

# What's new in Revit 2024

Key themes and features



### **Key themes**

**Revit 2024** 



### **New features and enhancements**

#### **Revit 2024**

#### **Design productivity**

- My Insights in Revit Home
- Dark Theme
- New Imperial and Metric Templates
- New sample model
- Modernized Project Browser with new Search
- Height parameter in scope box
- Color Books browser
- Textures visual style
- Revit to Twinmotion enhancements
- Site design Icon reorg for Massing and Site
- Site design Create Toposolid
- Site design Generate Toposolid from Toposurface
- Site design Linked Topography enhancements
- Site design Contour Display settings per Types

- Site design Cut geometry enhancement & Mass Cut excavations
- Site design Solid Sub-divisions
- Site design Cut & Split Toposolids
- Site design Graded Regions
- Site design Show shape-edit control points
- Site design Floor-based families and Slab Edges on Toposolids
- Site design Exposed Toposolid API
- New path alignment options for free form rebar
- Stirrup orientation for aligned free form rebar
- MEP fabrication ductwork stiffener
- Pipe Wall thickness as a built-in parameter
- Elevation parameters in visibility filters
- Hide insulation with hosting duct and pipe
- Parameters sorting in type/instance properties
- Export 'Family type' parameter

### **New features and enhancements**

#### **Revit 2024**

#### Simulation & analysis

- Sun Settings in the ribbon
- Run Solar Studies with seconds intervals
- Sun Paths in perspective views
- Generate energy model by view
- Enhanced structural analytical loads
- Structural area loads with color coding
- Custom physical-analytical association
- Detailed results for connection automation rules
- Non-coincident loads for electrical analytical components
- Flow and pressure calculations added to MEP fabrication network
- Network based calculation for design ductwork
- Demand loads for electrical analytical components
- Flow and pressure drop calculations

#### Cloud data & interoperability

- Link coordination models from Autodesk Docs
- Manage links dialog for coordination models
- Access properties of coordination model objects
- Point snaps for coordination model objects
- Collaboration cache relocation for cloud models
- Link and Import PDF in Revit LT and Design Automation API
- Revit to Robot Link enhancements

### **New features and enhancements**

#### **Revit 2024**

#### **Design optimization**

- Dynamo for Revit 2.17 upgrade
- Dynamo Player & Generative Design updates
- Dynamo Player & Generative Design samples
- Improved steel connections SDK documentation
- Revit additional resizable dialogs
- Revit Macro security improvements
- API enhancements for developers

#### **Documentation efficiency**

- Place multiple views and schedules on a sheet
- Move aligned to sheet enhancements
- Open sheet directly from drawing area
- Schedule revision clouds
- Align patterns on shaped-edited surfaces
- Bar bending details on reinforcement drawings
- Bar bending details in rebar schedules
- 2D element draw order in 3D families
- Resize all schedule rows
- Enable removal of unit symbol for fraction inches



# **Design productivity**

Revit 2024

### My Insights in Revit home

#### **Revit 2024**

- New My Insights tab in Revit home page
- Get personalized insights based on how you work and the work you do
- Learn valuable information (new features, commands and workflows)
- Display through cards
  - React to the cards
  - Learn more through the link in cards



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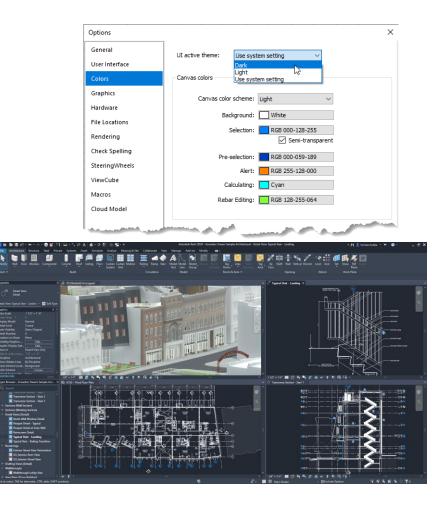
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### **Dark theme**

#### **Revit 2024**

- Support Dark Theme for 1st level user interface
- Dark Theme settings
- UI modernization
  - 2000+ new modernized icons for both light and dark themes
  - Modernized style for both light and dark themes
- Dark Theme for canvas display

Navigate projects more easily with a modernized UI



### New sample model and project templates

#### **Revit 2024**

- Multidisciplinary dataset to demonstrate Revit full capability
- Full set of documentation and models for Architecture, Structure, MEP, and Site model
- Point cloud of existing location
- A guided tour of the project and models
- New imperial and metric English "All Discipline" templates

Discover best in class BIM practices

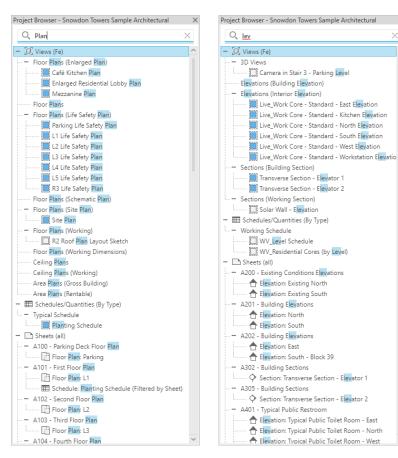


### **Modernized Project Browser with new search**

#### **Revit 2024**

- New search function permanently at the top of the Project Browser
- Search initiated automatically after keywords entered
- Instantly update relevant results as the user types their query
- Instantly highlight the matched keywords in the filtered list on all levels of the hierarchy in the Project Browser

Enhanced productivity while working with views, schedules, sheets, and families



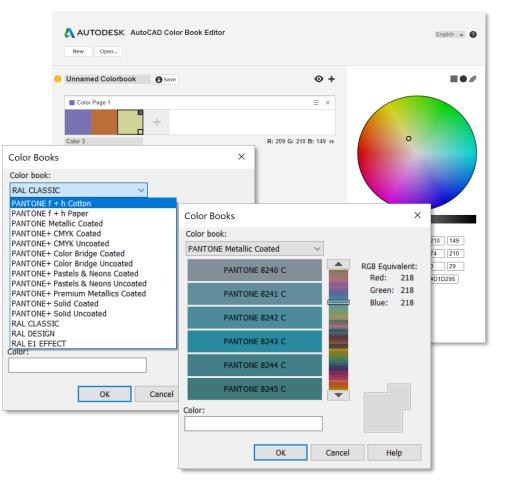
# **Color Books browser**

#### **Revit 2024**

- Specify colors using third-party color books or user-defined color books
- Changes to Pantone color selection
- Search color by number input and hit TAB to display the results
- Create a custom book palette with the Autodesk Color Book Editor

Improve design deliverables by applying consistent color standards

#### https://download.autodesk.com/global/acb/index.html

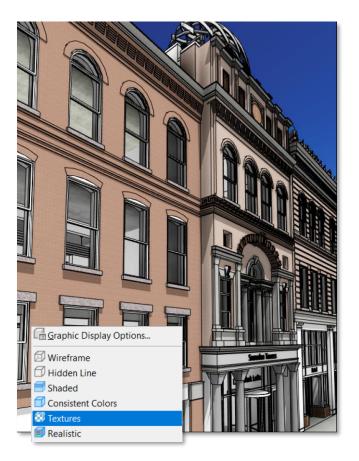


### **Textures visual style**

#### **Revit 2024**

- Display the texture map of a materials without rendering
- Ignores the effects of light
- Assets appear evenly distributed across all surfaces

Expand your ability to create impactful representations using the Textures style

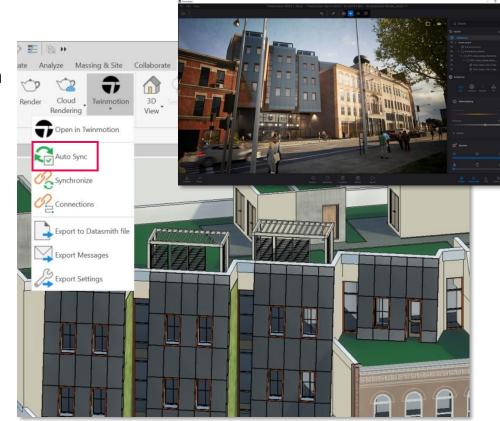


### **Revit to Twinmotion enhancements**

### **Revit 2024**

- Automatic Synchronization of changes from the Revit model to the Twinmotion direct link connection
- All visible geometry in a view is automatically kept in sync
- Enabled only for 3D Views
- Access to the latest Twinmotion release 2023.1

Automatically sync in Twinmotion to the latest Revit model updates

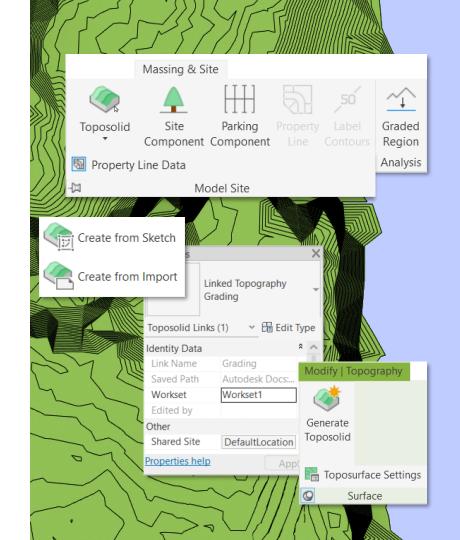


## Site design - Toposolids

#### **Revit 2024**

- Reorganized Site Tool icons
- Creation methods:
  - By sketching line and manipulating points
  - By CAD or point file import
- Convert Toposurfaces to Toposolids
- Linked Topography becomes a Toposolid
- New toggle for Property Line Data settings

Improve design quality and documentation in landscape design

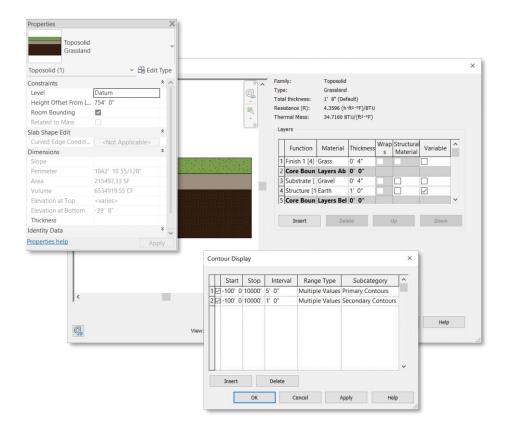


## Site design - Toposolid Properties

#### **Revit 2024**

- System family with instance and type parameters
- Build a compound type Toposolid with a layered structure
- Define Contour Settings as Type Properties
- Can be room-bounding elements
- Reporting parameters include slope, perimeter, area, volume, elevation at Top & Bottom, and Thickness

Better site documentation with expanded Toposolid types



## Site design – Solid Subdivisions

#### **Revit 2024**

- Area offset from the original surface
- Sketch any boundary to form the subdivisic
- Set a unique material
- Must have a thickness > 0
- Option to display contour lines

Design topography features faster and deliver better site plans

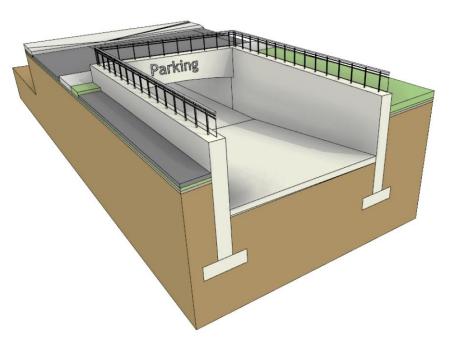


## Site design – Cut and Split Toposolids

#### **Revit 2024**

- Building Pads are now retired, but you can still edit their boundaries
- Use boolean operations with loadable or inplace void-mass families to model excavations or tunnels
- Cut a Toposolid with Walls, Floors, Structural Foundations, and elements from a dozen of other categories
- Use the Split Tool to divide a Toposolid into separate elements.

Model complex site conditions with the expanded boolean and split operations

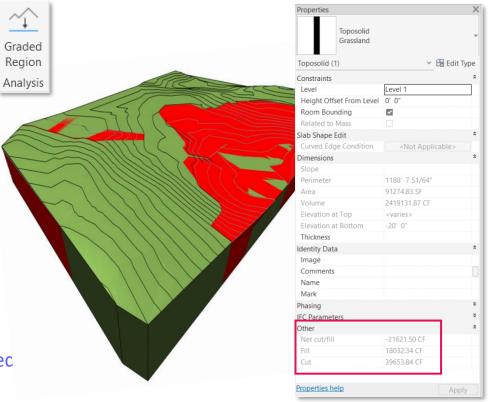


## Site design – Graded Regions

### Revit 2024

- Calculate and report cut and fill volumes in Toposolids
- Applies the grading functionality from previous releases to Toposolids
- Use shape-editing tools to grade proposed point elevations
- Add cut & fill values in schedules

Reduce your site construction cost with balancec cut and fill volume analysis



### Site Design – Show shape-edit control points

#### **Revit 2024**

- Change the display status of control points during highlight and selection
- Enable Preview Points in the Toposolid Shape Editing panel dropdown menu
- Control points are off by default

Set the display of control points in Toposolids to your preference



## Site Design – Additional functionality

### **Revit 2024**

- Toposolids are able to act as a host of the following elements:
  - Site component
  - Parking
  - Railings
  - Floor Based Element
- Apply a slab edge family to the edge of a Toposolid
- Exposed Toposolid API

Improved site modeling in BIM with the expanded functionality of Toposolids



### New path alignment options for free form rebar

#### **Revit 2024**

- Vertical position for transverse reinforcement along double curved path
- Choose the bar alignment options during free form rebar placement
- Set the alignment options through the Bar Alignment parameter
- The planar face to which the bars are parallel or perpendicular can be selected on placement of the rebar set

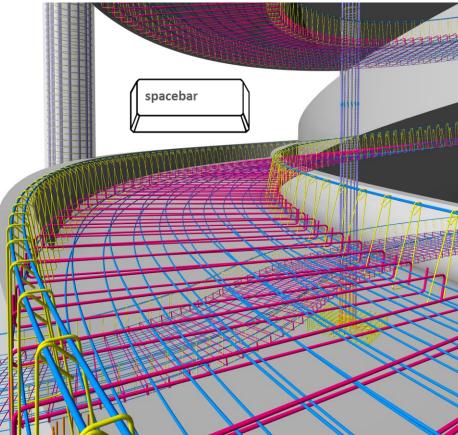
Increase 3D rebar modelling versatility

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### Stirrup orientation for aligned free form rebar Revit 2024

- Rotate the bar ends of stirrups created using aligned free form rebar
- Easily toggle stirrup orientation by pressing Space bar

Increase 3D rebar modelling versatility with greater control over free form rebars

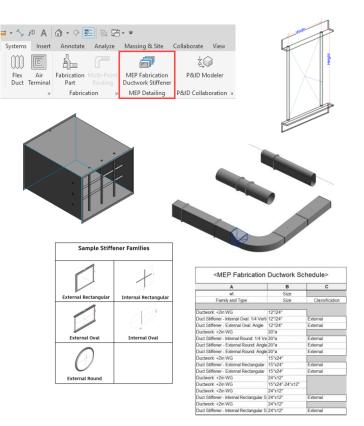


### **MEP fabrication ductwork stiffener**

#### **Revit 2024**

- New MEP Fabrication Ductwork Stiffener command
- Place internal and external stiffeners on rectangular, round, and oval fabrication ductwork
- Embedded schedules can quantify stiffeners per duct and stiffener subcomponents
- Export fabrication duct with holes based on internal stiffeners
- Sample content provided through Load Autodesk Family



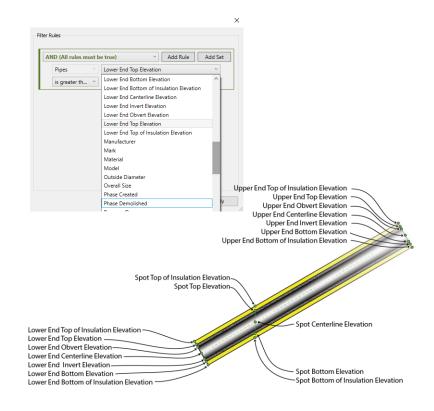


# **Elevation parameters in visibility filters**

#### **Revit 2024**

- All elevation parameters on either end of an MEP segment can now be added to visibility filters
- Elevation parameters now include:
  - Lower / Upper End Bottom of Insulation Elevation
  - Lower / Upper End Centerline Elevation
  - Lower / Upper End Obvert Elevation
  - Lower / Upper End Top Elevation
  - Lower / Upper End Top of Insulation Elevation

Gain more flexibility in controlling the display of MEP components in views



# Pipe Wall thickness as a built-in parameter

#### **Revit 2024**

- Wall thickness parameter now available as a built-in parameter
- Wall thickness parameter available for:
  - Tags
  - Schedules
  - $\circ$  View Filters

Easily create documentation for pipes with the wall thickness parameter

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	Inside Diameter	6 1/16"				*		
	Wall Thickness	9/32"						
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# Hide insulation with hosting duct and pipe

#### **Revit 2024**

- Hide Ducts with insulation/lining by:
  - Turning off Ducts category in the visibility setting
  - Selecting uninsulated instances of duct and select Hide by Categories
  - Select instances of insulated duct without selecting its insulation and select Hide
- Also applies to insulated/lined:
  - Duct Fitting
  - Duct Accessories
  - o Pipe
  - Pipe Fitting
  - Pipe Accessories

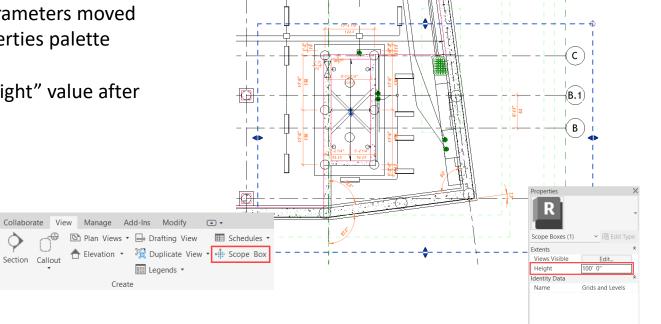
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Model systems more efficiently with additional visibility controls

### Height parameter in scope box

#### **Revit 2024**

- "Height" and "Name" parameters moved from options bar to properties palette
- Possibility to edit the "Height" value after the scope box is created



properties help

Navigate and manipulate project data more effectively

### Parameters sorting in type/instance properties Revit 2024

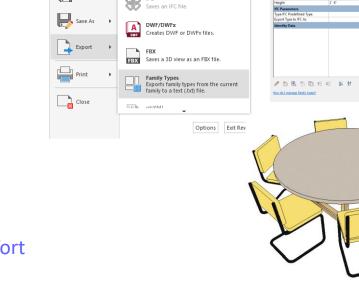
- Project parameters are automatically sorted alphabetically (and not by order of creation)
- Sorting is done per category ; relative position of family parameters is kept as before

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# **Export 'Family type' parameter**

#### **Revit 2024**

- 'Family Type' parameter data is included when using Family Types export
- Type driven by family parameter
- Makes it easier to build type catalogs for nested families



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Create Insert Annotate View Manage Add-Ins Mod

CAD Formats

Creates PDF files

Creates exchange files and sets options.

Creates DWG, DXF, DGN, OBJ, SAT,

Family Type

Create and manage family type catalogs with less effort



# **Simulation & analysis**

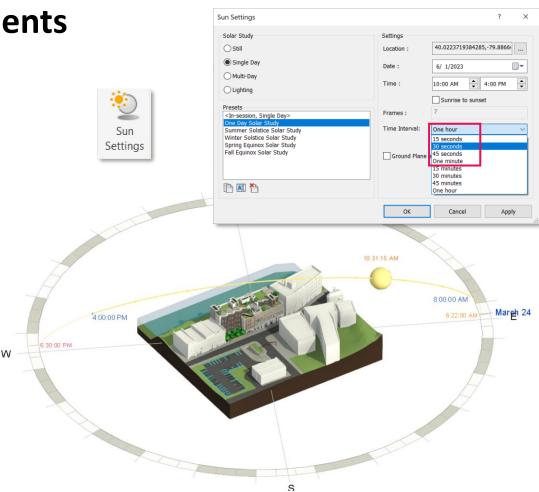
Revit 2024

### **Solar Study enhancements**

### Revit 2024

- Access Sun Settings from the Solar Study ribbon
- Run Single Day Solar Studies at a higher precision
- Options include 15, 30, 45 or 60second intervals
- Sun Path editable in perspective views

Better visualize the impact of sunlight and shadows

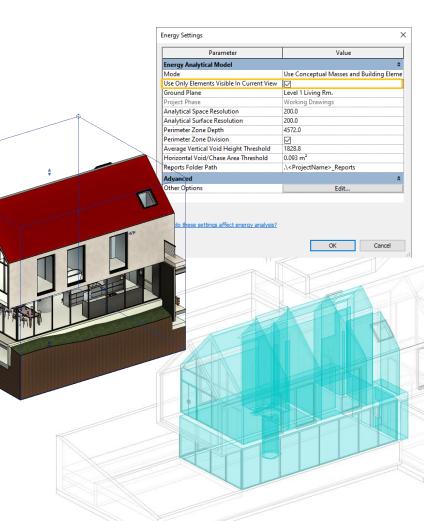


### Generate energy model by view

#### **Revit 2024**

- Active view may be used to generate the energy model
- Only visible elements in the view are included in the model generation
- Applicable to 3D views

Iterate the energy analytical model more quickly and streamline analysis

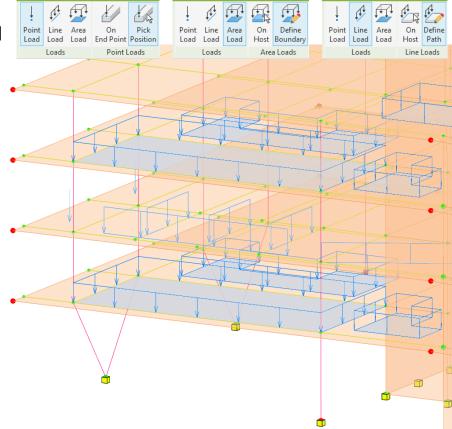


### **Enhanced structural analytical loads**

#### **Revit 2024**

- Hosted loads applied to specific areas of panels and members
  - Planar loads applied to user-defined, sketched areas of 
     analytical panels
  - Linear loads applied to specified segments of analytical members lengths and analytical panels
- Point loads can be placed anywhere on their hosts
- Loads can be constrained (or not) to their hosts' boundaries

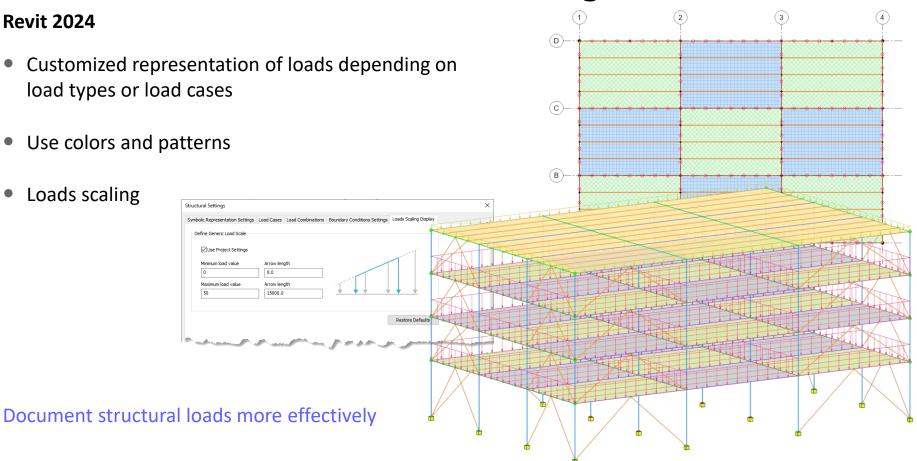
Define structural loads more accurately and flexibly



### Structural area loads with color coding

### **Revit 2024**

- Customized representation of loads depending on load types or load cases
- Use colors and patterns
- Loads scaling



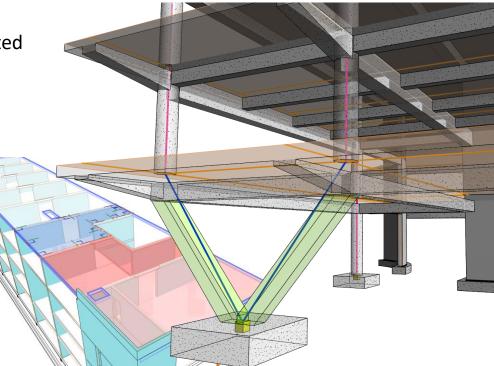
### **Custom physical-analytical association**

#### **Revit 2024**

- Group a different number of physical and analytical elements into a single association
- Multiple analytical panels or members associated to a single physical object (or vice versa)
- Same user workflow as for the 1:1 association

Better coordinate updates across physical and analytical models



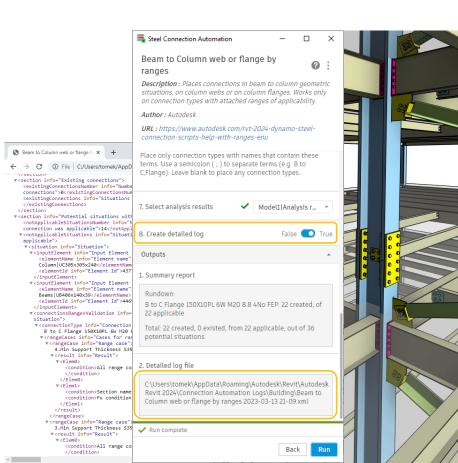


## Detailed results for connection automation rules

#### **Revit 2024**

- Use the information in the log generated at the specified location for:
  - Connections that were placed
  - Situations where connections already existed
  - Situations where no connection was applicable

Design steel structures more quickly and accurately

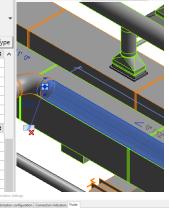


# Flow and pressure drop calculations

- Flow and pressure drop calculations added to MEP fabrication elements
- New Fluids tab in Fabrication Settings associates fluid and temperature settings
- Roughness parameter added to straight elements
- Pipe and duct calculations run in the background
- Results displayed as properties on straight segments

Connect MEP	decign	and	fabrication	workflows	
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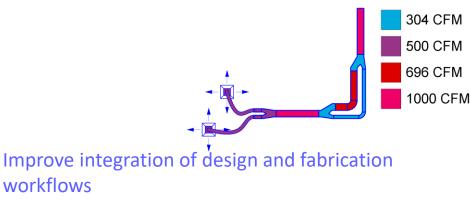
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			ADSK - Hydronic Condenser Water R		* Not set	

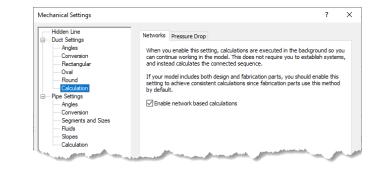


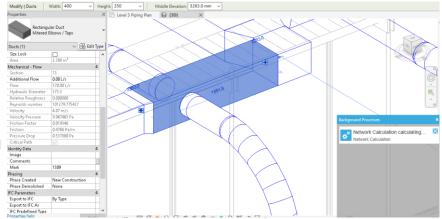


# Network based calculations for design ductwork

- Enable the new calculation engine in Mechanical Settings
- Duct calculations now run in the background
- Improved handling of parallel flow cases







# Demand loads for electrical analytical components

#### **Revit 2024**

- Demand factors now apply to analytical loads
- Applies to Analytical Equipment Loads and Analytical Area Based Loads
- Demand apparent power and demand current computed for analytical distribution elements
- Values are schedulable and reportable in system browser

Analyze the impact of demand on the analytical model for sizing equipment

	wer Distribution	Connected Load	Demand Load	Connected Current	Demand Current	Voltage
	Utility	1033304 VA	558396 VA	50 A	27 A	12000 V
	Utility Transformer	1033304 VA	558396 VA			
	SWITCHBOARD	1033304 VA	558396 VA	2868 A	1550 A	208 V
	MAIN1	572042 VA	443081 VA	1588 A	1230 A	208 V
	MB11	101664 VA	60398 VA	282 A	168 A	208 V
	MB12	122062 VA	44466 VA	339 A	123 A	208 V
	a 🔢 MB13	191386 VA	189886 VA	531 A	527 A	208 V
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# Non-coincident loads for electrical analytical components

#### Revit 2024

- Define and connect analytical loads for all loads (e.g., mechanical, owner provided, etc.)
- Configure loads as backup / standby
- Automatic computation of connected vs demand load

Design electrical systems more simply and comprehensively

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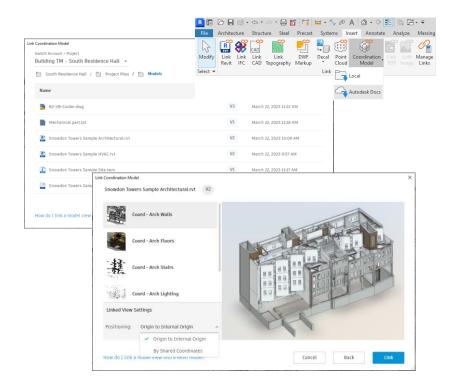
# Cloud data & interoperability

# Link coordination models from Autodesk Docs

#### **Revit 2024**

- Link a coordination model into the current Revit project
- 60+ file formats available in Autodesk Docs
- Link models or views
- Underlay the coordination model as visual reference when designing in Revit

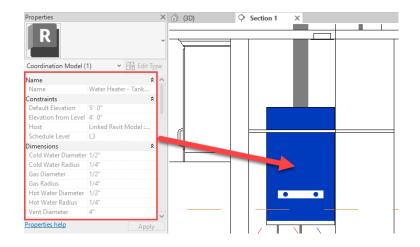
Coordinate design development and model deliverables more effectively between stakeholders



# **Properties of coordination model objects**

#### **Revit 2024**

- Get access to the properties of Coordination Model objects
- Select individual coordination objects (by pressing Tab)
- Get their properties displayed in the Properties palette
- Note that those properties are not editable



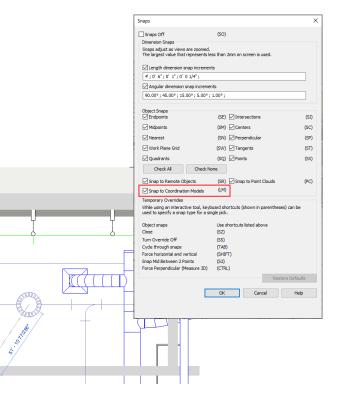
Quickly access properties of coordination model objects

# Point snaps for coordination model objects

#### Revit 2024

- Snap to linked geometry in projection views
- New "Snap to Coordination Models" in Snaps dialog (activated by default) adds precision to coordination modeling
- New hotkey (LM) to control this new object snap
- Can snap to corners or ends of coordination model objects

Enable fast and convenient snap on coordination model objects



# Manage links dialog for coordination models

#### **Revit 2024**

- New Coordination Model tab in the Manage Links dialog box
- Information arranged into a grid structure for better management
- Options available to place instance
- Possibility to link a coordination model from a local source or from Autodesk Docs

Easily manage coordination models for faster collaboration

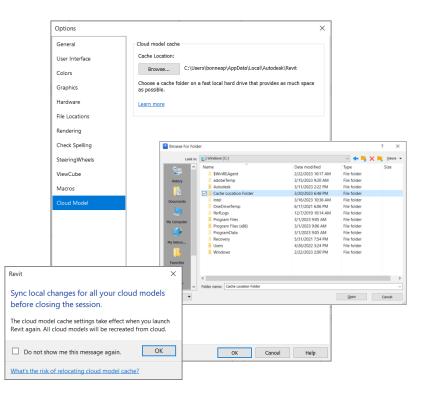
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Furniture FBX.fbx (Scene)	Loaded	Autodesk Docs://Building TM/S	Cloud		1	1
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# **Collaboration cache relocation for cloud models**

- New Cloud Model tab in Options dialog
- Ability to specify a different path for the cache folder
- By default, the cloud model cache path is C:\Users\username\AppData\Local\Autodesk\Revit
- The cloud model cache setting takes effect the next time you launch Revit





# Link and Import PDF in Revit LT

#### Revit 2024

- Link or Import PDF files projection views or sheets.
- PDF stays as a view specific object
- Use as a background underlay in floor plans
- Snap to PDF vector data
- Supported by Design Automation API

Expanded ability to display PDF information for Revit LT users

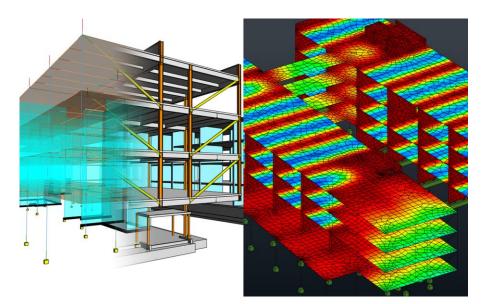


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## **Revit to Robot Link enhancements**

#### **Revit 2024**

- Transfer of analytical panels created by extrusion
- Transfer of linear and planar loads hosted on members and panels
- Data transfer of steel member code types
- Transfer of arc members



Better support of BIM-centric structural analysis workflows



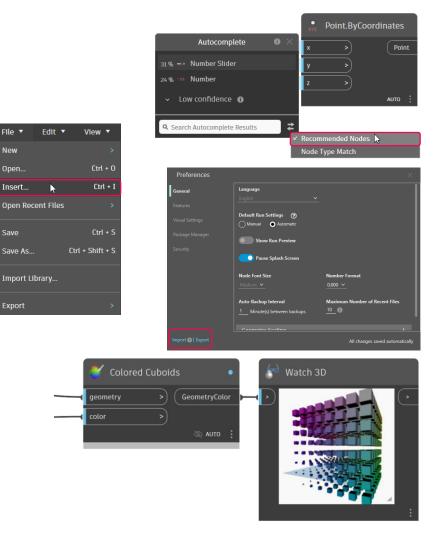
# **Design optimization**

# **Dynamo for Revit 2.17 upgrade**

#### **Revit 2024**

- Enhanced Node Autocomplete
- New Dynamo settings with import/export and deployment
- In-product node documentation
- Insert graph into an open workspace
- Watch 3D nodes show geometry
- Default font sizes for group styles
- Find connected node

Improved experience when developing automation workflows



File

New

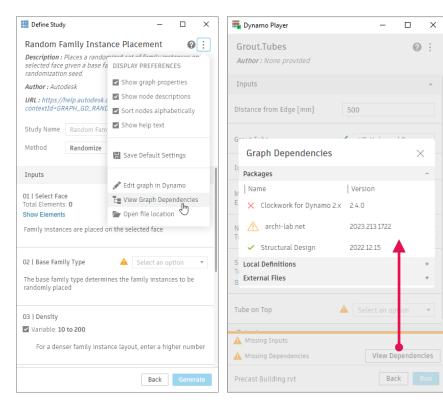
Save

# **Dynamo Player & Generative Design updates**

#### **Revit 2024**

- New Issue Manager shows warnings from Dynamo runs
- Expose graph dependencies to Dynamo Player and Generative Design users
- New sample graphs are available
- Images are available as outputs in Dynamo Player

Improved user experience for computational design workflows



# **Revit additional resizable dialogs**

#### Revit 2024

- List of updated dialogs:
  - Decal Types dialog
  - Check spelling dialog
  - Keynotes dialog
  - New Legend view dialog
  - New Drafting view dialog
  - New Plan dialog
  - Save Selection dialog
  - Load Selection dialog
  - Detail Levels dialog
  - Halftone/Underlay dialog
  - Create Group dialog

# Small enhancements that improve the Revit user experience

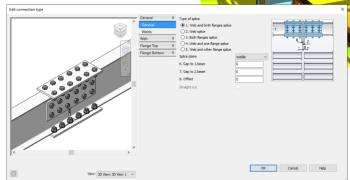
- Export Image dialog
- System Color Schemes dialog
- Import Line Weight dialog
- Work Plane dialog
- Insert 2D elements dialog
- o eTransmit Transmit a model dialog
- Starting View dialog
- Select Element by ID dialog
- Element IDs of selection dialog
- Edit Label dialog

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Name: Assembled Stair at Level 5 in Building C	Name: Assembled Stair at Level 5 in Building C			OK Cancel	8	Help			
Name: Assembled Stair at Level 5 in Building C	Name: Assembled Stair at Level 5 in Building C	ave Selection							
							— )		
		Name: Accombled Stair at I	evel 5 in Building (						
OK Cancel	OK Cancel		terer o in ballang e						
		Pasenbled Stail at a							
			Cance						

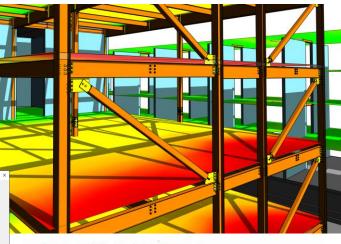
## **Improved steel connections SDK documentation**

#### **Revit 2024**

- Detailed guidelines for creating and customizing steel connections
- New API samples



Design steel structures more quickly and accurately



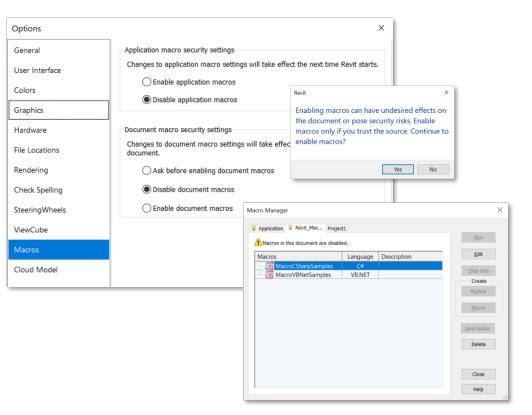
from Autodesk.Revit.UI import \*
from Autodesk.Revit.UI.Macros import \*
from Autodesk.Revit.UI.Selection import \*
from Autodesk.Revit.D8 import \*
from System.Collections.Generic import \*
from System import \*
from math import \*

class ThisDocument (DocumentEntryPoint):
 #region Revit Macros generated code
 def FinishInitialization(self):
 DocumentEntryPoint.FinishInitialization(self.InternalStartup()

def OnShutdown(self): self.InternalShutdown() DocumentEntryPoint.OnShutdown(sel

## **Revit Macro security enhancements**

- Application macros and document macros are disabled by default
- Prevent the execution of malicious codes
- A new warning inform users of potential security risks

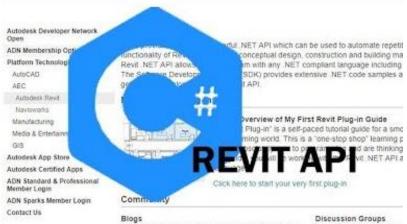


# **API enhancements for developers**

#### **Revit 2024**

- Element ID upgrade
- **Design Automation API**
- Group reload
- Purge Unused
- Link Visibility Graphic Overrides By Host and Linked View
- Draw order of 2D elements in 3D families

Autodesk Developer Network



Get news, expert tips and insider resources directly from Autodesk software engineers

Take part in active API dis by Autodesk software end

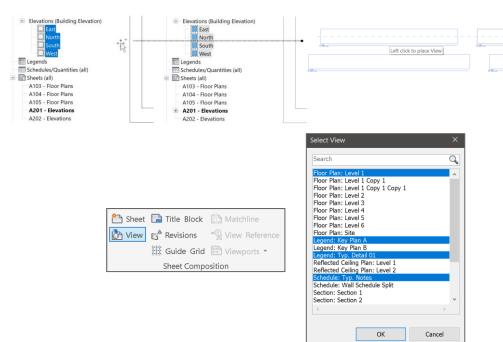
Expanded API access for third-party developers



# **Documentation efficiency**

# Place multiple views and schedules on a sheet

- Multiple views and schedules can be placed on a sheet at the same time
  - Drag them from the project browser
  - Select multiple items from the Select View dialog
- Search function now available in the Select View dialog
- Easy arrangement on the sheet with views positioned tiled on the cursor

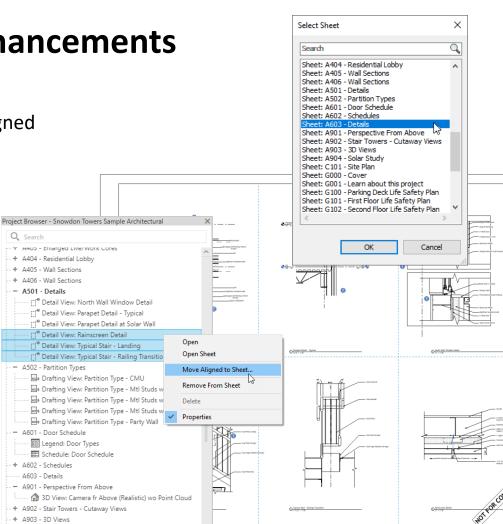


# **Move Aligned to Sheet enhancements**

#### **Revit 2024**

- Sheet-based elements can be moved and aligned between sheets directly from:
  - the Project Browser
  - the sheet drawing area

Move multiple elements between sheets while keeping their original positions

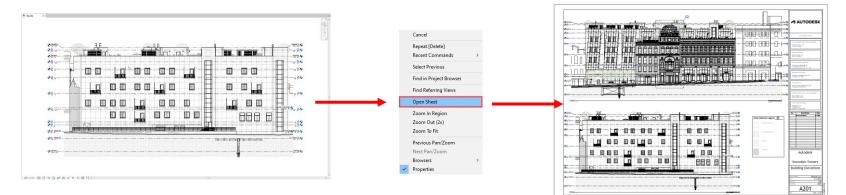


# **Open sheet directly from drawing area**

#### Revit 2024

- Open sheet command available directly in rightclick menu from the drawing area
- Confirmation dialog gets displayed for views placed on more than one sheet





Open sheets related to specific views more quickly

## **Schedule revision clouds**

#### **Revit 2024**

- New Revision Clouds category available for schedules
- Views, Sheets, and Revision Clouds fields available for revision cloud schedules
- Schedules key and Shared Parameters can be included

			A	В	С		D
New Schedule			Revision: Issued to	-	D Revision: Revision Descrip	nti View	s: View Name
			Cloud revision A				
Category name search:			Tom	2/2/23	Wall type change	Parking	
			Tom	2/2/23	Wall type change	PLAN R1 W	/ater
Filter list: <show all=""> ~</show>			Tom	2/2/23	Wall type change	L2	
Catagonia		Name:	Cloud revision B				
Category:			Sam	2/7/23	New meeting room layout	1	
Piping Systems	^	Revision Cloud Schedule	Sam	2/7/23	New meeting room layout	Sanitary Ris	ser #6
Planting			Cloud revision C				
Plumbing Equipment		Schedule building composition	Paul	2/18/23	Change glass door style	PLAN Parki	ng Water
Plumbing Fixtures		O Schedule keys	Paul	2/18/23	Change glass door style	PLAN R1 W	/ater
Railings			Cloud revision D				
Ramps		Key name:	Sam	2/25/23	Add more doors	PLAN L1 -	Block 35 Water
Revision Clouds			Sam	2/25/23	Add more doors	L2	
Roads			Cloud revision E				
Roofs		Phase:	Brad	3/3/23	Pipe diameter change	PLAN L2 W	/ater
Rooms			Brad	3/3/23	Pipe diameter change	PLAN L3 W	later
BVT Links			Brad	3/3/23	Pipe diameter change	L2	
Security Devices			Cloud revision F				
Signage			Clara	3/8/23	Revised layout	PLAN L4 W	/ater
			Cloud revision G				
B Site			Clara	3/15/23	Owner request	PLAN L5 W	(ater
Spaces			Cloud revision H				
Specialty Equipment			Paul	3/19/23	Wall thickness	PLAN R1 W	/ater
Sprinklers							
Stairs							
Structural Area Reinforcement					-		
Structural Beam Systems			<revisi< td=""><td>on Cloud Sche</td><td>-dule 2&gt;</td><td></td><td></td></revisi<>	on Cloud Sche	-dule 2>		
Structural Columns			1101101				
		Α	B	C	D		E
	V	iews: Sheet Name	Views: View Na	ame Revision N	umber Revision: Revision	Description	Revision: Issue
	DOMESTIC W	ATER PLAN - LO PARKING					
	DOMESTIC W	ATER PLAN - LO PARKING	PLAN R1 Water	Cloud revisi	on A Wall type change		Tom
	DOMESTIC W	ATER PLAN - LO PARKING	PLAN Parking Water	Cloud revisi	ion C Change glass door st	yle	Paul
	DOMESTIC W	ATER PLAN - LO PARKING	PLAN R1 Water	Cloud revisi	ion C Change glass door st	yle	Paul
	DOMESTIC W	ATER PLAN - LO PARKING	PLAN L1 - Block 35	Water Cloud revisi	ion D Add more doors		Sam
	DOMESTIC W	ATER PLAN - LO PARKING	PLAN L2 Water	Cloud revisi	ion E Pipe diameter change		Brad
rouping Formatting Appearance	DOMESTIC W	ATER PLAN - LO PARKING	PLAN L3 Water	Cloud revisi	ion E Pipe diameter change		Brad
a coping i criticitary Appearance	DOMESTIC W	ATER PLAN - LO PARKING	PLAN L4 Water	Cloud revisi	ion F Revised layout		Clara
m:	DOMESTIC W	ATER PLAN - LO PARKING	PLAN L5 Water	Cloud revisi	on G Owner request		Clara
~	DOMESTIC W	ATER PLAN - LO PARKING	PLAN R1 Water	Cloud revisi	ion H Wall thickness		Paul
	PLAN - LO SA						
	PLAN - LO SA		Parking	Cloud revisi	ion A Wall type change		Tom
	RCP - L2 SAM						
	RCP - L2 SAM	IITARY	L2	Cloud revisi	on A Wall type change		Tom
	RCP - L2 SAM	ITADV	L2	Cloud revisi	ion D Add more doors		Sam
				CIOUD TO TIDI			
	RCP - L2 SAM	IITARY	L2	Cloud revisi			Brad
	RCP - L2 SAM SECTIONS SA				ion E Pipe diameter change		

More easily track and call out changes to document sets

Schedule Prop Fields Filter

> Views Sheets

# Align patterns on shape-edited surfaces

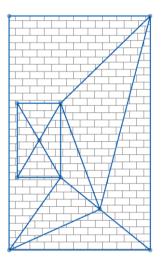
#### Revit 2024

- Address the distortion of patterns in sloped surfaces for floors, roofs and toposolids
- Options available in the contextual ribbon of the Align tool
- Pattern align options
  - Selected Face
  - Entire Surface

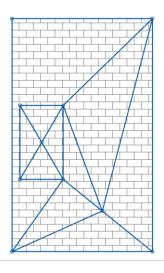
Improve pattern representation on sloped surfaces

	Modif	fy   Align	
Multiple Alignment	📮 Prefer:	Wall centerlines	-
Lock	🖾 Pattern:	Entire Surface	
	A.1.	Entire Surface	
	Align	Selected Face	

BEFORE







# Bar bending details on reinforcement drawings

#### **Revit 2024**

- Create accurate bar bending & installation instructions
- Respect typical documentation practices

27×13M

 $\infty$ 

320

Section

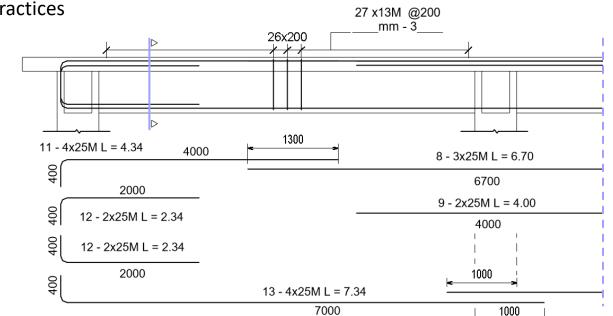
11 - 4 x 25M-

12 - 2 x 25M

12 - 2 x 25M-

13 - 4 x 25M





Streamline coordination between designers and fabricators

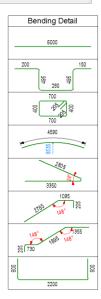
# Bar bending details in rebar schedules

#### **Revit 2024**

- Conventional representations for bar bending
- Automatic scaling to the schedule cell size

Bending Detail Options Graphics Rebar shape parameter Show names Line style Bending Detail Wide Blue Representa Standard Multiple values indica Linear dimension sty Bending Detail Linea Show lenghts as let. Outside of the dimension I Cther dimensions Hook lengths Bending Detail Angula Angular dimension s Outside of the dimensi Bending Detail Radia Bending Detail Diamet OK Cancel

Mark	Туре	Shape	Length	Α	В	С	D	E	Bending Detail
40	H16	00	6000	6000	0	0	0	0	A
41	H16	44	1500	200	500	285	500	150	A E
43	H16	52	2525	400	700	210	210	1180	B C B
44	H16	67	4600	4595	4500	400	0	0	Å ac
45	H16	14	6150	2805	1205	3350	2550	0	
46	H16	27	4075	2785	1100	210	1490	2355	B B
47	H16	35	4175	1360	1900	735	1010	210	w c A
48	H16	21	3725	800	2200	800	0	0	د B

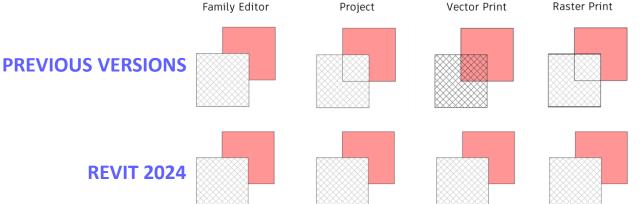


# Streamline coordination between designers and fabricators

## 2D element draw order in 3D families

#### **Revit 2024**

- Familiar 'Send to Back' and 'Bring to Front' buttons available in the family editor
- Consistent appearance of detail items in family editor, project, and print

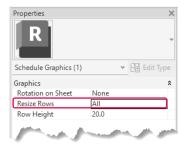


Consistent visual appearance across environments

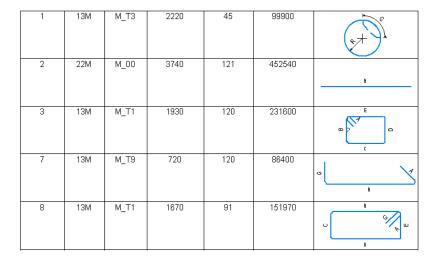
### **Resize all schedule rows**

#### **Revit 2024**

- Resize all rows regardless of content or just the image rows
- Create a clear representation by resizing rows with text, images or graphics
- Row height is adjusted if text is too tall or spans multiple rows



			Rebar	Schedule - A	11	
Rebar Number	Туре	Shape	Bar Length	Quantity	Total Bar Length	Bending Detail



Schedule and document more efficiently

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