

What's new in Revit 2025

Key themes and features



Key themes

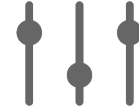
Revit 2025



Design productivity



Sustainability



Analysis



Interoperability



Cloud & data



Documentation efficiency



New features and enhancements

Revit 2025

Design productivity

- Create Walls with Auto Join and Lock
- In-canvas wall Wrappings controls
- Multiple loop mullion profiles
- Single-element or empty arrays in families
- Site design – Toposurface conversion for Pads
- Site design – Toposolid by Face
- Site design – Excavations on Toposolid
- Site design – Excavation volume parameters
- Site design – Shaft opening enhancement
- Site design – Excavated surfaces host elements
- Site design – Toposolid smooth shading
- Site design – Contour display when editing
- Site design – Shape editing snaps
- Dynamo for Revit 3.03 upgrades
- Search in Project Browser enhancement
- Dark Theme for Shared Views
- Revit personal accelerator UI
- Revit macro tools renovation
- Revit .NET 8
- Extensible storage improvements
- Filter discipline updates
- Option bar removal
- Parametric splicing for typical rebar
- Highlight bars exceeding the maximum length
- Prevent unexpected changes to the rebar model
- Enhanced Split features for framing and columns
- Updated set of rules for connections automation

New features and enhancements

Revit 2025

Design productivity(cont'd)

- Disable Mark value for MEP categories
- Validate model integrity
- Single-phase components
- Maximum circuits parameter for “Data/Other Panel”
- Other Panels can consume power
- Fabrication Data Manager – edit part type geometry
- Fabrication Data Manager – part search
- Fabrication Data Manager – upload and assign images

Sustainability

- Support for gbXML version 7.03
- Forma Add-in for Revit Updates
- Total Carbon Analysis for architects – Insight | Carbon Insight
- Total Carbon Analysis for architects – Insight | Flexible Dashboards

Analysis

- LCS orientation for structural analytical elements
- Annual operating schedules for energy analysis

Interoperability

- Improved IFC Category mapping setting
- Import/Export STEP files
- Support new GIS systems
- Informed Design for Revit
- Revit to Robot Link enhancements
- Use Advance Steel part & assembly marks in Revit

Cloud data

- Monitoring and visualization of Coordination Model changes

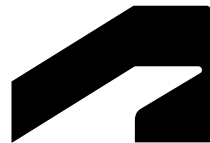


New features and enhancements

Revit 2025

Documentation efficiency

- Sheet collections
- Batch delete and add to library for materials
- Material thumbnail generator improvement
- Align and distribute annotations
- Background PDF Export
- Room perimeter accuracy improvement
- Schematic bending details for rebar tagging
- Enhanced annotations in bending details
- Set presentation options for multiple bar sets at once
- Tag and dimension components of connections
- Material Gauge parameter for fabrication ductwork
- Easier access to duct and pipe pressure drop data

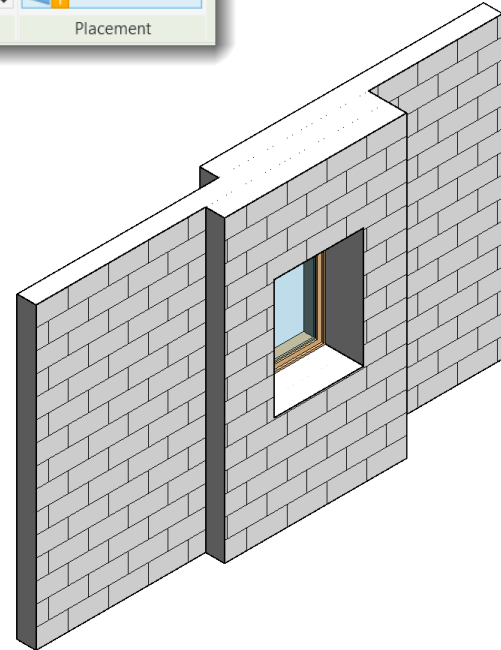
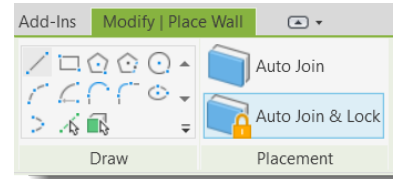


Design productivity

Revit 2025

Create Walls with Auto Join and Lock

- New wall placement options:
 - **Auto Join:** Automatically join a wall with an adjacent one.
 - **Auto Join & Lock:** Join and lock adjacent walls. Both move together.
- Inserted elements perforate adjacent walls
- Options not available for walls that are structural, face-based, stacked, and curtain walls.
- Slanted and tapered walls can join but won't lock

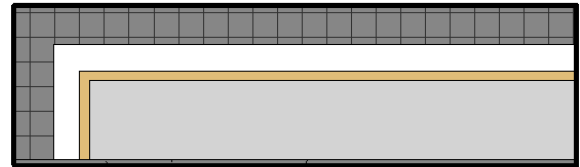
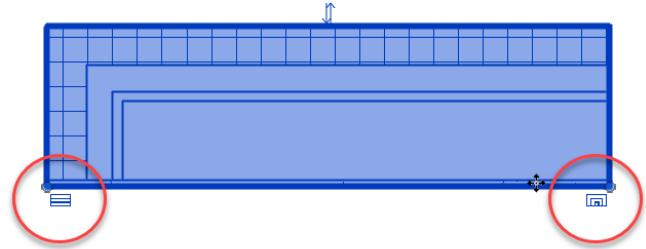


Automate the modelling and representation of adjacent walls



In-canvas wall Wrapping controls

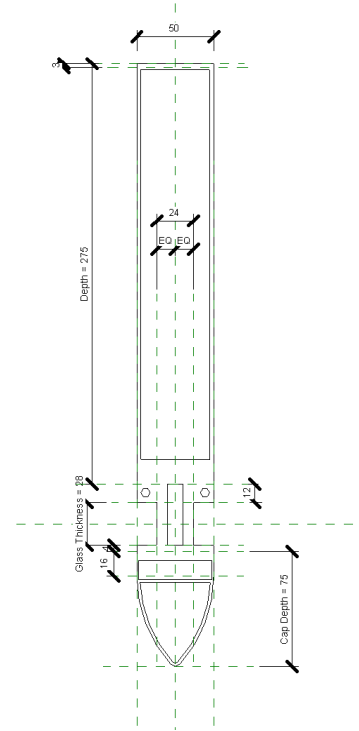
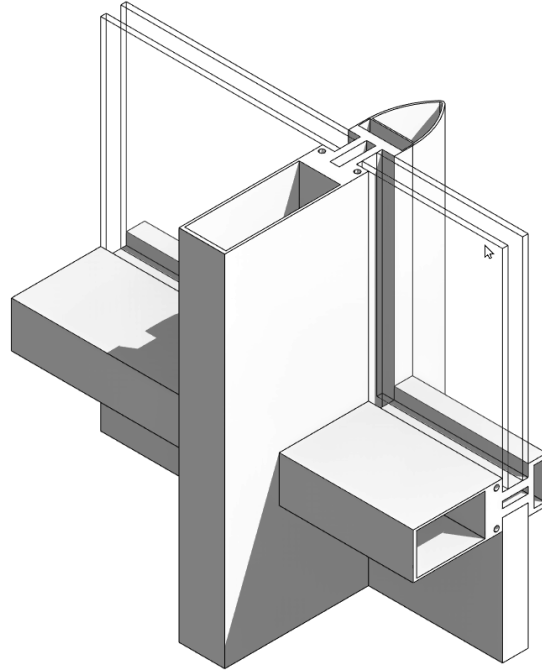
- Allow or disallow wall wrappings with the new wrapping controls
- Layer wrappings must be enabled in the wall type properties
- Controls only visible when a wall is selected in plan view



Expedite the representation of wall wrappings

Multiple loop mullion profiles

- Previously, mullion profiles were limited to a single loop.
- Create curtain wall mullions with profiles with multiple closed loops
- Open loops are not supported



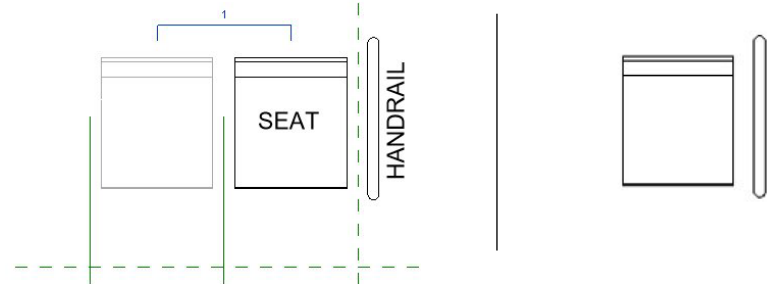
Higher level of development in the representation of mullions



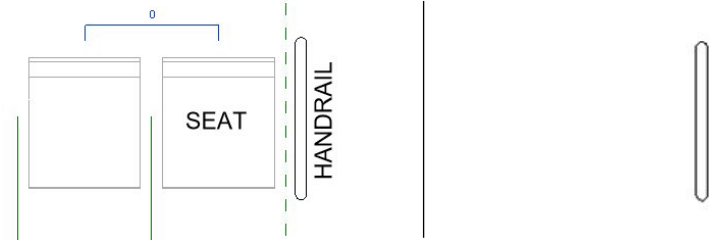
Single-element or empty arrays in families

- Display arrays containing zero or one element
- Works as expected for both linear and radial arrays
- Available only within the Family editor

Single-element array (1)



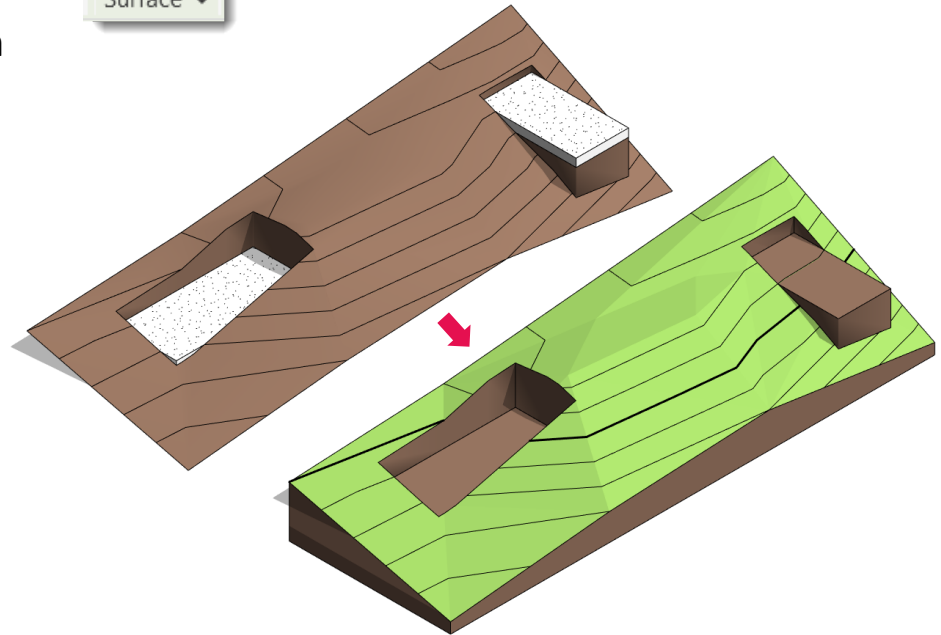
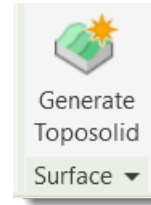
Empty array (0)



Greater modeling flexibility using families with arrayed components

Site design – Toposurface conversion for Pads

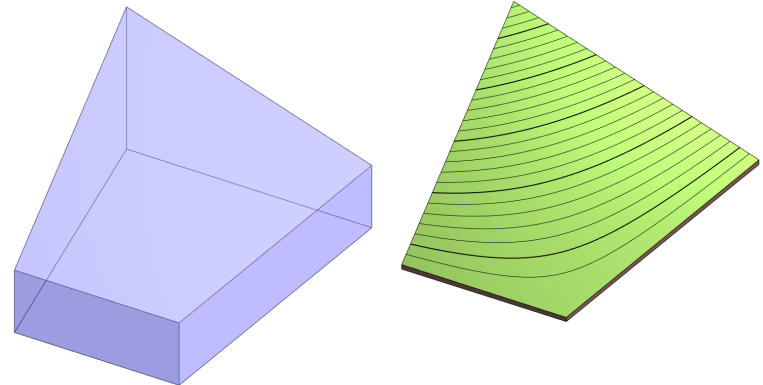
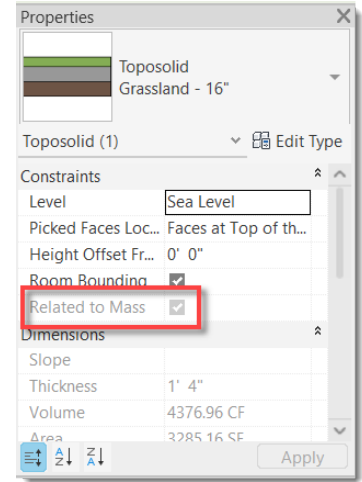
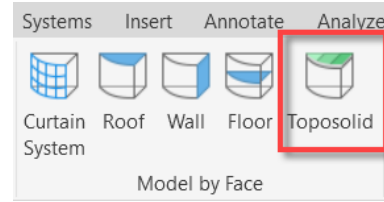
- Automatically convert legacy Building Pads into excavated areas
- Applicable to new Toposolids generated from a legacy Toposurface
- Legacy Toposurfaces and Building Pads are preserved alongside the Toposolid



Downstream Toposurface upgrades while maintaining design intent

Site design – Toposolid by Face

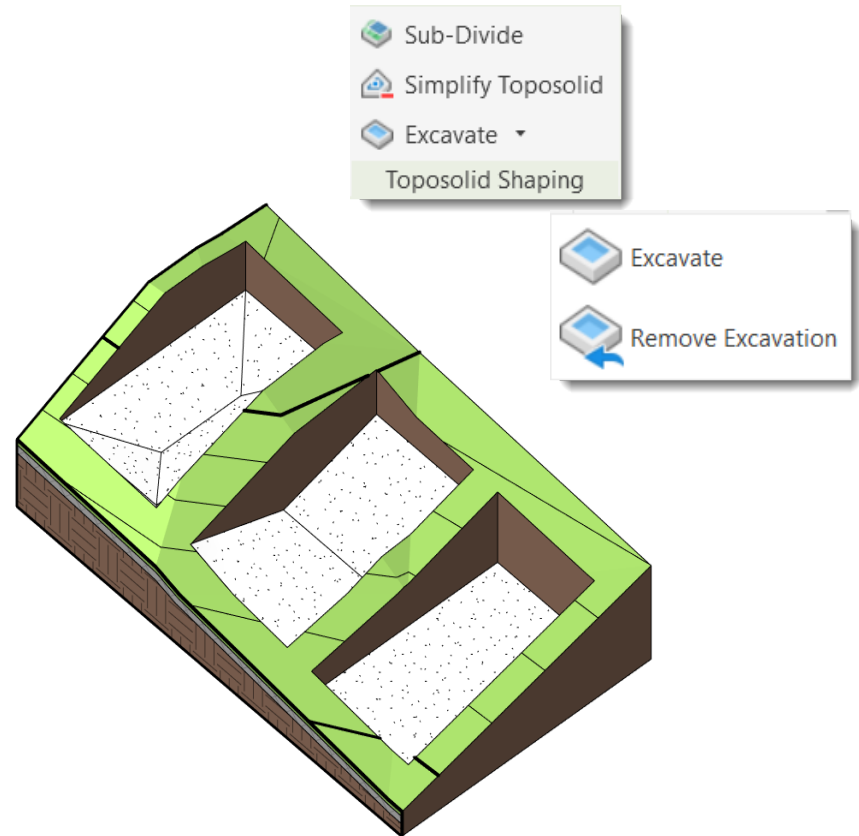
- Create Toposolids on any non-vertical faces of a mass family
- Inspect the *Related to Mass* checkbox to verify if the Toposolid is derived from a Mass
- Limited Shape-editing functions available
- Cannot select faces from different masses for the same Toposolid



Expanded options to represent complex topography

Site design – Excavations on Toposolid

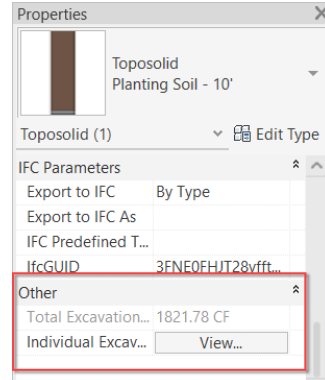
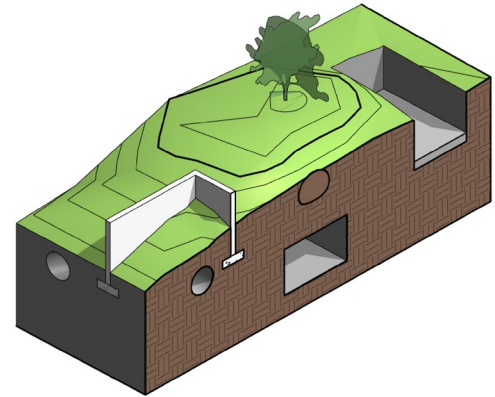
- Use a Floor, Roof or a Toposolid to excavate volume from the host Toposolid
- The Toposolid volume value is adjusted by the excavation volume
- Remove the excavation to undo the cutout
- Works also with legacy Pads



Enhanced control over topography cutouts

Site design – Excavation volume parameters

- Report the volume of soil removed by cuts and excavations
- Two new parameters:
 - *Individual Excavation Volume*
 - *Total Excavation Volume*
- Display excavation volumes in schedules



Excavation Volume on Toposolid

Excavation Volume is stored in the properties of the toposolid and volume is updated with geometry changes.

Element ID	Family and Type	Mark	Exc
1	1204093 Basic Wall : Generi	VCalc	28
2	1208726 32-PLNT-ROOT-B		30
3	1230628 Wall Foundation : VCalc		23
4	1235600 Tunnel : Tunnel	VCalc	13
5	1244998 Tunnel_Square : Tu	VCalc	99
6	1257472 Floor : Generic - 12		569.27 CF
7	1257643 Basic Wall : Generi		17.94 CF
8	1257774 Wall Foundation :		26.11 CF

What is Excavation Volume?

Multi-Category Schedule

<Multi-Category Schedule>

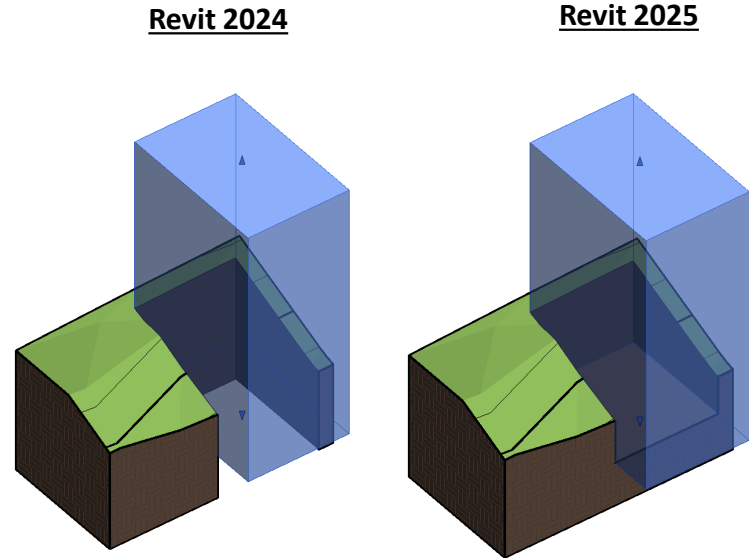
A	B	C
Category	Family and Type	Excavation Volume
Floors	Floor: Generic - 12"	569.27 CF
Generic Models	Tunnel_Square: Tunnel_Square	990.00 CF
Mass	Tunnel: Tunnel	136.10 CF
Structural Foundations	Wall Foundation: Bearing Footing - 36"	23.87 CF
Structural Foundations	Wall Foundation: Bearing Footing - 36"	26.11 CF
Walls	Basic Wall: Generic - 8"	28.02 CF
Walls	Basic Wall: Generic - 8"	17.94 CF
Grand total: 7		1791.31 CF

More accurate and efficient way to quantify excavation volumes



Site design – Shafts Opening enhancement

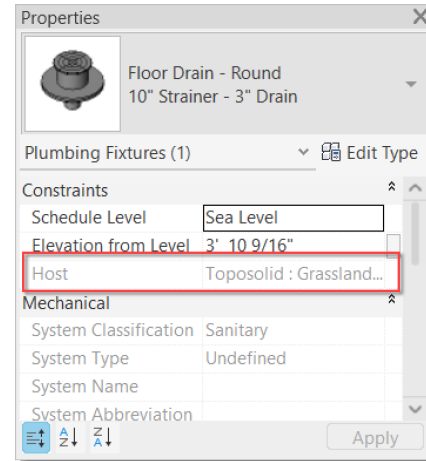
- Previously, the Shaft Opening would cut through the entire Toposolid, ignoring the bottom face
- Now, the Toposolid detects the bottom of the shaft as the cut off limit
- Limitation: The removed soil by a shaft is not tracked.



Enhanced representation of cutoffs created by Shafts in Toposolids

Site design – Excavated surfaces host elements

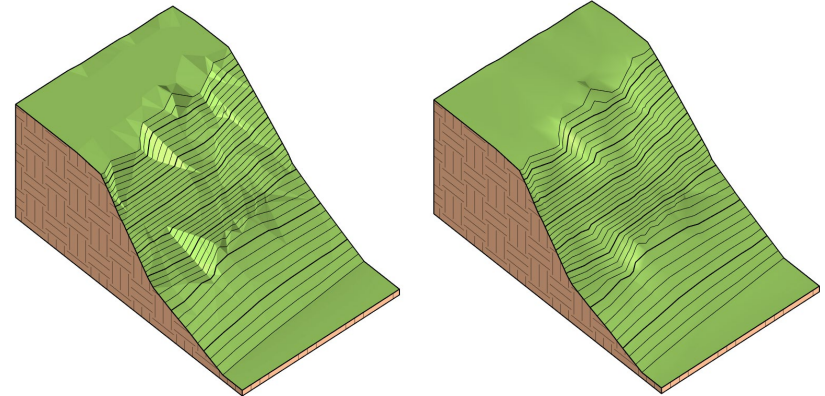
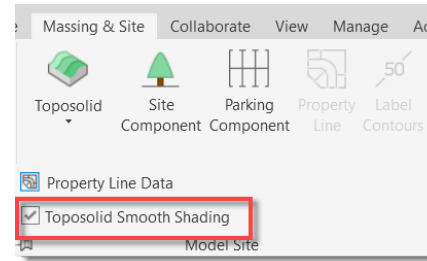
- Exposed surfaces of a cut toposolid can host face-based components
- Families report the Toposolid as a host



Expanded modelling flexibility using excavation surfaces

Site design – Toposolid Smooth Shading

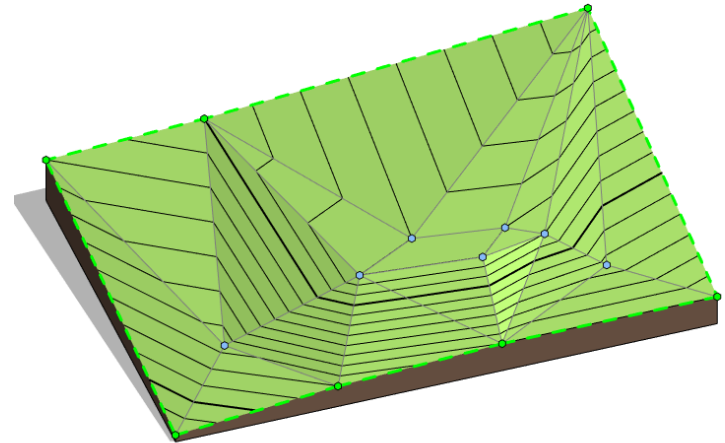
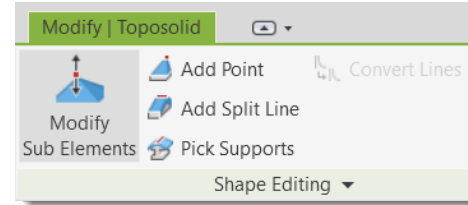
- Display Toposolids with smoothed surfaces
- Visible in views using Shaded, Consistent Colors, Textures, and Realistic visual styles.
- Smoothness maintained with you print or export
- Limitations when enabled:
 - Surface patterns will not display
 - Materials cannot be overridden with paint, decals, or graphic overrides
 - For linked Toposolids, smooth in the original file and reload



Enhance the visual representation of Toposolids with Smooth Shading

Site design – Contour display when editing

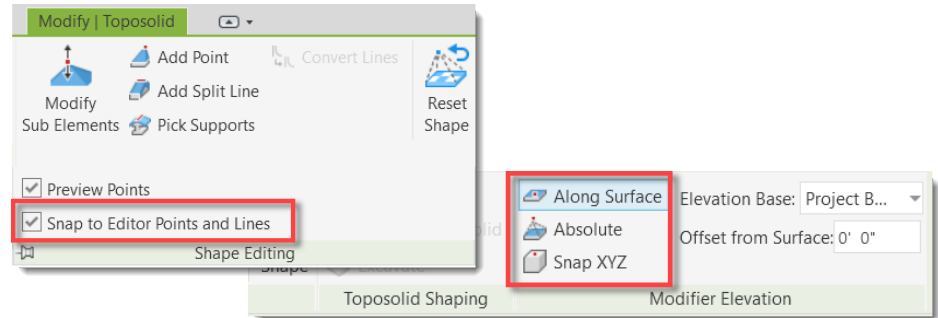
- Contour lines are now visible when shape-editing a Toposolid
- Contour visibility respond to graphics overrides and contour type settings



Improved control and experience when editing Toposolids

Site design – Shape Editing snaps

- When shape editing a Floor, Roof or Toposolid, enable or disable the snapping to inner points and edges
- Snapping options:
 - *Along Surface*: XY snap, Z on topo surface
 - *Absolute*: XY snap, Z based on elevation base settings
 - *Snap XYZ*: XY and Z snap to a 3D point
- Limitations:
 - Can't snap to Splines.
 - Snapping is conditioned by View Range
 - Prioritizes Endpoint and Midpoint



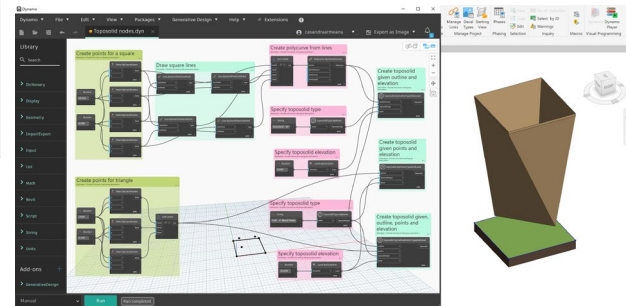
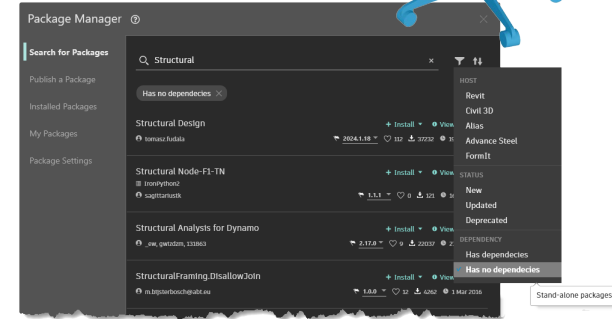
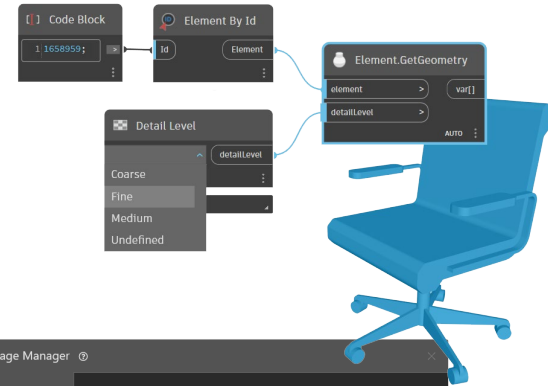
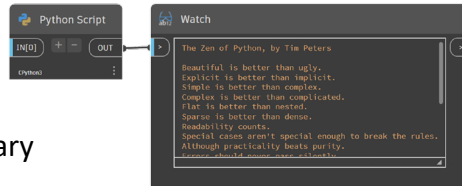
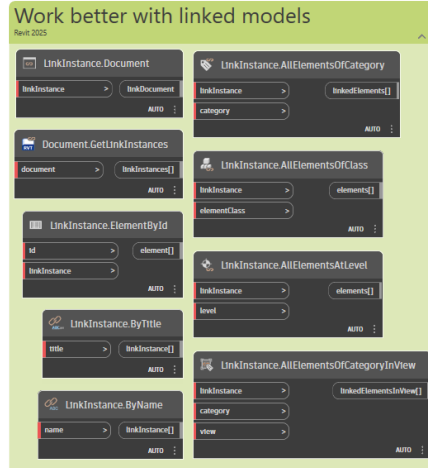
Increased 3D modelling precision for higher quality models in less time

Dynamo for Revit 3.03 upgrade

Revit 2025

- Work better with linked models
- Improved interactions with geometry
- Toposolid nodes
- The new Package Manager
- Search for nodes by category
- More readable Watch node text
- Updated Revit sample files
- Gate node and Remember node in the Dynamo library

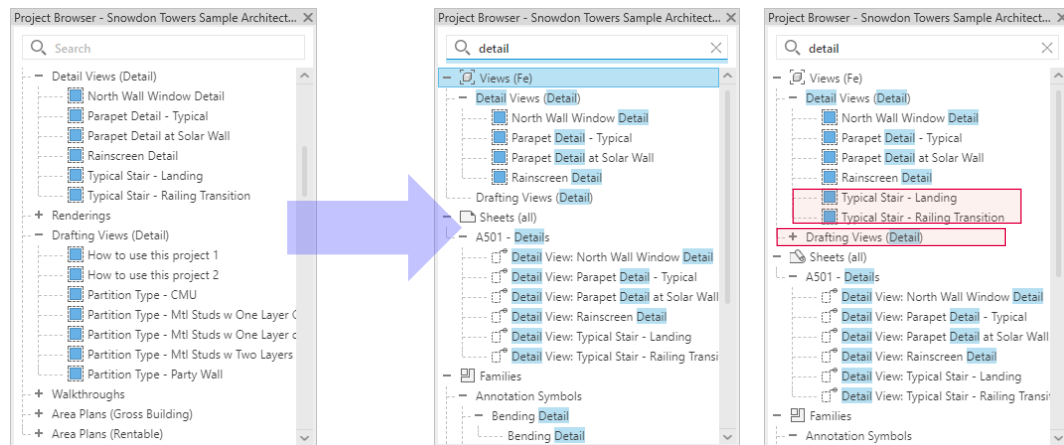
Improved experience when developing automation workflows



Search in Project Browser enhancement

Revit 2025

- View all the child nodes when the parent node contains the keywords
- Collapse the child nodes when they don't contain the keywords



Search more efficiently in Project Browser

Revit 2024

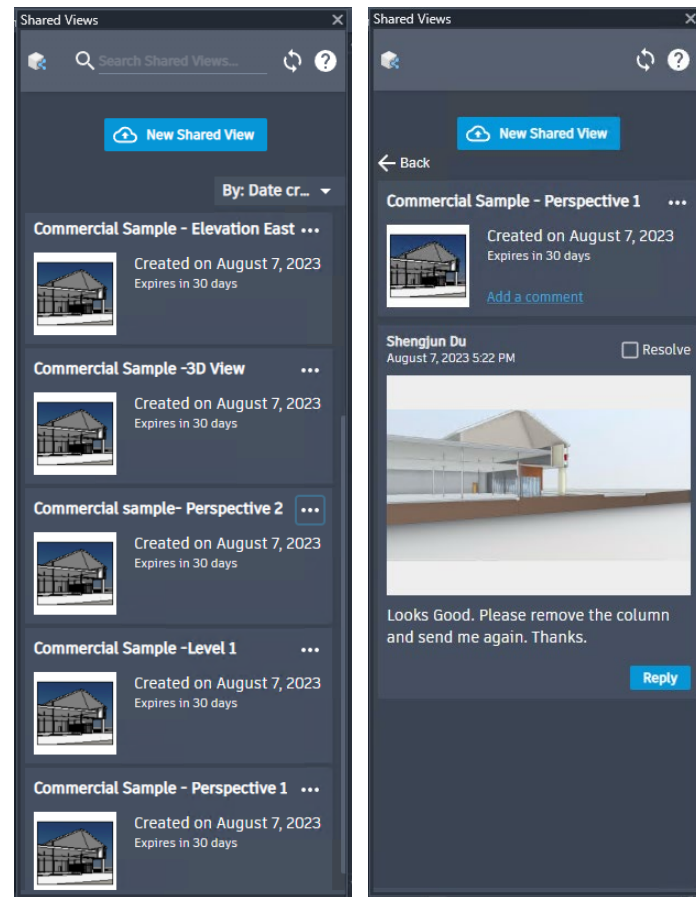
Revit 2025

Dark Theme for Shared Views

Revit 2025

- Enabled for the first level user interface in Shared Views
- Keep consistent with the other Dark Theme supported UI

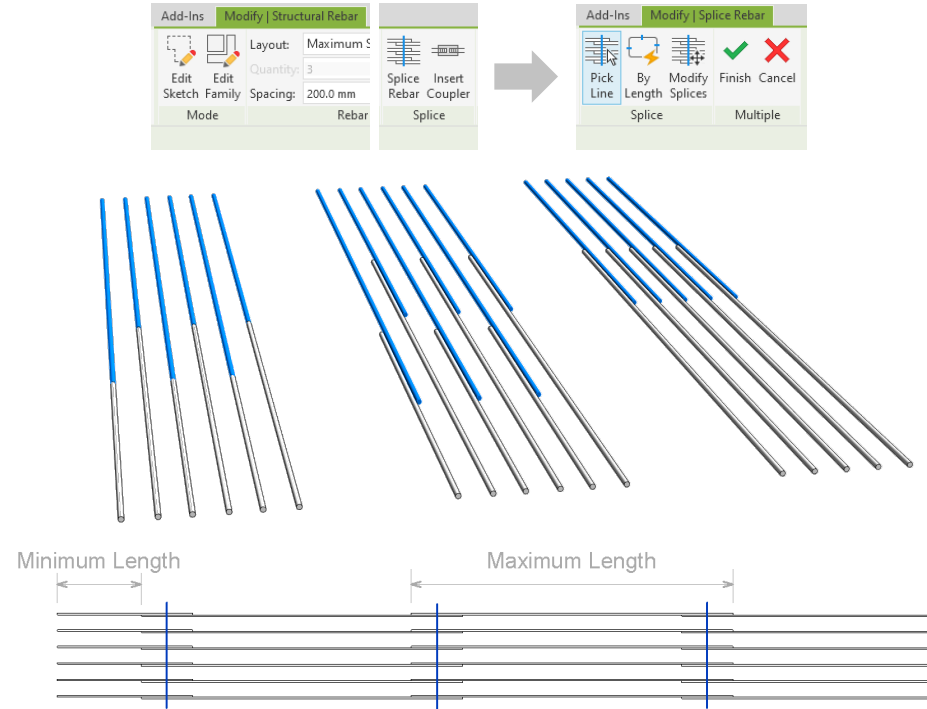
Seamless and consistent visual experience



Parametric splicing for typical rebar

Revit 2025

- Pick a line to splice multiple rebar sets
- Splice rebar by length
- Modify rebar splices
- Splice types and lap length configuration
- Automatic constraints for spliced ends



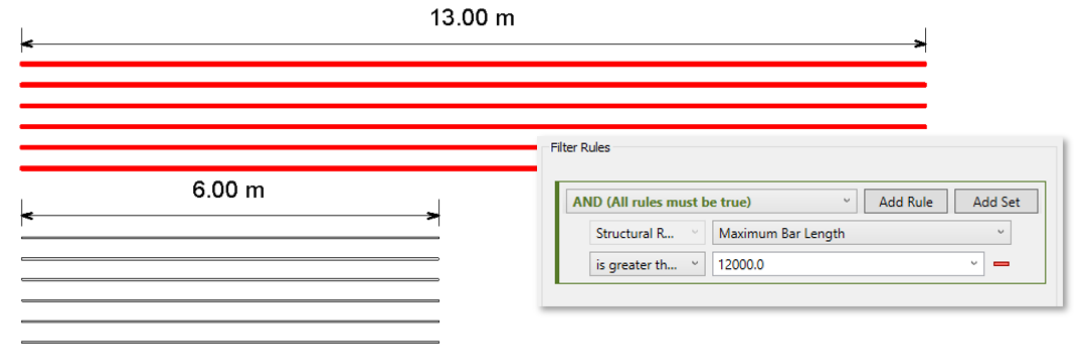
Enhanced user efficiency in accurately modeling concrete reinforcement



Highlight bars exceeding the maximum length

Revit 2025

- Visually inspect bars that require length adjustments
- Utilize Revit filters to highlight bars that require splitting

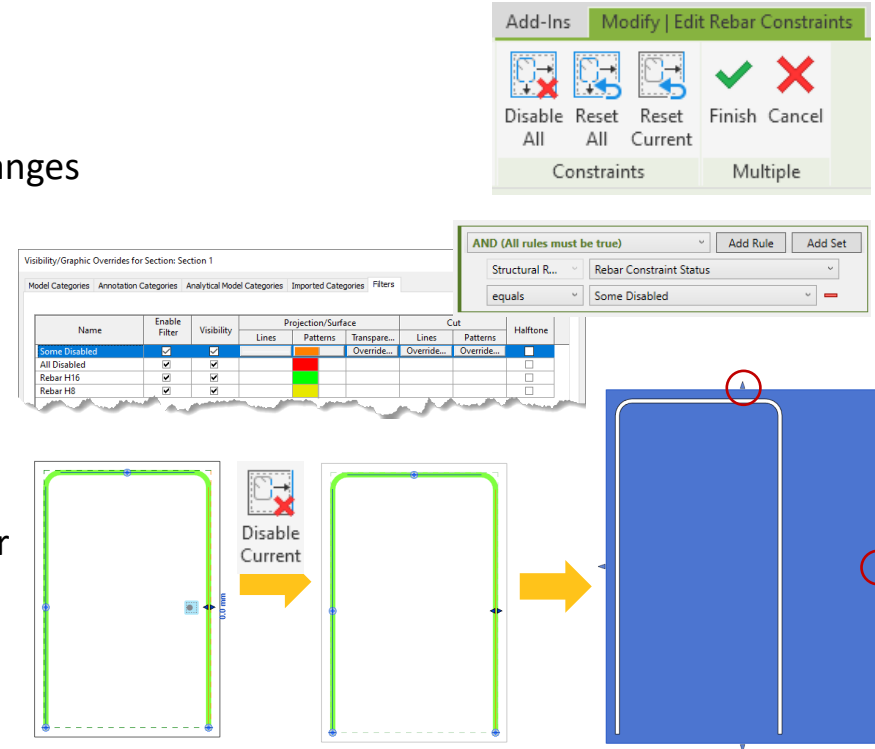


Enhanced rebar quality control

Prevent unexpected changes to the rebar model

Revit 2025

- Disable rebar constraints on individual bar handles
- A handle with a disabled constraint doesn't react to changes of the concrete faces
- Manually drag a bar handle with a disabled constraint
- Edit constraints for multiple bars and disable all the constraints
- Check the rebar constraints status by using schedules or filters



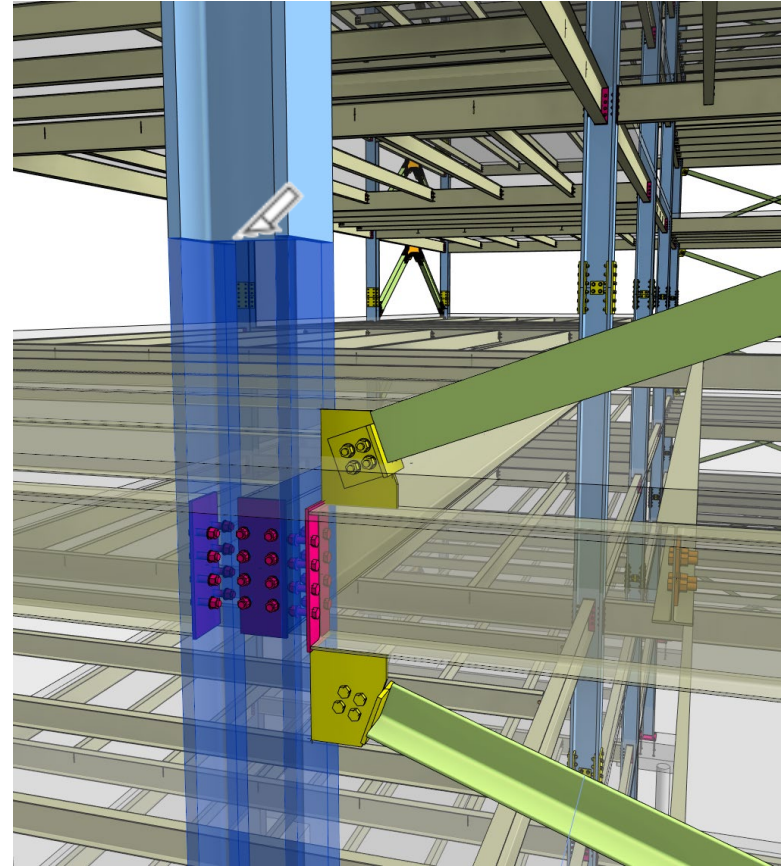
Enhanced control over rebar geometry

Enhanced Split features for framing and columns

Revit 2025

- Consistent ribbon experience for accessing “Split” and “Split with gap” for steel members
- Splitting steel framing and columns that have steel connections

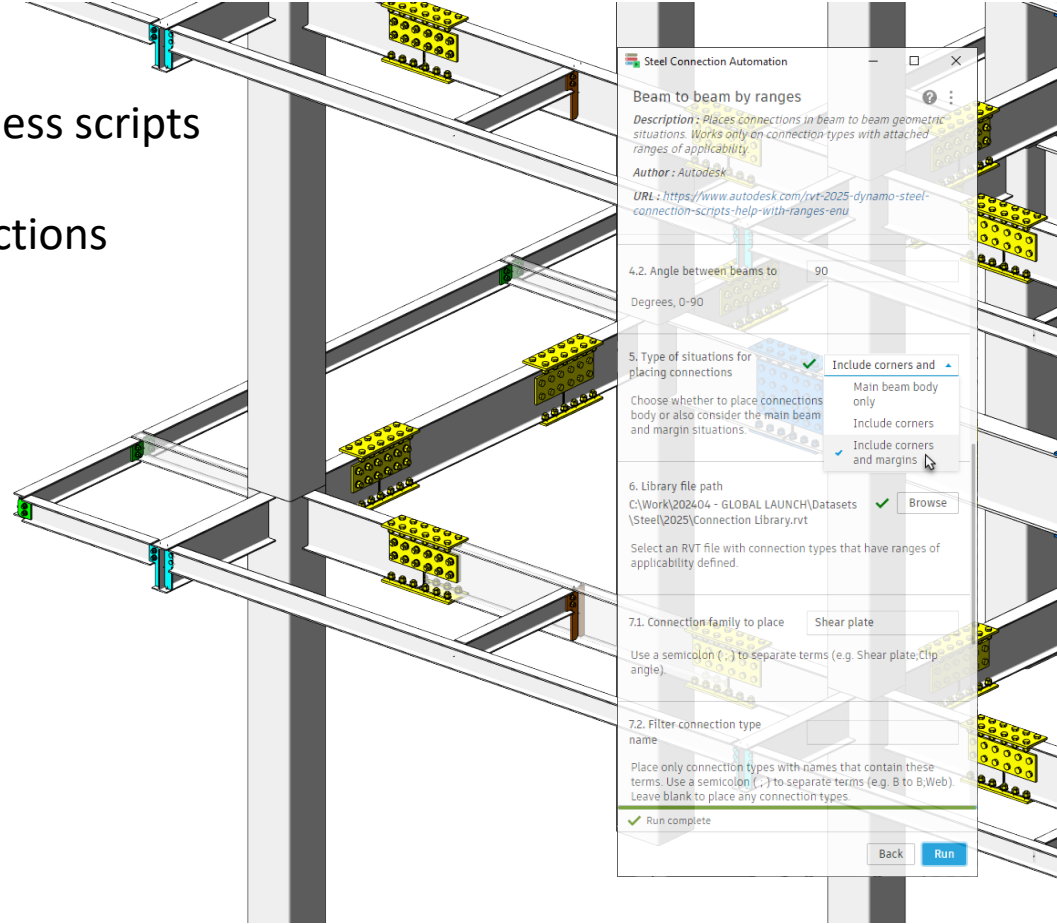
Enhanced detailed steel design



Updated set of rules for connections automation

Revit 2025

- Place more typical connections using less scripts
- Select where to place the steel connections

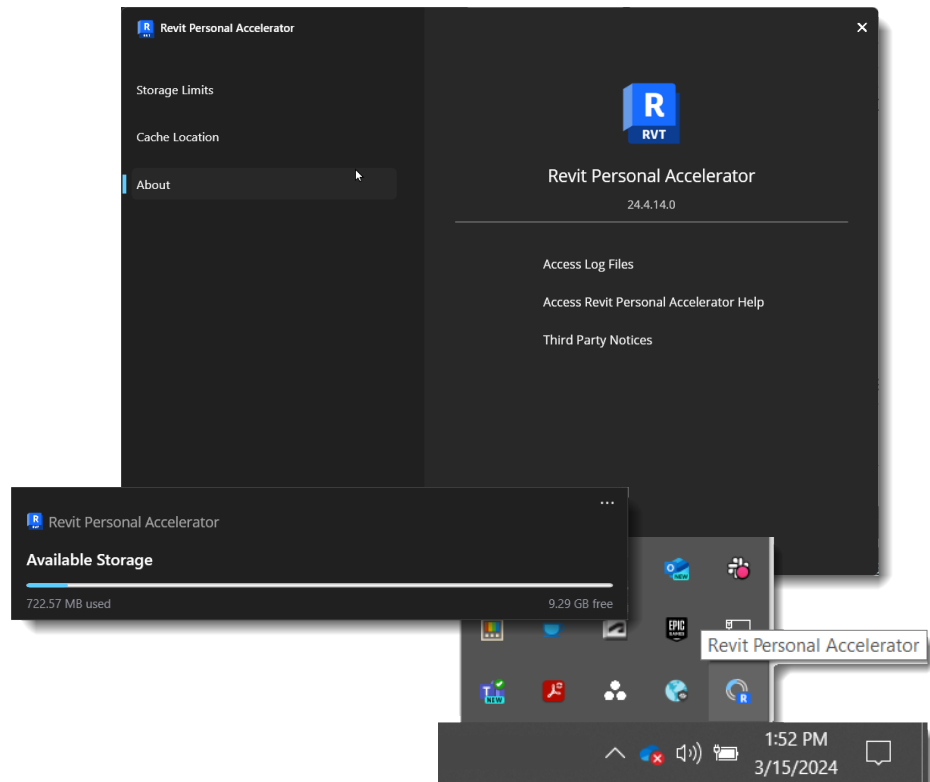


Easier usage of steel connection automation

Revit personal accelerator UI

- The Revit Personal Accelerator (PAC) optimizes performance when working on Revit Cloud Models
- Display PAC available storage
- Change max capacity limit (GB) value
- Copy cache folder location to clipboard
- Direct access to log and help files

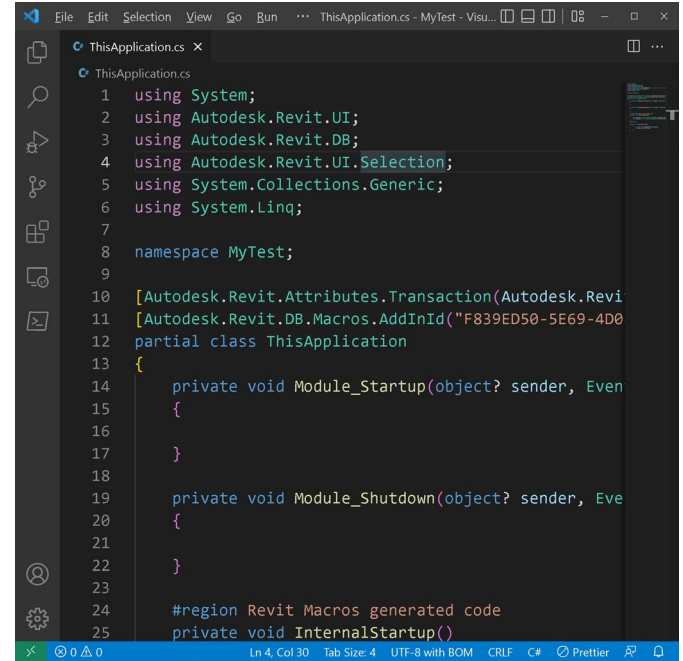
Improved performance and stability when working with Revit Cloud Models



Revit macro tools renovation

Revit 2025

- The new workflow uses Visual Studio Code as a more modern and extensible code editor
- Support for automatic template generation
- Document Level Macros, Python, and VB.NET macros are no longer supported



```
File Edit Selection View Go Run ... ThisApplication.cs - MyTest - Visu...
ThisApplication.cs x
ThisApplication.cs
1 using System;
2 using Autodesk.Revit.UI;
3 using Autodesk.Revit.DB;
4 using Autodesk.Revit.UI.Selection;
5 using System.Collections.Generic;
6 using System.Linq;
7
8 namespace MyTest;
9
10 [Autodesk.Revit.Attributes.Transaction(Autodesk.Revit.Attributes.TransactionMode.Manual)]
11 [Autodesk.Revit.DB.Macros.AddInId("F839ED50-5E69-4D0...)]
12 partial class ThisApplication
13 {
14     private void Module_Startup(object? sender, EventArgs e)
15     {
16     }
17
18     private void Module_Shutdown(object? sender, EventArgs e)
19     {
20     }
21
22     #region Revit Macros generated code
23     private void InternalStartup()
24     {
25     }
26 }
```

Streamlined and more efficient coding experience



Revit .NET 8

Revit 2025

- Revit migrated an important technical framework to the latest version (.NET 8)
- Improved 3rd party developer experience
- Integration with modern development environments like Visual Studio Code
- Staying current with technology and regular maintenance

A large purple rectangular graphic with a diagonal split. The top-left portion is a lighter shade of purple, and the bottom-right portion is a darker shade. The text ".NET 8.0" is centered in white, bold, sans-serif font.

.NET 8.0

Improved performance across the board



Extensible storage improvements

Revit 2025

- Resolve Schema Conflict in file upgrade
- Resolve Schema Conflict when Sync to Central or Reload latest
- Resolve Schema Conflict in file open

Optimized workflows minimizing schema conflicts

The image displays two overlapping dialog boxes from Revit 2025. The top dialog, titled "Data Conflict - Add-Ons", informs the user that the upgraded model contains conflicting data and provides details such as the project name "RVTACD_100_200_HSP0_I3_300" and a list of conflicting data items. It includes a "Show details" button and a link to "Learn more about data conflict". The bottom dialog, titled "Operation Could Not Be Completed", features a yellow warning icon and explains that the operation failed due to a conflict with data from an "Add-On Vendor 'XXXX'". It offers two options: "Cancel the current Operation" (with a help link) and "Continue loading the file" (with a warning about potential data loss). Both dialogs have "OK" buttons.

Data Conflict - Add-Ons

The upgraded model contains data that conflicts with the data already used in the current session and Revit deleted the conflicted data during upgrades.

Depending on Add-Ons, this may cause data loss or unexpected behavior in related Add-Ons. Click Show Details to view the project name and a list of conflicted data.

The project name is:
RVTACD_100_200_HSP0_I3_300

The conflicting data is:
"XXXX'XxxXxxXxx" - Add-On Vendor "XXXX"
"XXX'XxxXxxXxx" - Add-On Vendor "XXX"
"XXXX'xxXxxXxx" - Add-On Vendor "XXXX"

Show details

[Learn more about data conflict](#)

Operation Could Not Be Completed

This operation could not be completed because the central model contains data that conflicts with the data already used in the current Revit session.

The conflicting data is "XXXX" from Add-On Vendor "XXXX".

Save your local file, restart Revit, and try again. If the issue persists, follow the guidance in the help link below to manually delete the conflicted data.

OK

Data Conflict - Add-Ons

The file being loaded conflicts with data already used in the current Revit session. What do you want to do?

The conflicting data is "XXXX" from Add-On Vendor "XXXX".

→ **Cancel the current Operation**
For help resolving the issue follow the instructions in the help link below to delete the conflicting data.

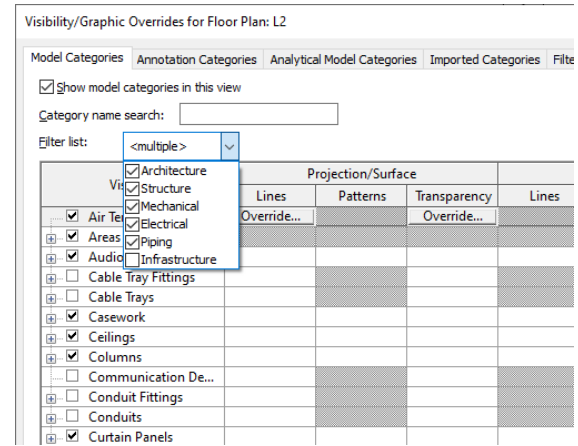
→ **Continue loading the file**
Revit will delete a version of the conflicted data in the current session. Depending on the Add-Ons affected, this may cause data loss or unexpected behavior.

[How to resolve the conflict?](#)

Filter discipline updates

Revit 2025

- Update filter discipline of some categories under Visibility Control dialog
- The changes are based on a user survey with 300+ valid user replies
- The category filter was reassigned as shown in the table for these categories



	Architecture	Structure	Mechanical	Electrical	Piping	Infrastructure
Medical Equipment	X		X	X	X	
Food Service Equipment	X		X	X	X	
Audio Visual Device	X			X		
Fire Protection	X		X	X	X	
Vertical Circulation	X	X				X
Hardscape	X					
Temporary Structure	X	X				X
Signag	X			X		

Work more efficiently with categories



Option bar removal

Revit 2025

- Options move to Property palette
- Options move to ribbon
- Allows for keytips, shortcuts, and to be closer to other functionality

#	Name	How to trigger it	Moved to Property Palette	Moved to Ribbon
1	3D Snapping option	Create a new conceptual mass family >- Enable "3D snapping" option		X
2	Workplane Space Setting	Show Work Plane >- Select work plane >- Change "Space" setting	X	
3	Ellipse Line: Keep Ratio option	Select an ellipse line >- Enable "Keep Ratio" option	X	
4	Arc Line: Keep Concentric option	Select an arc line >- Enable "Keep Concentric" option	X	
5	Apply Area Rule option	Create new area boundary line >- Enable "Apply area rule" option		X
6	Modify: Scale tool	Modify >- Scale		X
7	Create Level: Make Plan View and Plan View Types setting	Create a level >- Change "Make Plan View" checkbox and "Plan View Types" settings		X
8	Annotation: Tag by Category tool	Click Annotation>Tag by category	X	X

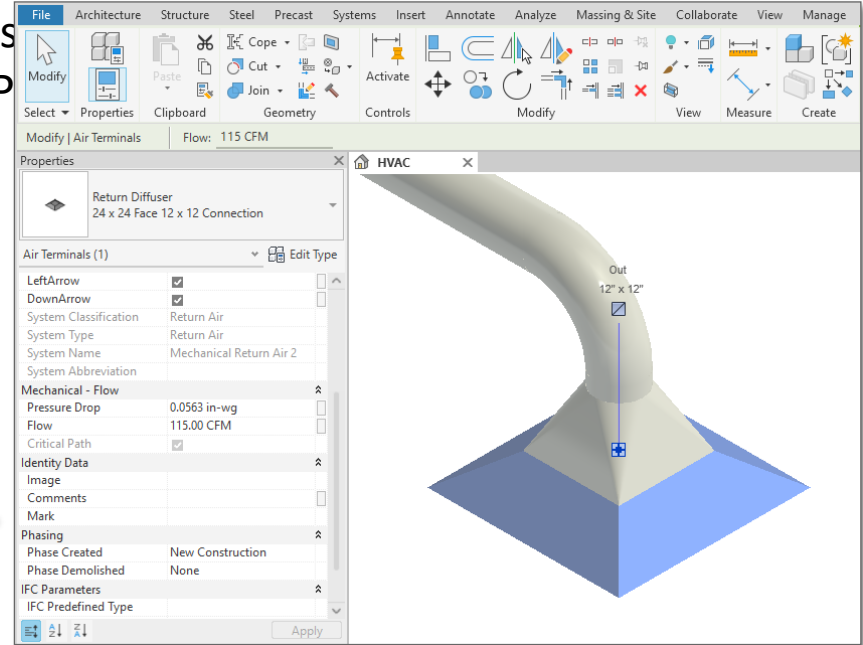
Easier to find controls, that are more visible and accessible

Disable Mark value for MEP categories

Revit 2025

• Mark Numbers will no longer auto-generate as new elements are created for the following MEP categories

- MEP Ancillary Framing
- MEP Fabrication Ductwork Stiffeners
- Air Terminals
- Mechanical Equipment
- Duct Accessories
- Electrical Equipment
- Electrical Fixtures
- Mechanical Control Devices
- Lighting Fixtures
- Pipe Accessories
- Sprinklers
- Plumbing Fixtures
- Plumbing Equipment



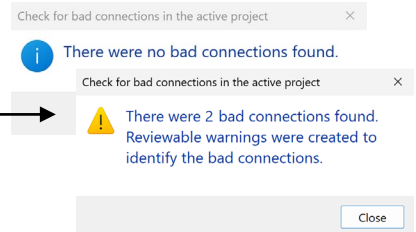
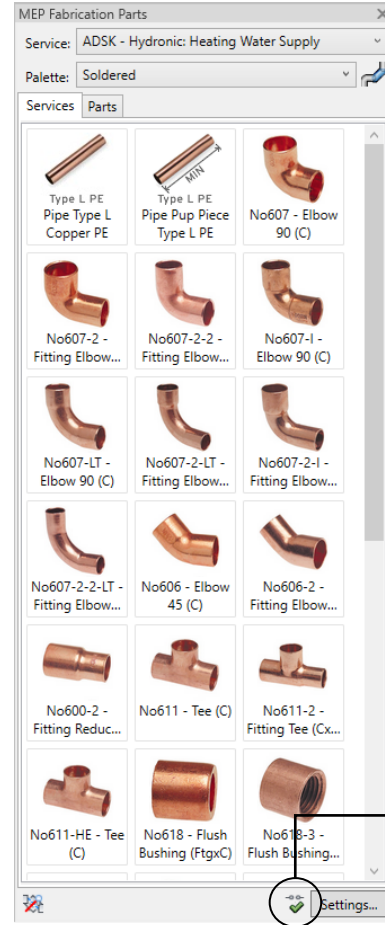
Streamline mark numbering for cleaner documentation

Validate model integrity

Revit 2025

- Validate model health before updating configuration
- No longer wait for several hours for reload configuration only to undo the reload due to disconnects
- Issues are stored as reviewable warnings

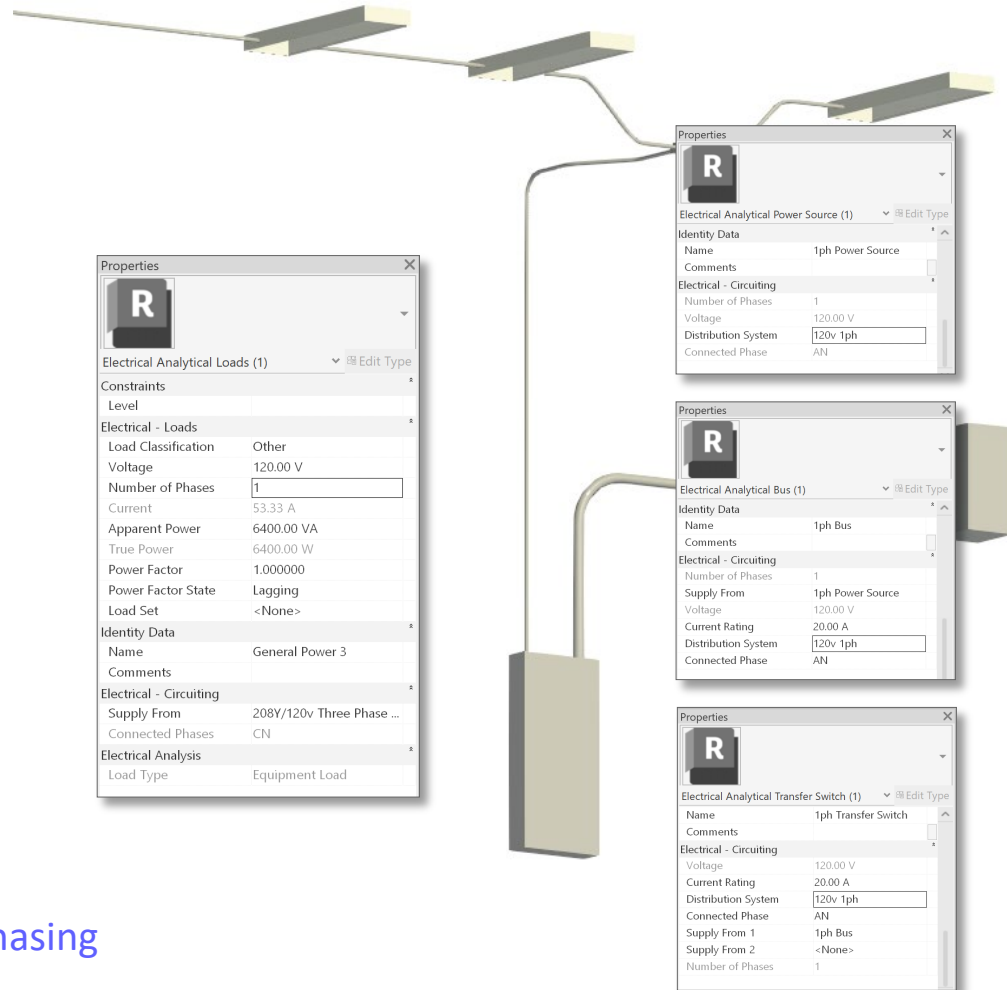
Avoid fabrication rework with model validation



Single-phase components

Revit 2025

- Revit will now support single-phase components within three-phase connections and a variety of single-phase and three-phase configurations
- Parameters have been renamed to clearly identify power properties



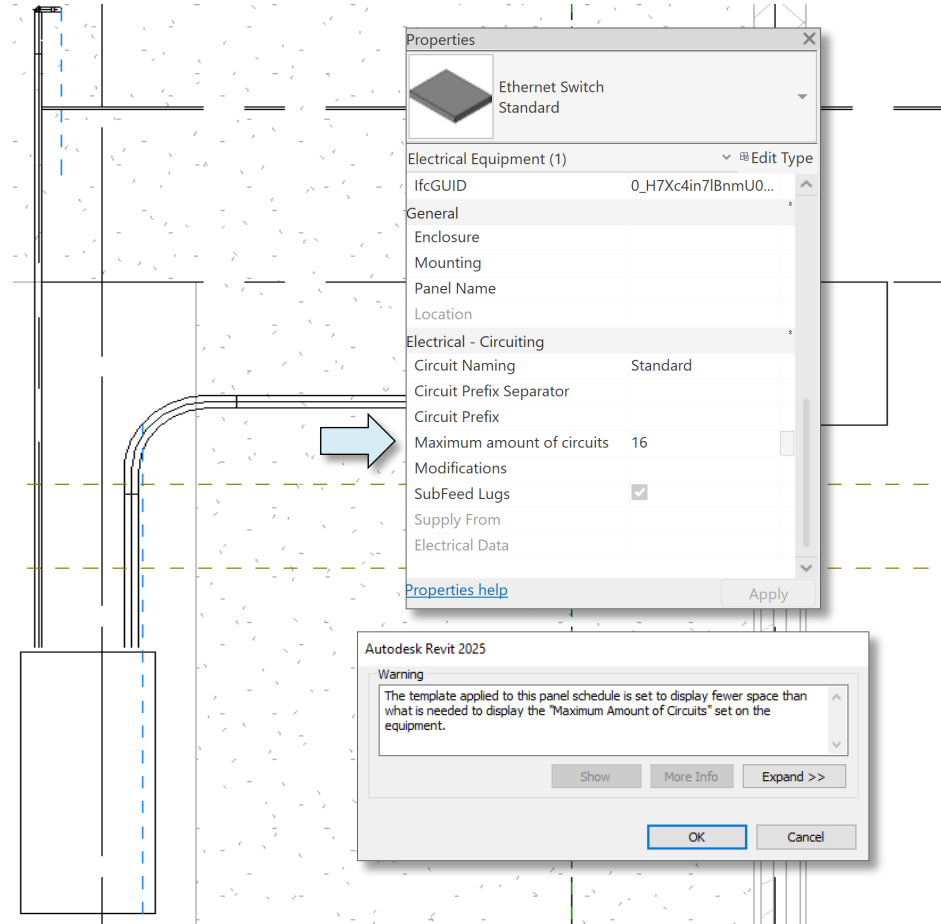
Enhanced efficiency and design for electrical phasing

Maximum circuits parameter for “Data/Other Panel”

Revit 2025

- A new parameter “Maximum amount of circuits” has been added for data and other panel
- Variable amount option can be enabled for data panel schedule templates
- Revit will show “Warning” if user attempts to connect more circuits than “Maximum amount of circuits”

Enhanced efficiency for electrical design

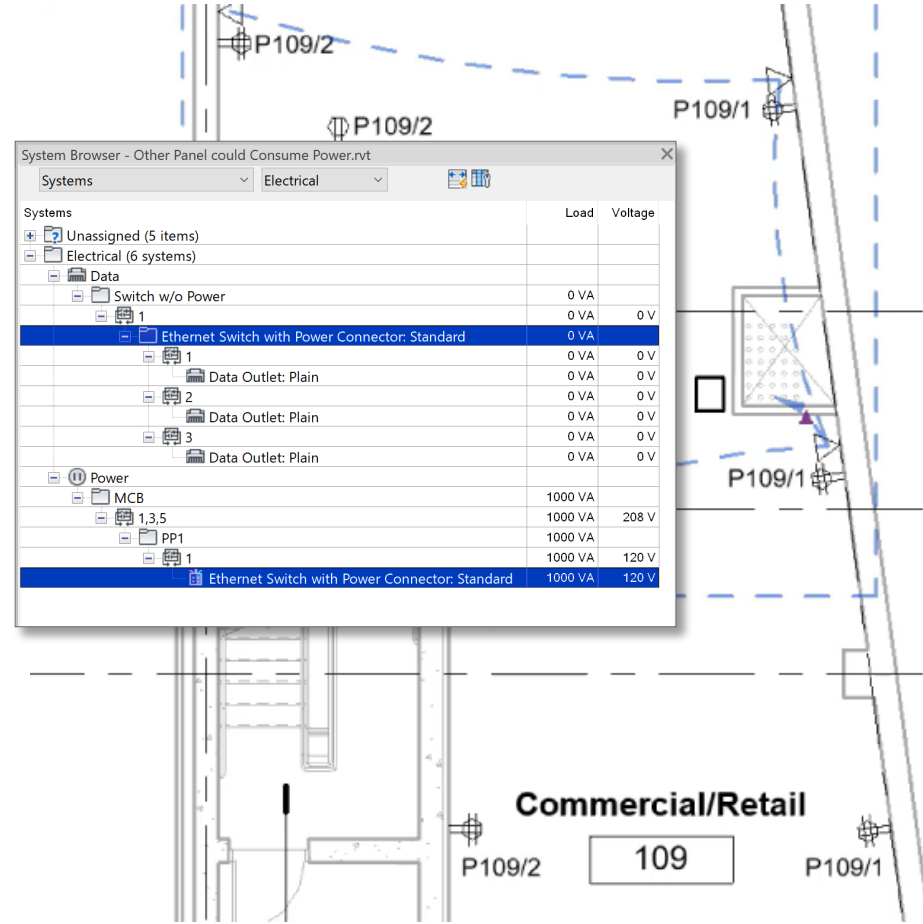


Other panels can consume power

Revit 2025

- Power from low voltage panels like fire alarms are now accounted for on power circuits
- The System Browser will report the load to the assigned power connector

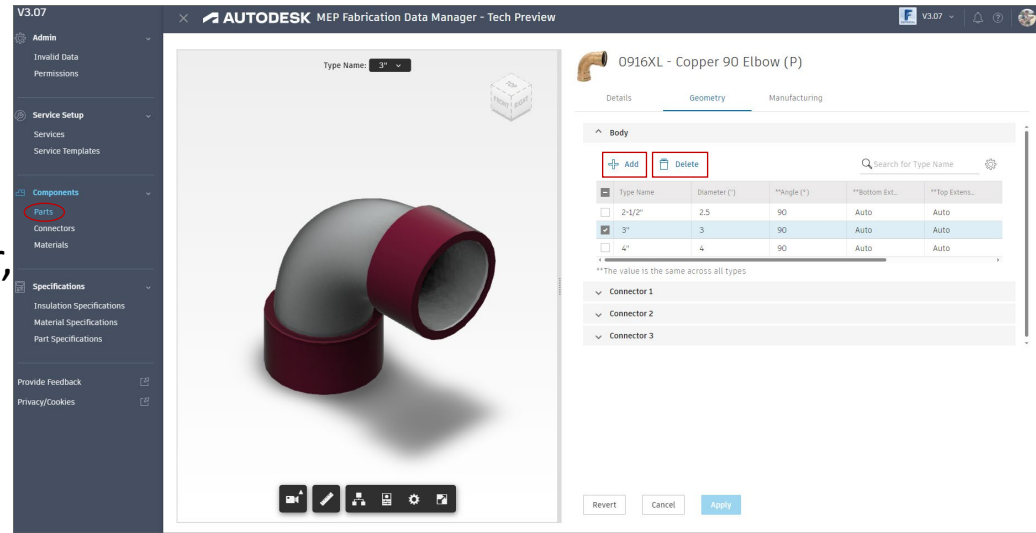
Expanded options for informed data of electrical systems



Fabrication Data Manager - edit part type geometry

Revit 2025

- Edit geometry in Fabrication Data Manager (FDM) for product listed parts only
- Add and remove part types
- Easily edit part data such as diameter, angle and length

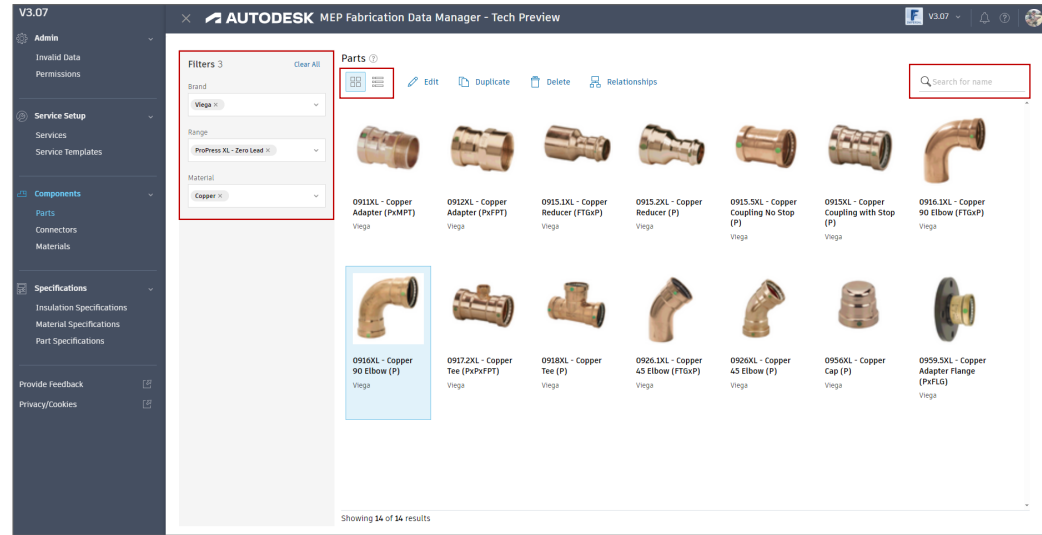


Enhanced features for editing fabrication parts

Fabrication Data Manager - part search

Revit 2025

- More accurate parts search in Fabrication Data Manager (FDM)
- Filter using part data
- Search by part name
- Choose between tile and table views

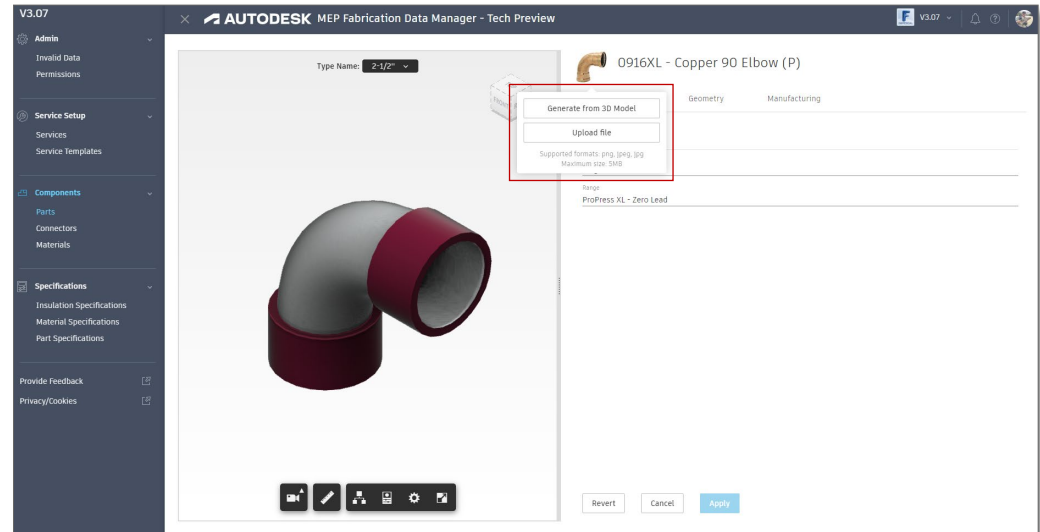


Enhanced features for fabrication part search

Fabrication Data Manager - upload and assign images

Revit 2025

- Easily upload and assign images to parts in Fabrication Data Manager (FDM)
- Generate from 3D Model will take snapshot of current view
- Upload File will allow you to bring in a png, jpeg, or jpg image



Simplified imaging for fabrication parts



Sustainability

Revit 2025

Export gbXML schema version 7.03

Revit 2025

- Revit now supports the latest version of gbXML (v7.03)

- Expanded descriptions of HVAC equipment and operational parameters including

- Zone Equipment
- Air Systems
- Hydronic Loops
- HVAC systems: Air systems, Heat Exchangers, Fans, Chiller and Coil types

More comprehensive modeling of building energy systems



v7.03

Zone Equipment (1) Edit Type	
Identity Data	
Name	VAV-01
Energy Analysis	
Equipment Type	Variable Air Volum...
Behavior	One per Space
Heating Coil	Hot Water
Heating Hot Water...	HW-01
Air System	AHU-1
Draw Ventilation	<input type="checkbox"/>



ZoneHVACEquipment : aim0362	
zoneHVACEquipmentType	VAVBox
drawVentilation	true
heatingCoilType	HotWater
id	aim0362
Name	VAV-01-1
CADObjectId	398494-1
AirSystemId	
airSystemIdRef	aim0358
HydronicLoopId	
hydronicLoopIdRef	aim0354
hydronicLoopType	HotWater

Air Systems (1) Edit Type	
Identity Data	
Name	AHU-1
Energy Analysis	
Heat Exchanger	<None>
Preheat Coil	<None>
Cooling Coil	Chilled Water
Chilled Water Loop	CHW-01
Heating Coil	Hot Water
Heating Hot Water...	HW-01
Fan	Variable Volume



AirSystem : aim0358	
heatingCoilType	HotWater
coolingCoilType	ChilledWater
id	aim0358
Name	AHU-1
CADObjectId	398496
Fan : aim0359	
fanType	VariableVolume
id	aim0359
HydronicLoopId	
hydronicLoopIdRef	aim0354
hydronicLoopType	HotWater
coilType	Heating
HydronicLoopId	
hydronicLoopIdRef	aim0356
hydronicLoopType	PrimaryChilledWater
coilType	Cooling

Water Loops (1) Edit Type	
Identity Data	
Name	CHW-01
Energy Analysis	
Loop Type	Chilled Water
Chiller Type	Water Cooled
Condenser Water ...	CDW-01

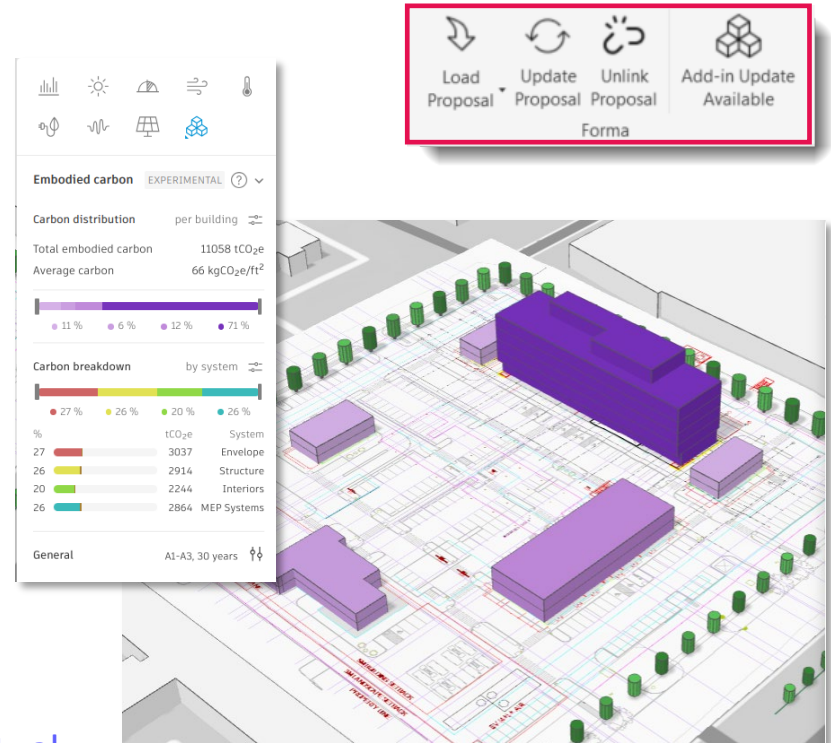


HydronicLoop : aim0356	
loopType	PrimaryChilledWater
fluidType	Water
chillerType	WaterCooled
id	aim0356
Name	CHW-01
CADObjectId	398500

Forma Add-In for Revit - Updates

- Access in Revit proposals optimized by the latest set of Forma's environmental analysis and capabilities:
 - Embodied Carbon Tech Preview
 - Solar Analysis Beta
 - Rowhouse tool
 - Rhino extension
- Update notifications in Ribbon

Reduce the environmental impact in Forma's conceptual proposals and transfer them to Revit



Total Carbon Analysis for Architects

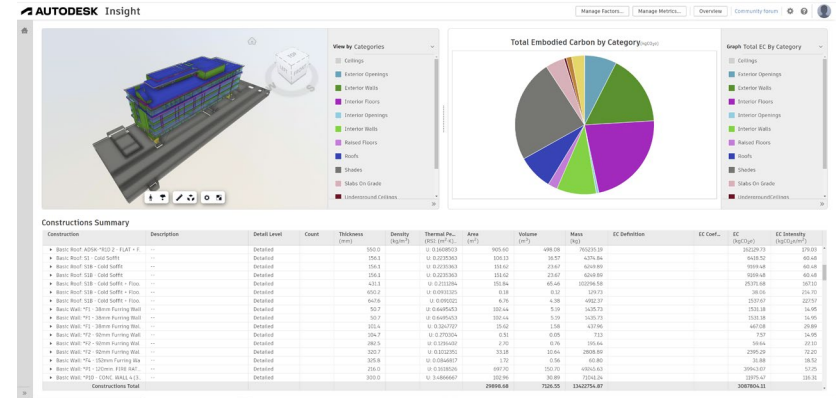
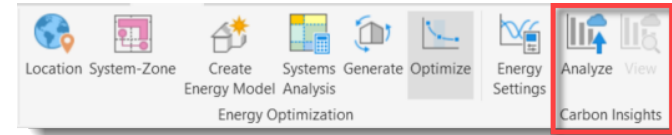
Insight - Carbon Insights

- Offers directional insight on embodied and operation carbon impacts and tradeoff between architectural systems in Revit

- Available in Revit as a plugin

- Leverage EC3 Databases to configure the analysis

- Display results in graphs by Construction, Material, Intensity by Area

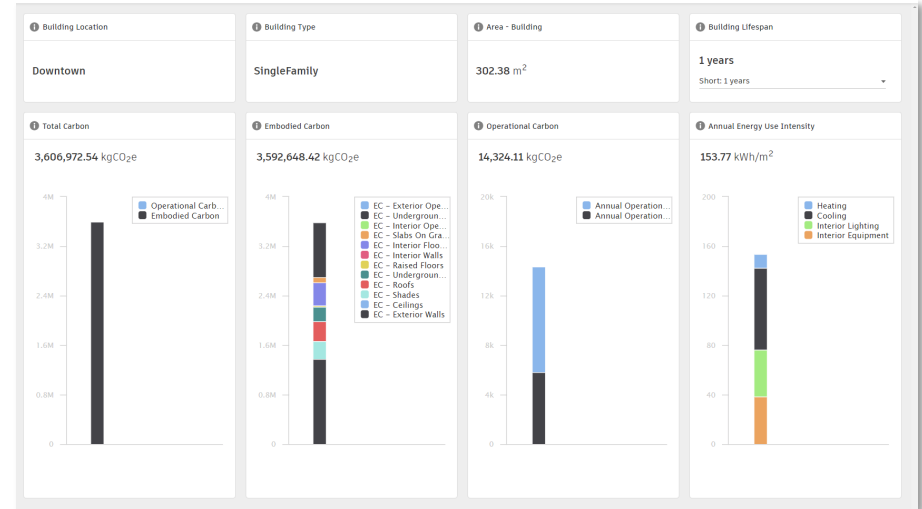
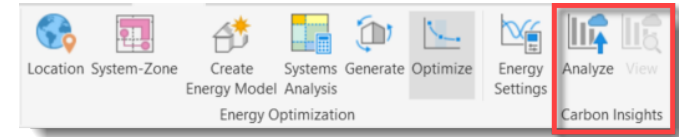


Access data-driven insights for designing buildings with a lower carbon footprint

Total Carbon Analysis for Architects

Insight – Flexible Dashboards

- Build customized flexible, open and transparent dashboards
- Suggest targeted improvements
- Create custom data points (factors) and performance indicators (metrics) to customize the analysis scope



Make comparisons and understand design trade-offs, with new flexible dashboards



Analysis

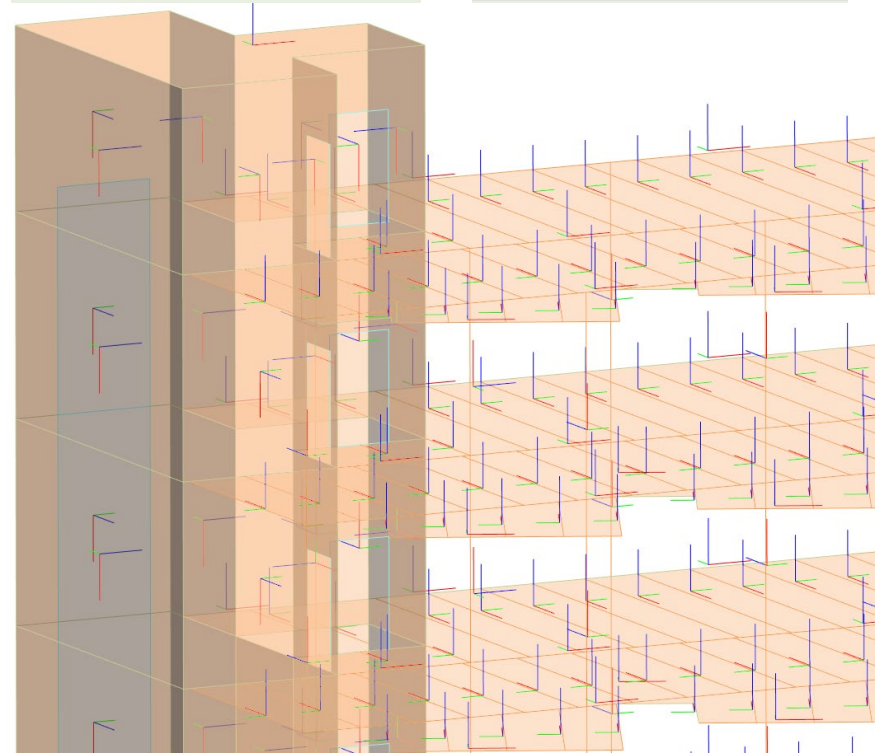
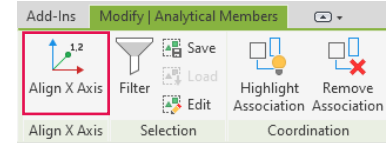
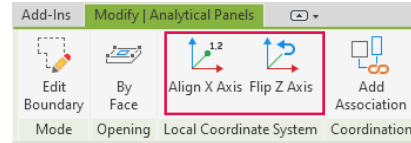
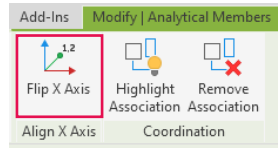
Revit 2025

LCS orientation for analytical elements

Revit 2025

- Change or align the X axis orientation for multiple analytical members at the same time
- Use a reference line to align the X axis orientation or align/flip the Z axis orientation for multiple analytical panels simultaneously
- Supports the control of orientation for loads, boundary conditions, results, etc.
- Clear and accurate structural analysis results interpretation

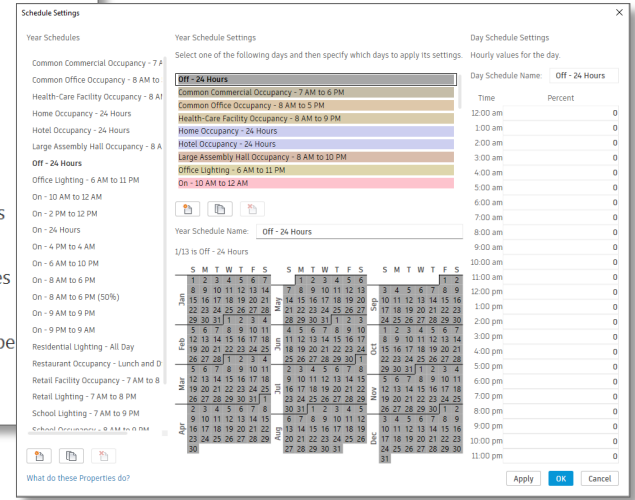
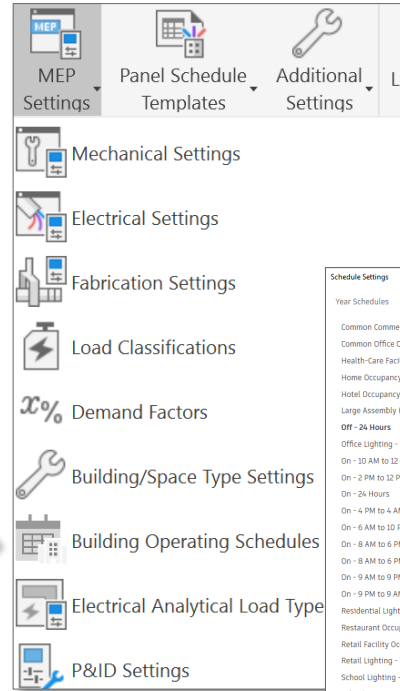
Improved analytical consistency with structural analysis software



Annual operating schedules for energy analysis

Revit 2025

- Building Operating Schedules can now be easily accessed under MEP Settings
- Annual schedules can now be defined for different operating conditions, multiple daily schedules, and hourly load intensity



Enable energy efficiency in design with enhanced scheduling features



Interoperability

Revit 2025

Improved IFC Export Mapping Settings



- Customize Revit category mapping with templates
- Create, import, duplicate, save, export, rename and delete templates
- Search category keywords
- Use the dialog launcher to select IFC Class and Predefine type
- Reset to default values.

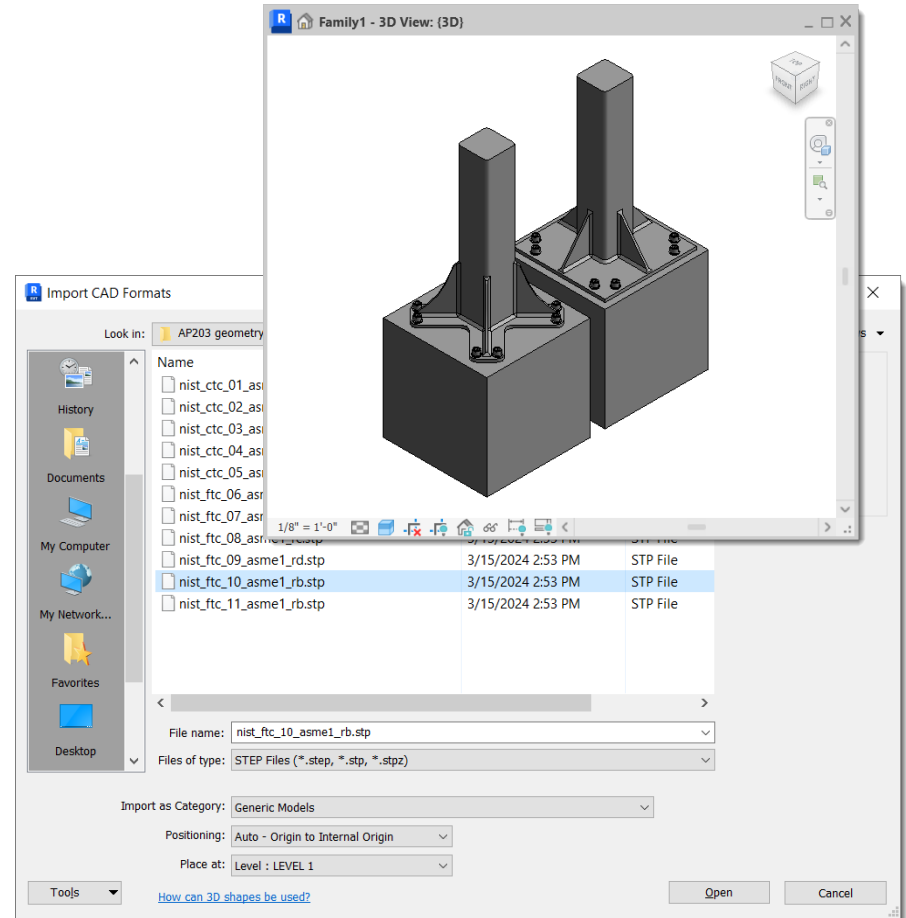
The screenshot shows two overlapping dialog boxes. The top one is 'Modify Setup' with tabs for General, Additional Content, Property Sets, Level of Detail, Advanced, and Geographic Reference. The 'Category Mapping' dropdown is highlighted with a red box. The bottom dialog is 'Manage IFC Export Mapping Settings', which has a search bar containing 'equip' and a table of mapping settings.

	Revit Category	IFC Class	Predefiner	User-de	Reset
<input checked="" type="checkbox"/>	Electrical Equipment	IfcBuildingEle...	...		↺
<input checked="" type="checkbox"/>	Food Service Equipmen	IfcElectricApp...	...		↺
<input checked="" type="checkbox"/>	Mechanical Equipment	IfcBuildingEle...	...		↺
<input type="checkbox"/>	Mechanical Equipment	IfcAnnotation...	...		↺
<input checked="" type="checkbox"/>	Medical Equipment	IfcMedicalDe...	...		↺
<input checked="" type="checkbox"/>	Plumbing Equipment	IfcBuildingEle...	...		↺
<input checked="" type="checkbox"/>	Specialty Equipment	IfcBuildingEle...	...		↺

Improve collaboration with enhanced interoperability settings

Import/Export STEP files

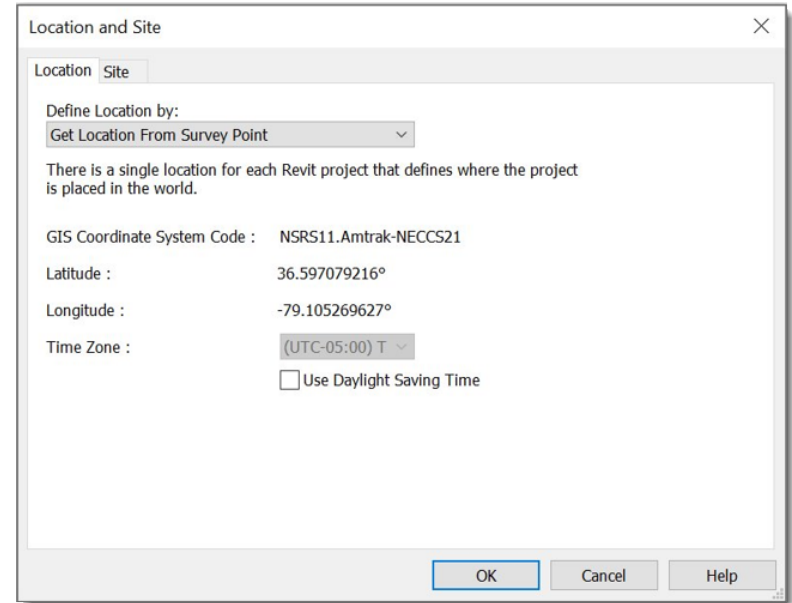
- The STEP format is a universal neutral format read by most CAD software programs
- Enhanced coordination with non-Revit stakeholders and product manufacturers
- Map imported geometry to a specified Revit category



Expanded options of information exchange

Support new GIS coordinate systems

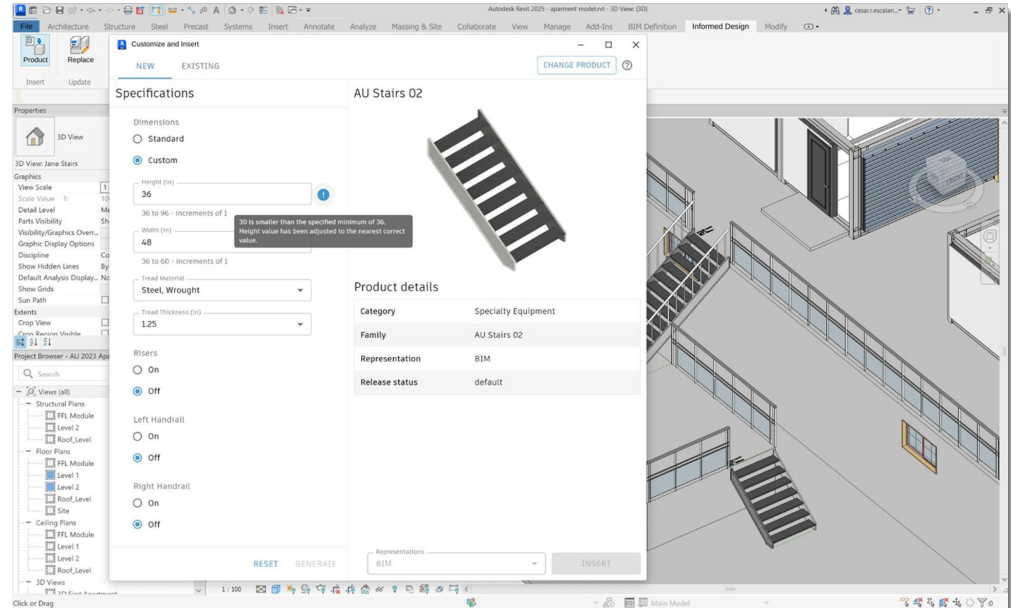
- Support five new GIS coordinate systems
 - CGCS2000
 - UK GG951
 - Amtrak Northeast Corridor
 - US Albers NAD83
 - ISN2016



Enhanced integration with geodesical referenced datasets

Informed Design for Revit

- **Template Discovery:** Browse catalogs of known-manufacturable building products for use in Revit projects.
- **Customization:** Tailor building products to align with your building's requirements, ensuring compliance with manufacturers' specifications.
- **Certainty:** Ensure design decisions are accurate and manufacturable to reduce project risk and prevent errors.

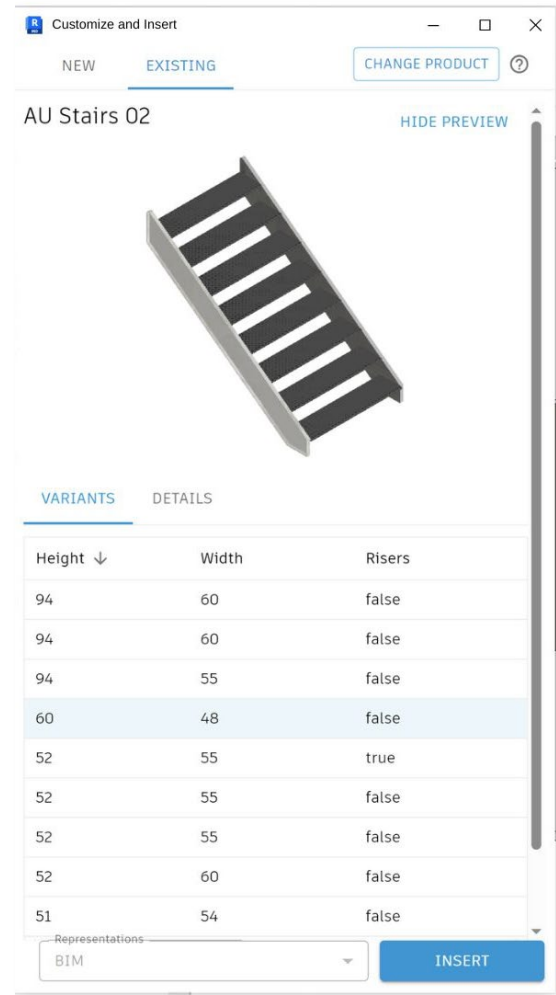


Leverage manufacturer-supplied data in real-time to design more quickly, accurately, and cost-effectively.

Informed Design for Revit

- **Insert pre-generated variations:** Browse the list of validated product variations to place instances quickly and easily.
- **Update and replace:** Modify the values of existing instances to configure replacements. Swap out-of-date products with the manufacturer's latest product release.

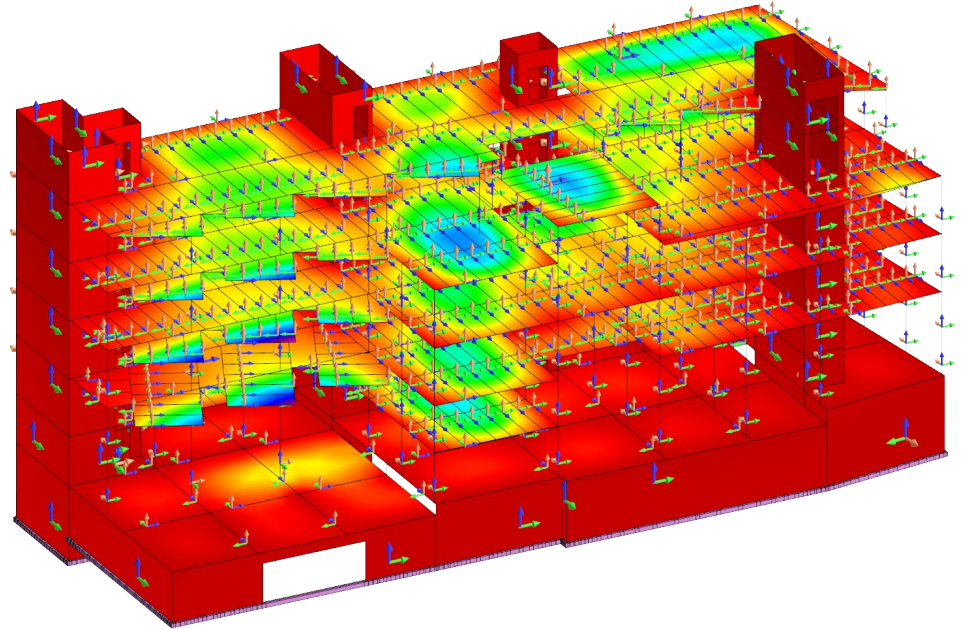
Explore building product templates, tailor and add them into design files, ensuring traceability as a known, manufacturable component.



Revit to Robot Link enhancements

Revit 2025

- Transfer of Local Coordinate Systems after Revit analytical LCS enhancements
- Transfer for split members

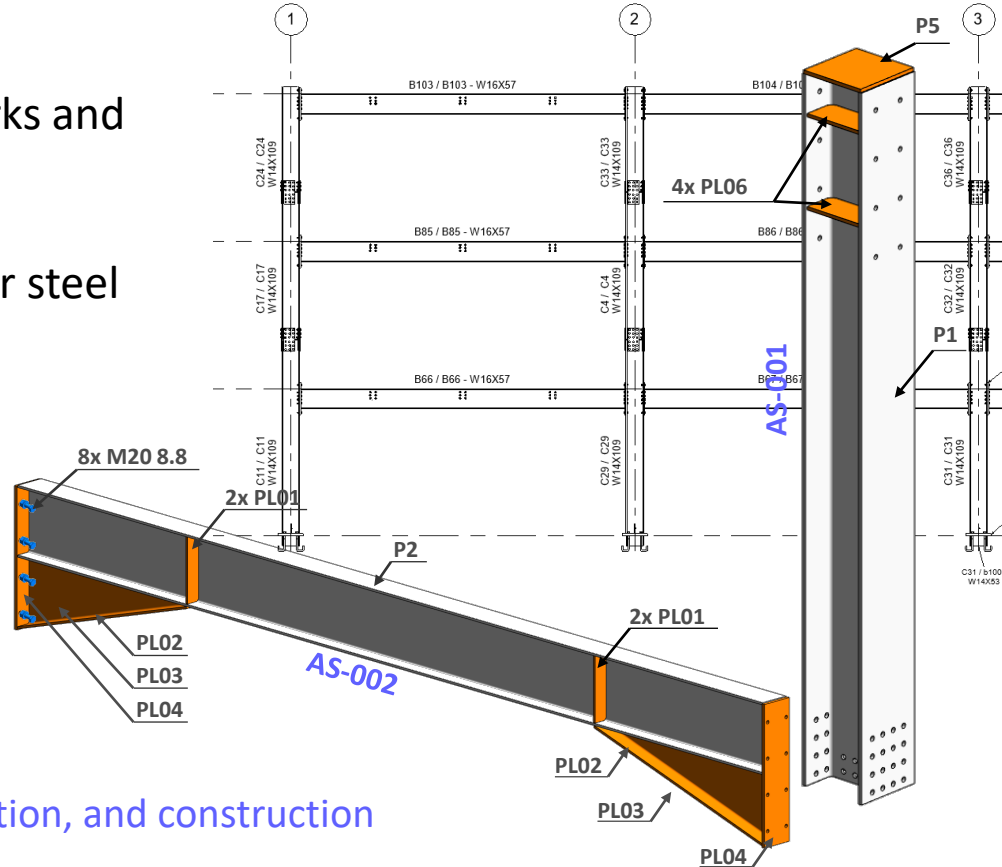
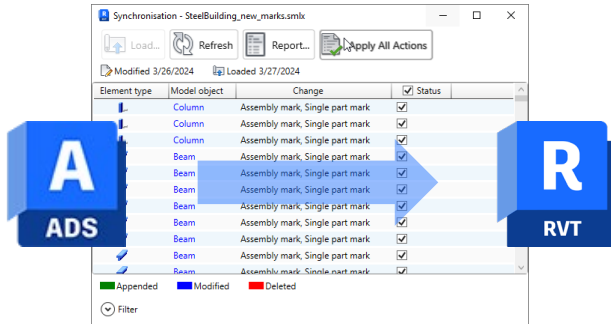


Better support of BIM-centric structural analysis workflows

Use Advance Steel part & assembly marks in Revit

Revit 2025

- Transfer and synchronize single part marks and assembly marks
- Create general arrangement drawings for steel projects



Better connected projects across design, fabrication, and construction



Cloud data

Revit 2025

Monitoring of Coordination Model changes

Revit 2025

- Comparing changes across coordination model versions
- Displaying type & number of changes
- Consistent results & user experience with Autodesk Construction Cloud
- Insights into object parameters that changed

Collaborate View Manage Add-Ins Modify

Worksharing Monitor Show History Restore Backup Publish Settings Manage Models Copy/ Monitor Coordination Review Coordination Settings Reconcile Hosting Interference Check Coordination Model Changes Shared Views Share

Coordination Model Changes

Snowdon Towers Sample Architectural.rvt (Coord ...)

Autodesk Docs://Building TM/Snowdon Towers/Project ...
View: Coord - Arch Walls 2

Current version: V7 27 Mar 2024

Compare to: V5 27 Mar 2024

5 Added 196 Modified 8 Deleted

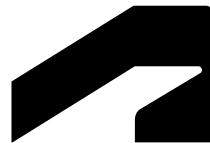
Walls

- Basic Wall	5 189 6
- Exterior - 13 5/8" R	0 1 0
- Core - Concrete 12"	0 4 1
- Foundation - 24" Cr	0 2 0
- Chase - GWB & Met	0 8 0
- Core - Concrete 18"	0 1 0
- Party - 6 1/8" (2-hr	0 2 1 0
- Exterior - 12 5/8" R	0 11 0

● Basic Wall [678361]
● Basic Wall [697710]
● Basic Wall [698364]
● Basic Wall [736143]
● Basic Wall [752749]
● Basic Wall [1054757]
● Basic Wall [1055871]
● Basic Wall [114326201]

Learn about Coordination Models

Coordinate design development and model deliverables more effectively between stakeholders



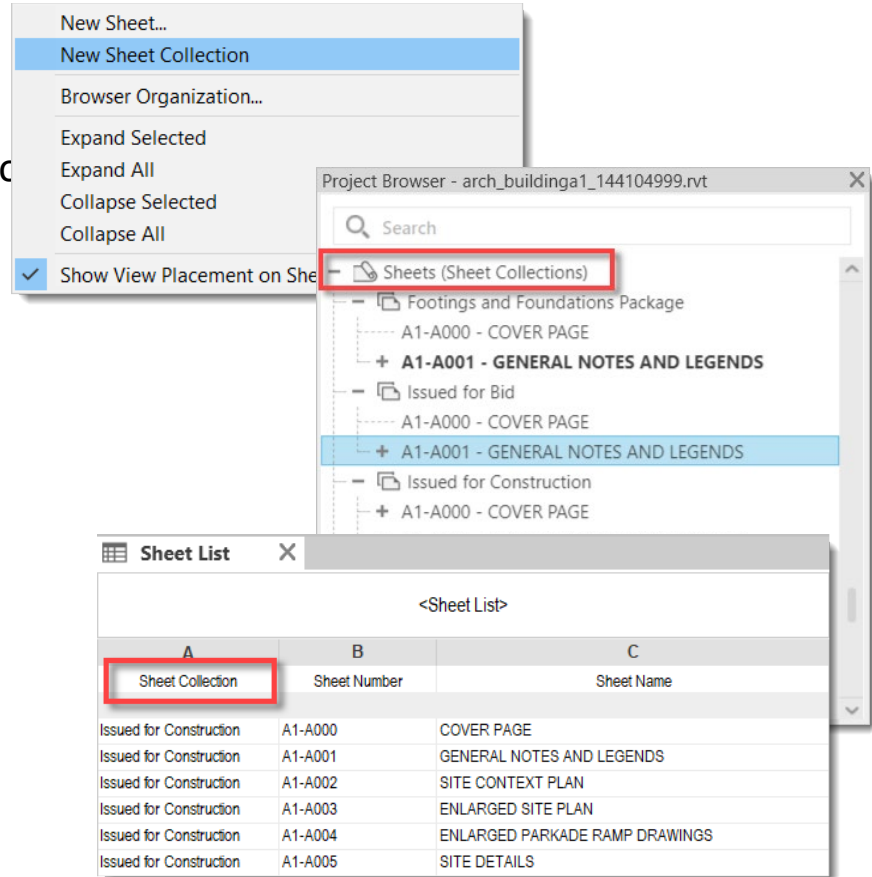
Documentation efficiency

Revit 2025

Sheet Collections

- Create multiple, flexible groups or packages of sheets
- Allow duplicate Sheet Number values across collections
- Use two new view parameters: *Sheet Collection* and *Referencing Sheet Collection*
- Drag and drop sheets in the Project Browser to organize sheet in collections

Deliver projects faster with clear and organized sheet collections



The image shows a screenshot of the Revit software interface. On the left, a context menu is open with 'New Sheet Collection' highlighted. On the right, the Project Browser shows a tree view of sheet collections. The 'A1-A001 - GENERAL NOTES AND LEGENDS' collection is highlighted. Below the Project Browser, the 'Sheet List' window is open, displaying a table of sheet information.

<Sheet List>		
A	B	C
Sheet Collection	Sheet Number	Sheet Name
Issued for Construction	A1-A000	COVER PAGE
Issued for Construction	A1-A001	GENERAL NOTES AND LEGENDS
Issued for Construction	A1-A002	SITE CONTEXT PLAN
Issued for Construction	A1-A003	ENLARGED SITE PLAN
Issued for Construction	A1-A004	ENLARGED PARKADE RAMP DRAWINGS
Issued for Construction	A1-A005	SITE DETAILS

Sheet Collections

- Apply a custom Browser Organization using the Sheet Collection parameter
- Create new sheets directly on under a collection in the project browser
- Filter sheets by Sheet Collection before printing or exporting
- Apply View Filters using Sheet Collection values

Deliver projects faster with clear and organized sheet collections

Browser Organization Properties

Filtering Grouping and Sorting

Browser Organization: Sheet Collection
Specify the grouping/sorting rules for this browser organization.

Group by: Sheet Collection

Using: All characters Leading characters 1

Then by: <None>

Using: All characters Leading characters 1

Then by: Select Views/Sheets

Using: Select print set: FULL SET

Then by: <multiple>

Using: Hide un-checked views/sheets

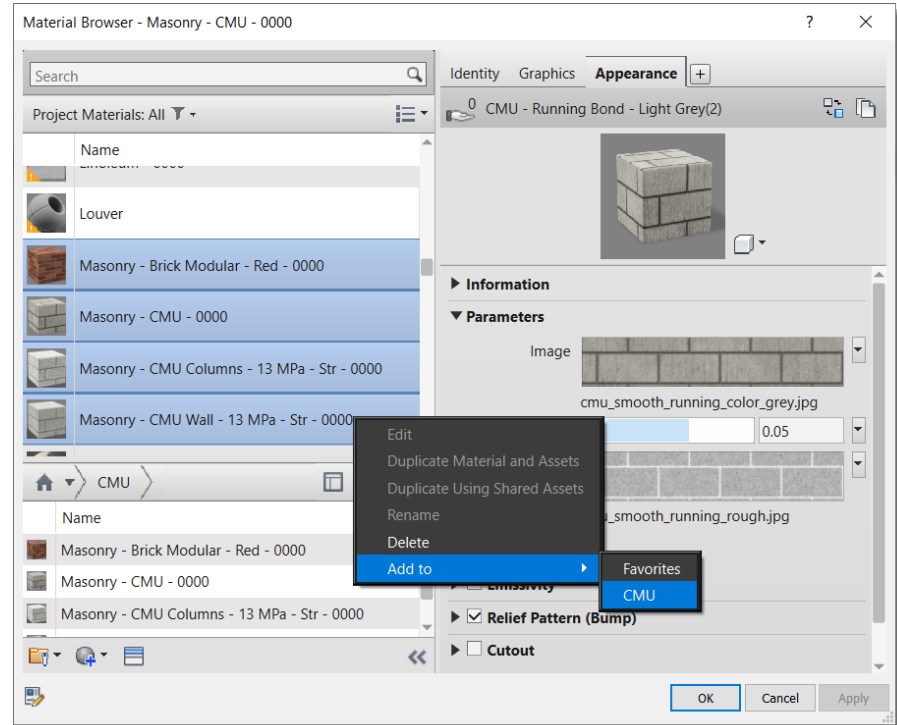
Type	Name
<input type="checkbox"/>	2D Views
<input type="checkbox"/>	3D Views
<input checked="" type="checkbox"/>	All Sheets
<input checked="" type="checkbox"/>	Sheets: Collection 1
<input type="checkbox"/>	Sheets: Footings and Foundations Package
<input type="checkbox"/>	Sheets: Issued for Bid
<input checked="" type="checkbox"/>	Sheets: Issued for Construction
<input type="checkbox"/>	Sheets not in Collections

Type	Name
<input checked="" type="checkbox"/>	Issued for Construction Sheet: A1-A100 - PARKADE FLOOR PLAN
<input checked="" type="checkbox"/>	Issued for Construction Sheet: A1-A101 - LEVEL 1 AND 2 FLOOR PLAN
<input checked="" type="checkbox"/>	Issued for Construction Sheet: A1-A102 - LEVEL 3 AND 4 FLOOR PLAN
<input checked="" type="checkbox"/>	Issued for Construction Sheet: A1-A103 - LEVEL 5 AND 6 FLOOR PLAN

Batch delete and add to library materials

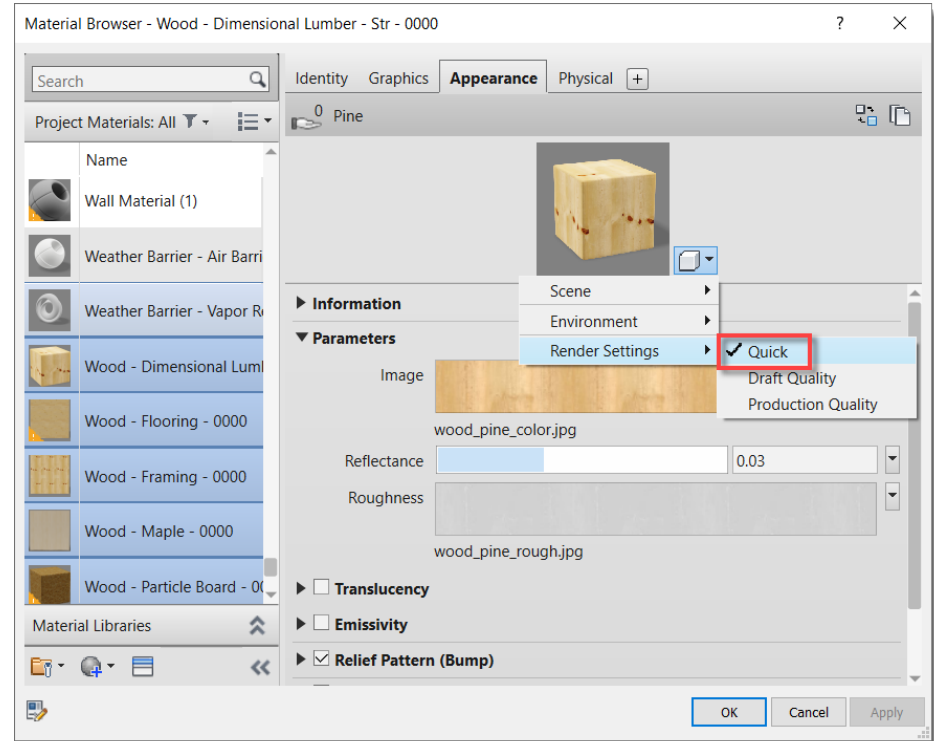
- Select multiple materials at once
- Delete materials in batches
- Add material to custom libraries in batches

Manage project materials quickly



Material thumbnail generator improvement

- Generate thumbnails in the material browser faster with the new 'Quick' render setting
- Display thumbnails with fewer CPU resources

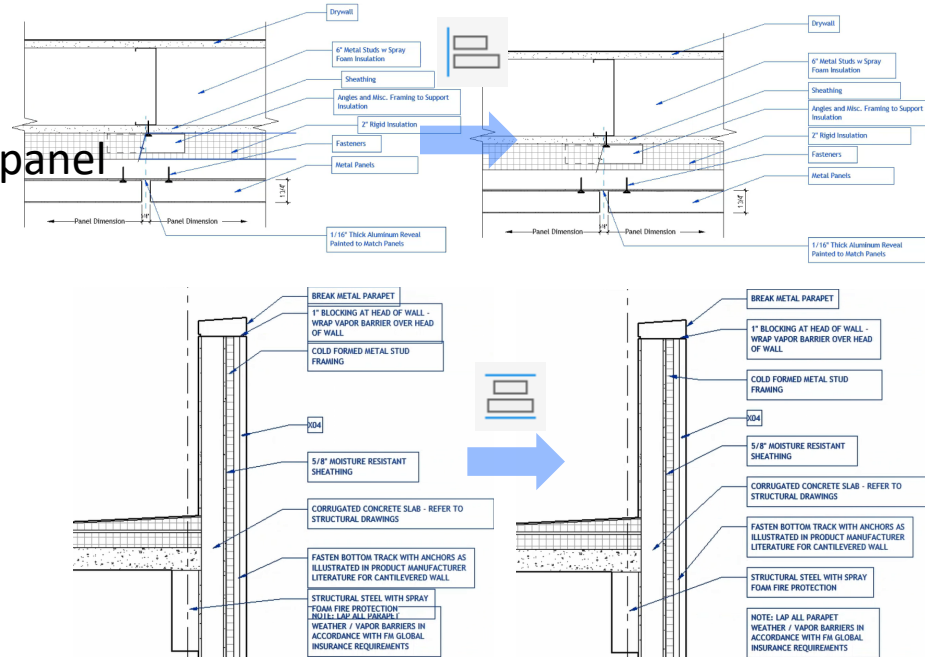
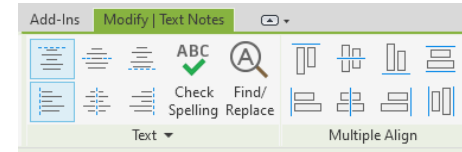


Explore project materials with ease

Align and distribute annotations

Revit 2025

- Select annotations including text, tags and keynotes
- New Align and Distribute contextual ribbon panel
- Neatly distributed with one click
- Text alignment for multiple selected texts

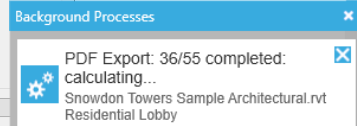
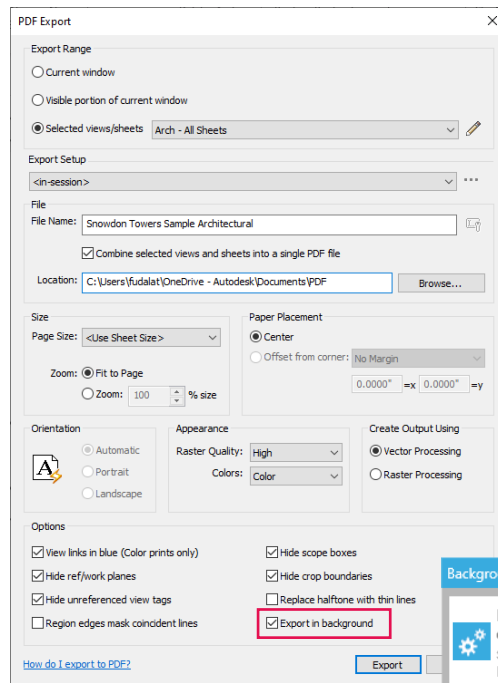


Quickly align annotations to create neat and legible drawings

Background PDF Export

Revit 2025

- Continue working on your model while the export process completes
- Monitor the status of the PDF export

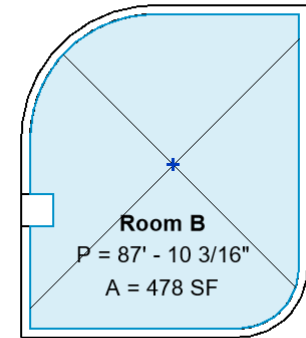
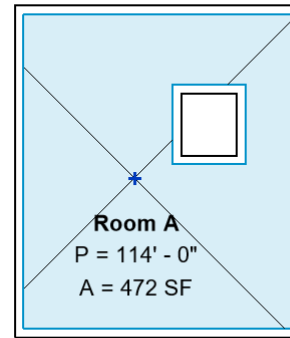


Seamless design workflow



Room Perimeter accuracy improvement

- More accurate room perimeter calculations at:
 - Inner loop boundaries
 - Curved boundaries
- Perimeter values may change slightly when a file is upgraded



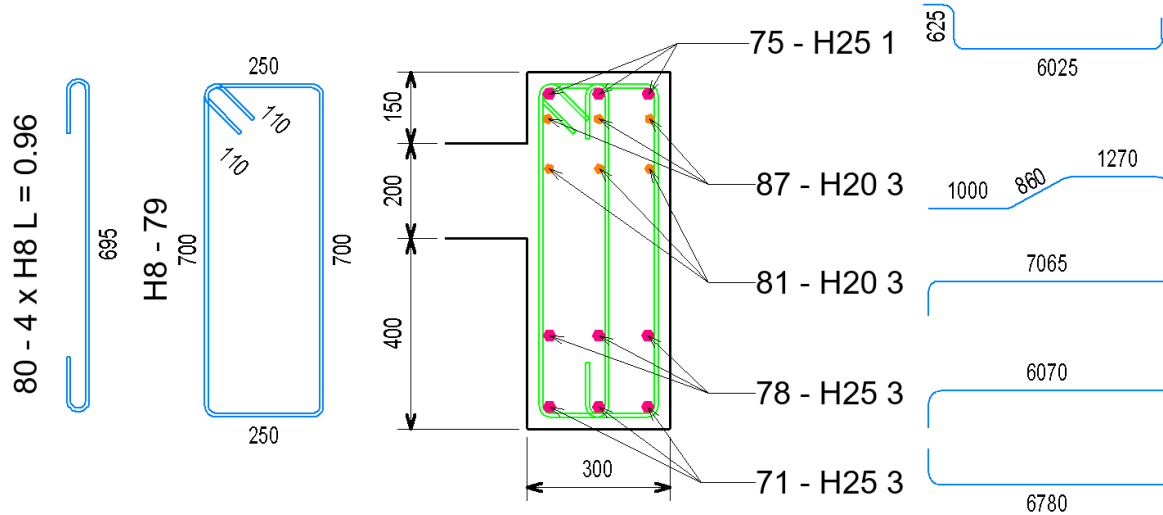
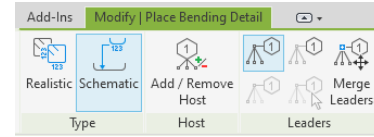
<Room Schedule>		
A	B	C
Name	Perimeter	Area
Room A	114' - 0"	472 SF
Room B	87' - 10 3/16"	478 SF

Get more accurate data from room schedules

Schematic bending details for rebar tagging

Revit 2025

- Options to show dimensions or just the bar bending
- More complete shop drawings



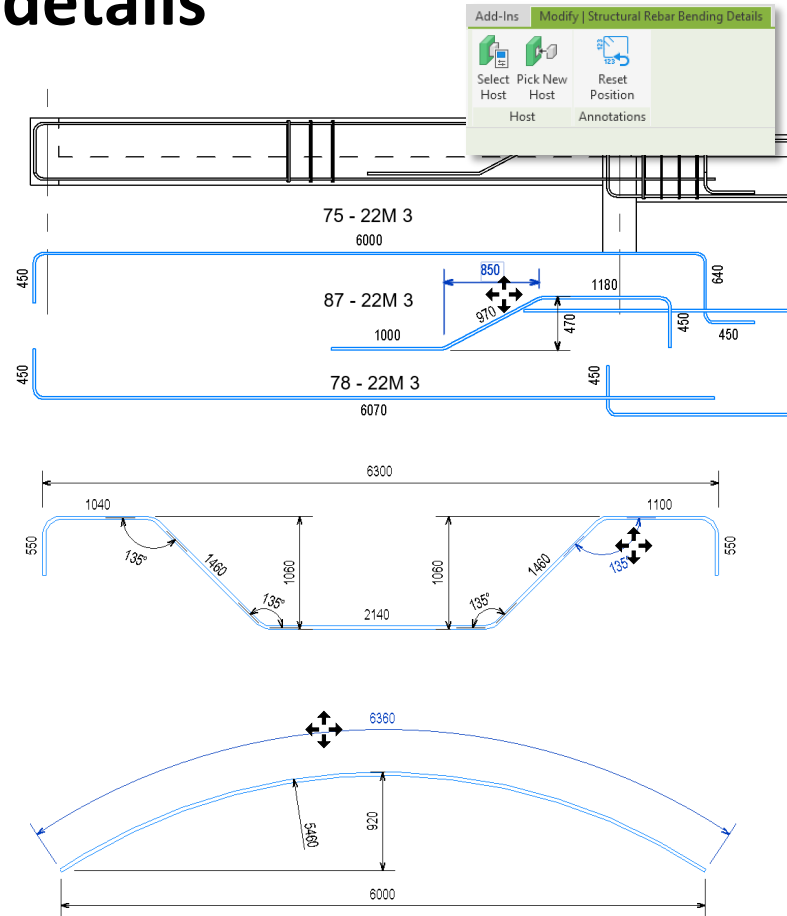
Streamline coordination between designers and fabricators

Enhanced annotations in bending details

Revit 2025

- Improved control over annotations in bending details
- Select and move dimensions and tag in bending details
- Align tags in realistic bending details
- Align multiple bending details

Streamline coordination between designers and fabricators

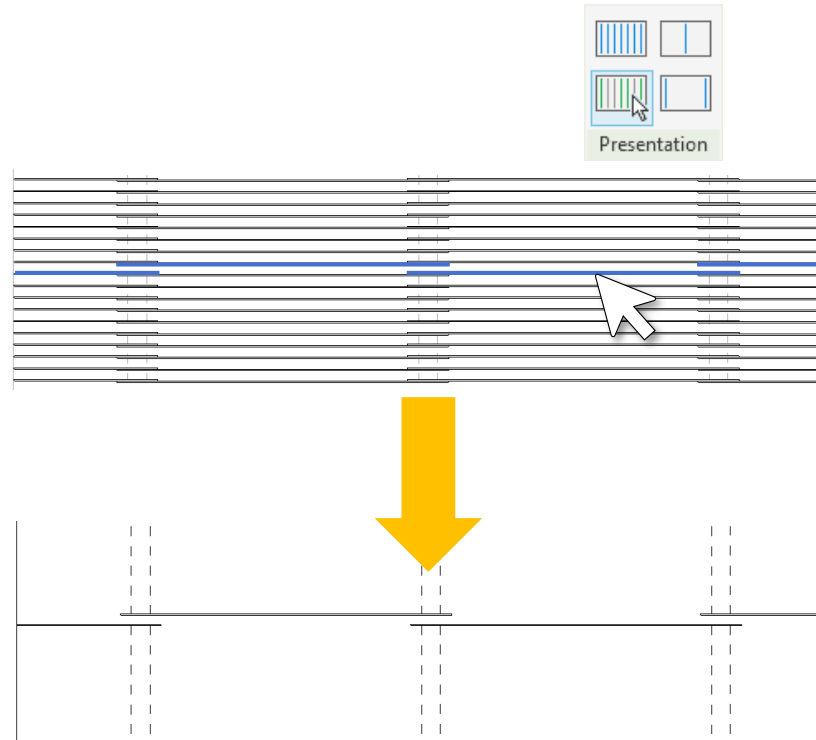




Enhanced rebar set presentation

Revit 2025

- Select bars to show from multiple rebar sets
- Set presentation options for multiple bar sets at once

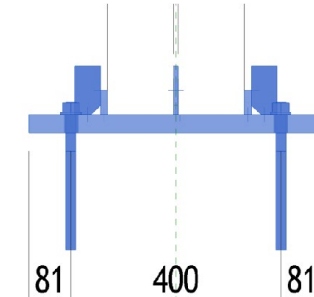
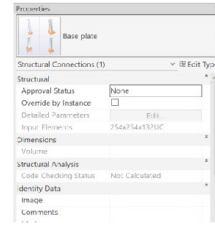
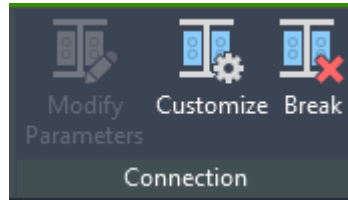


Enhanced productivity during the creation of shop drawings

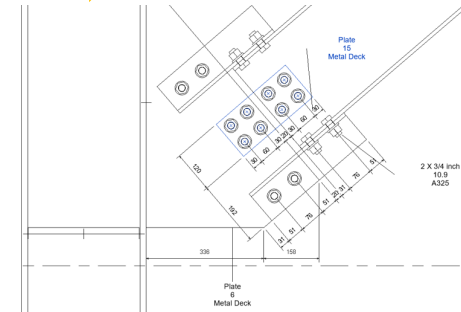
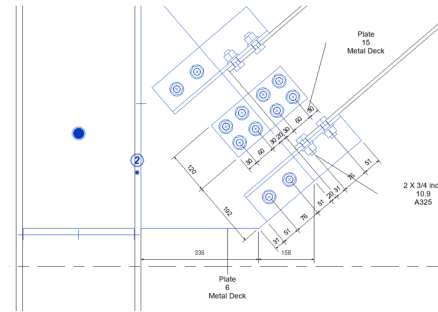
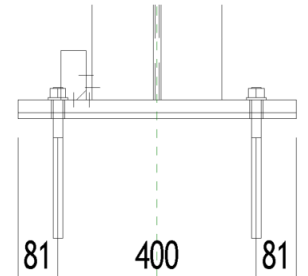
Tag and dimension components of connections

Revit 2025

- Existing tags and dimensions are preserved on steel connections break command



Break



Improve your engineering documentation

More easily access duct and pipe pressure drop data

Revit 2025

- Analytical Duct and Pipe Segments with associated tag categories have been added as Analytical Model Categories
- Flow and pressure loss information is now available in schedules and shown in properties

Family Name	Type Name	Flow	Height	Width	Analytical Length	Hydraulic Diameter	Velocity	Pressure Drop	Friction Factor	Friction	Loss Coefficient
Pex Duct Round	Pex - Round	101 CFM		0 - 10 2102"	6"	510 FPM	0.00 in-wg	0.02603	0.08 in-wg/100ft		
Pex Duct Round	Pex - Round	101 CFM		0 - 10 120"	6"	510 FPM	0.00 in-wg	0.02603	0.08 in-wg/100ft		
Pex Duct Round	Pex - Round	101 CFM		2 - 3 1/4"	6"	510 FPM	0.00 in-wg	0.02603	0.08 in-wg/100ft		
Pex Duct Round	Pex - Round	101 CFM		3'-0"	6"	510 FPM	0.00 in-wg	0.02603	0.08 in-wg/100ft		
Pex Duct Round	Pex - Round	102 CFM		2 - 3 1/4"	6"	520 FPM	0.00 in-wg	0.02608	0.08 in-wg/100ft		
Pex Duct Round	Pex - Round	102 CFM		3'-0"	6"	520 FPM	0.00 in-wg	0.02608	0.08 in-wg/100ft		
Pex Duct Round	Pex - Round	101 CFM		0 - 10 1316"	6"	510 FPM	0.00 in-wg	0.02603	0.08 in-wg/100ft		
Pex Duct Round	Pex - Round	101 CFM		0 - 10 120"	6"	510 FPM	0.00 in-wg	0.02603	0.08 in-wg/100ft		

3902 CFM
620 FPM

Properties panel for Analytical Duct Segments (1). The panel shows various parameters including Dimensions (Analytical Length: 20' 10 57/64"), Mechanical (Network Id: 2351128, System Type/Service: Return Air), and Mechanical - Flow (Section: 16, Flow: 418.02 CFM, Hydraulic Diameter: 3", Relative Roughness: 0.000113, Reynolds number: 20591.807001, Velocity: 74.83 FPM, Velocity Pressure: 0.0003 in-wg, Friction Factor: 0.02048, Friction: 0.0003 in-wg/100ft, Pressure Drop: 0.0001 in-wg, Critical Path: [X]).

Visibility/Graphic Overrides dialog for 3D View: HVAC. The dialog shows the 'Analytical Model Categories' tab selected. The 'Show analytical model categories in this view' checkbox is checked. The 'Category name search' field contains 'Segments'. The 'Filter list' is set to '<multiple>'. The dialog table shows the following settings:

	Projection/Surface			Halfnote	Detail Level
	Lines	Patterns	Transparency		
<input checked="" type="checkbox"/> Analytical Duct Segments	[Blue dashed line]	[Blue dashed line]	[Blue dashed line]	<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Analytical Pipe Segments	[Blue dashed line]	[Blue dashed line]	[Blue dashed line]	<input type="checkbox"/>	By View

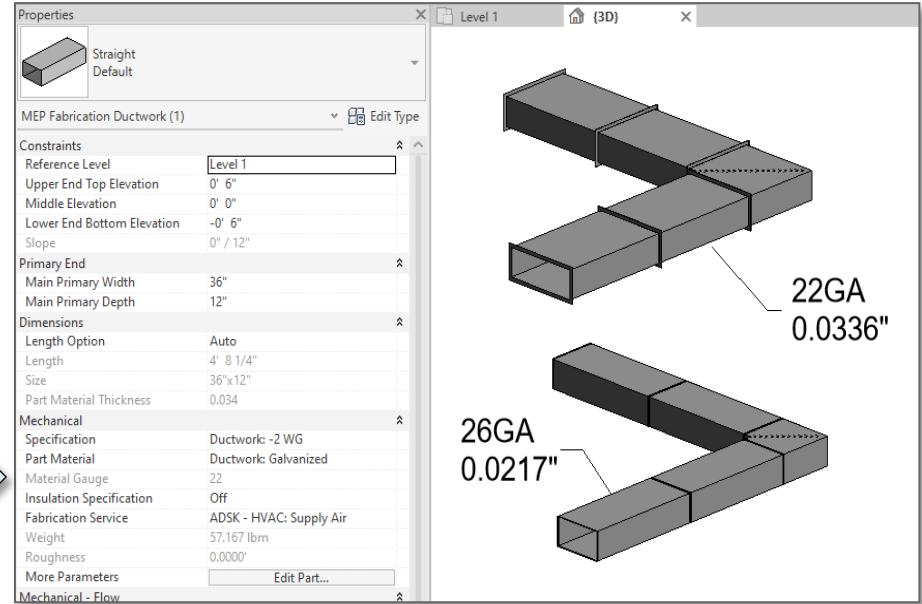
Buttons: All, None, Invert, Expand All. A note states: 'Categories that are not overridden are drawn according to Object Style settings.' Buttons: Object Styles..., OK, Cancel, Apply, Help.

Enhanced access to analytical model categories

Material Gauge parameter for fabrication ductwork

Revit 2025

- A new parameter “Material Gauge” has now been added for MEP fabrication ductwork
- This new parameter will be read-only and can be used in Tags and Schedules



Increased fabrication efficiency

<Fabrication Ductwork Schedule>		
A	B	C
Specification	Size	Material Gauge
Ductwork: -2 WG	36"x12"	22
Ductwork: -2 WG	24"x12"	26



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