015

- Calculation methods for pressure drop
 - Haaland equation
 - Colebrook equation
 - Duct and pipe
 - Specify calculation method

Promote greater accuracy when calculating pressure drop using Haaland or Colebrook equations

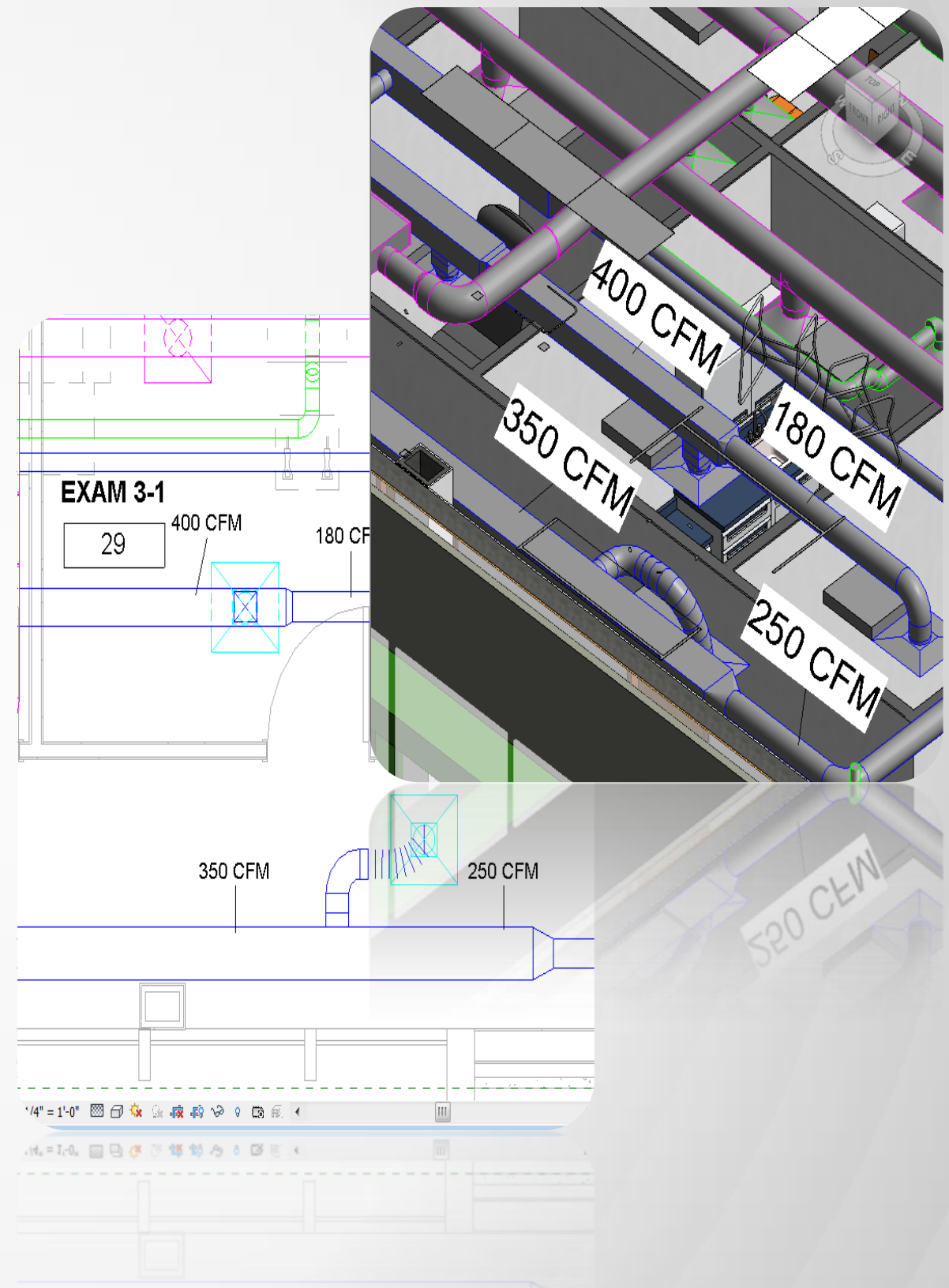


MEP engineering enhancements

Autodesk® Revit® 2015

- Tapped duct and pipe tags
 - Tag values before / after tap
 - Actual value based on location
 - Multiple values in tag

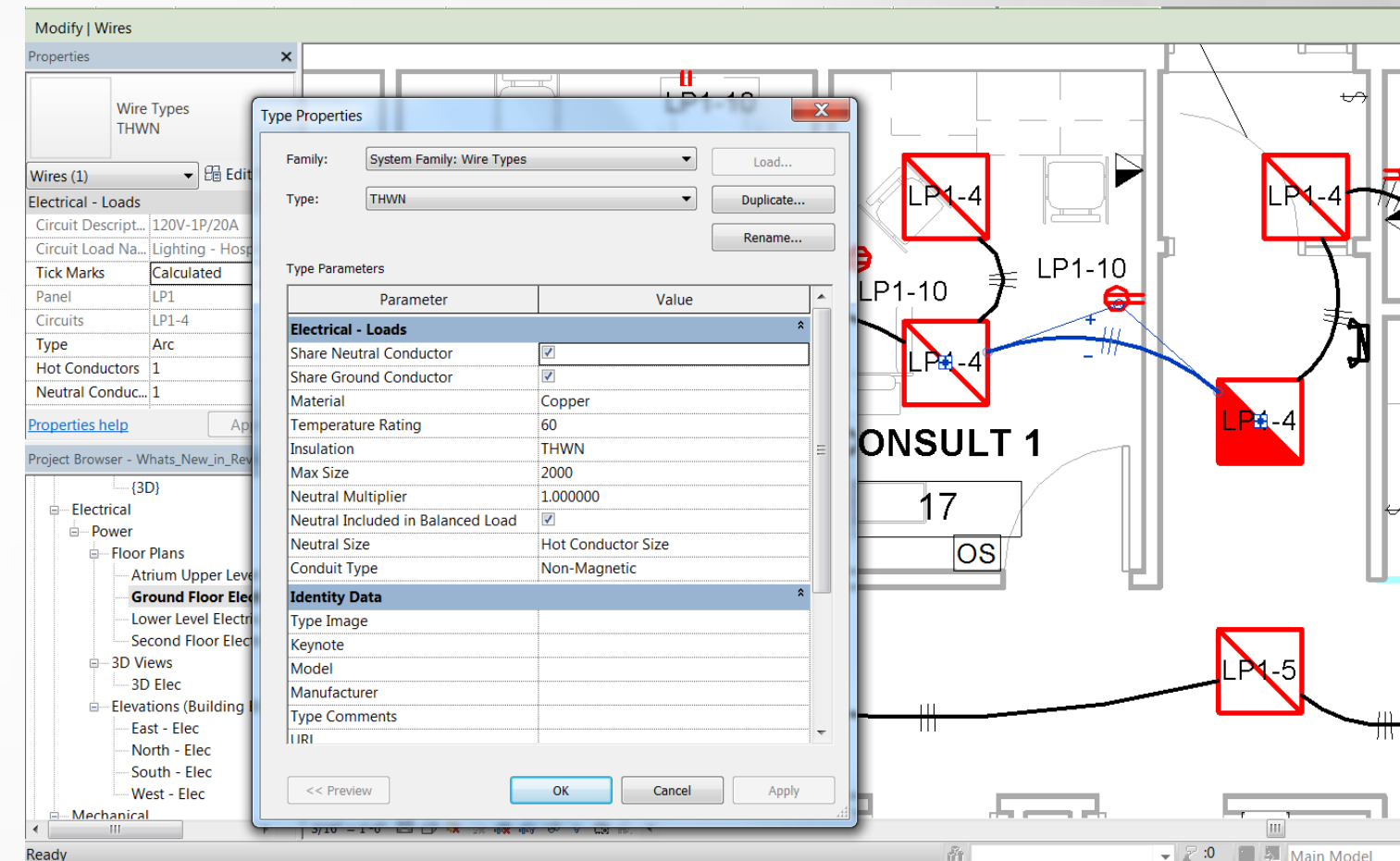
Tag duct or pipe with more accurate numerical values along length



MEP engineering enhancements

Autodesk® Revit® 2015

- Electrical API enhancements
 - Create wire shapes
 - Add/modify wire properties
 - Remove vertices

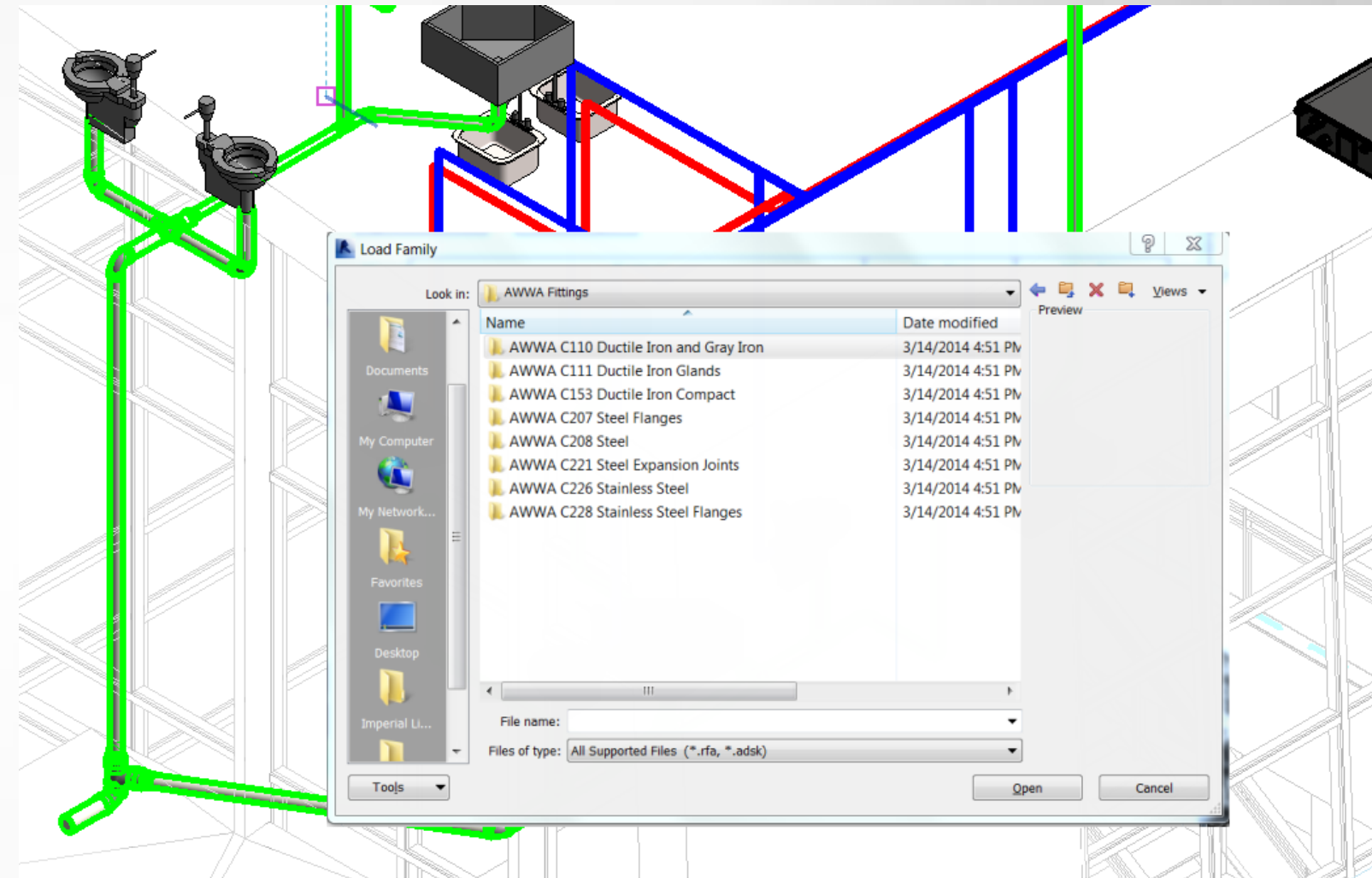


Create all wire shapes available in the UI,
via the API

MEP engineering enhancements

Autodesk® Revit® 2015

- Additional country-specific content
 - US AWWA content
 - Japan MEP electrical content



Improve project design with content that is based on US & Japan industry standards



Autodesk, the Autodesk logo, and Revit are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product and services offerings, and specifications and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

© 2014 Autodesk, Inc. All rights reserved.