



What's New

in PowerPack for Autodesk Revit 2024.1

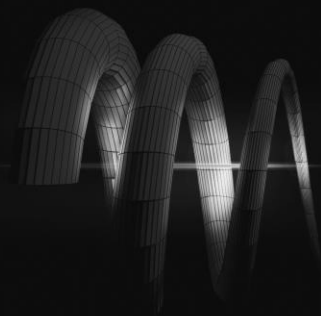


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1. Welcome to Graitec Powerpack for Revit 2024.1

We are pleased to announce that the update for PowerPack for Revit 2024.1 is now available. This update adds multiple enhancements and new features, in particular enhancements to the Clone Drawings tool, along with bug fixes that were affecting the functionality of certain tools.



1.1. Licensing GUI Updates

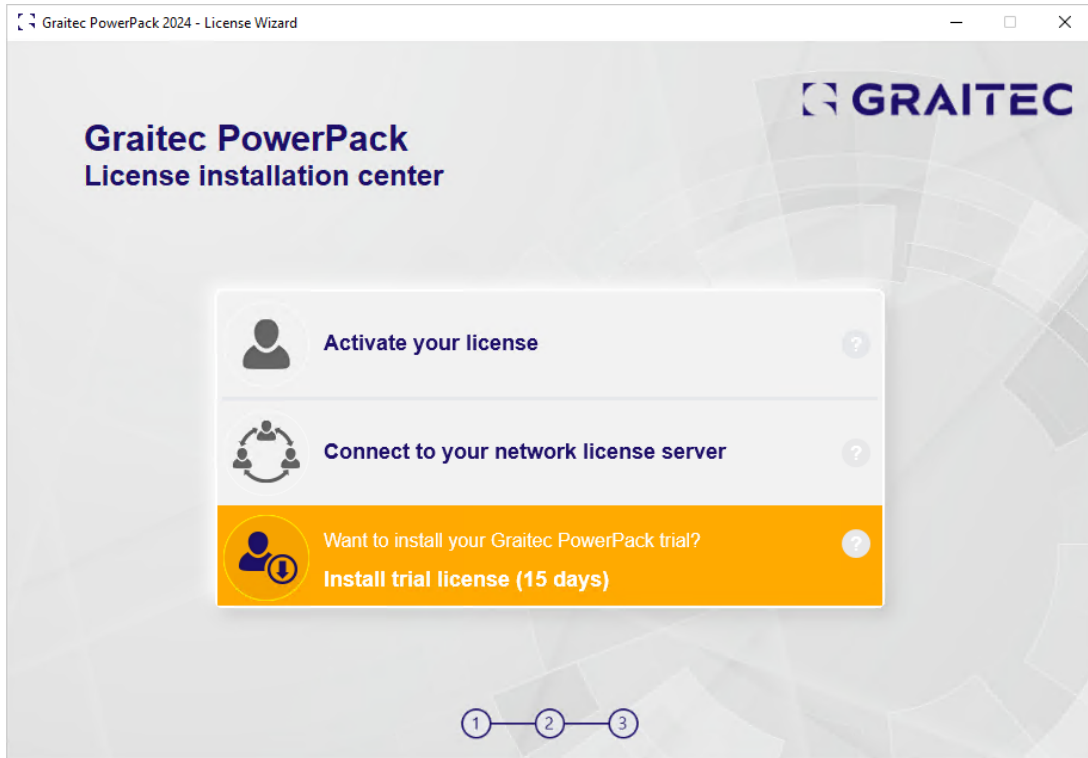
For the 2024.1 version there is an update to the GUI of the licensing process, which is the same as previous versions, in that you will need your license number and activation codes, that are distributed to you via Graitec.

At the activation of any command within the Powerpack, the user will now be greeted with the new licensing pop-up dialog, the enhancements seen here are an opportunity to set the tone for a positive journey on Graitec products and empowering you with an intuitive and user-friendly interface. The License Wizard automatically pops up once any command in the Powerpack is opened and no license has yet been activated. It's the perfect setup to either:

- Give the PowerPack a try by installing the free Trial version. The full product version will be available to you for 15 days once you fill out the registration form.
- Activate the product if you already have a license with Serial Number and Activation Code.

1.1.1. Trial Version Activation

At the opening of the License Wizard, the user will see the default condition selected under the options available, the option is highlighted in Amber and is related to selecting the Graitec PowerPack trial, selecting this option with then move forward to a second popup to



Trial license highlighted first step. 2024.1

The user will then be prompted to:

- Give the PowerPack a try by installing the free Trial version. The full product version will be available to you for 15 days once you fill out the registration form.

Graitec PowerPack 2024 - License Wizard - Registration Form

Graitec PowerPack License installation center

Complete your information:

Name

Surname

E-mail

Phone Number

Company

Are you a student?

Zip Code optional

Country

I agree with GRAITEC General Terms and Conditions

Submit

The process will complete with a confirmation pop-up at the end of the activation process.

Advance Installation or contact your reseller.' Below this text is a 'Finish' button."/>

Graitec PowerPack License installation center

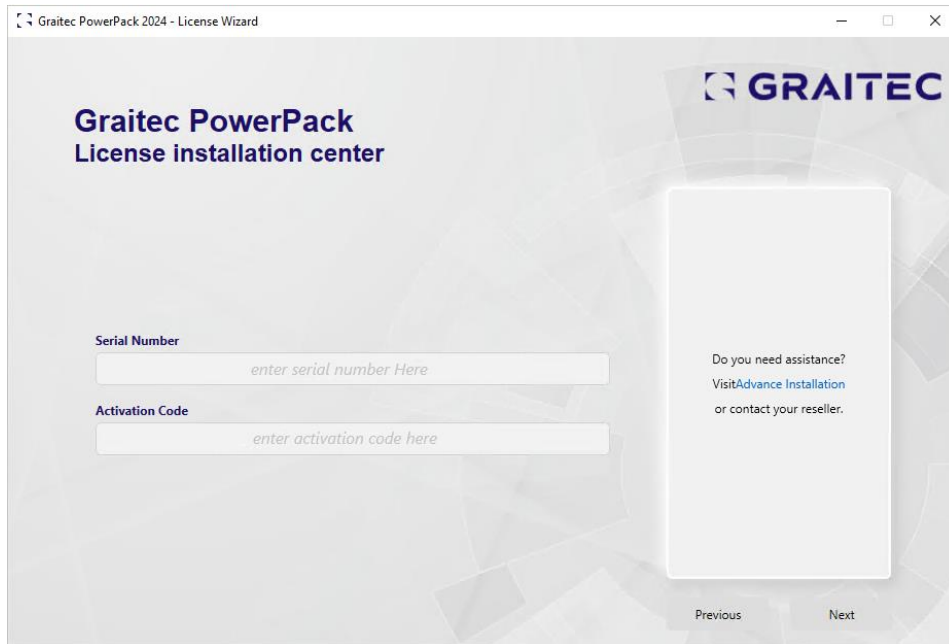
Your license Advance XXXX XXXXXX-XX-XXXXXX has been properly installed. Graitec PowerPack 2024 will start automatically if it is covered by the license you've just activated. We wish you good use and invite you to contact your dealer GRAITEC in any matter relating to the use of your software.

Do you need assistance?
[Visit Advance Installation](#)
or contact your reseller.

Finish

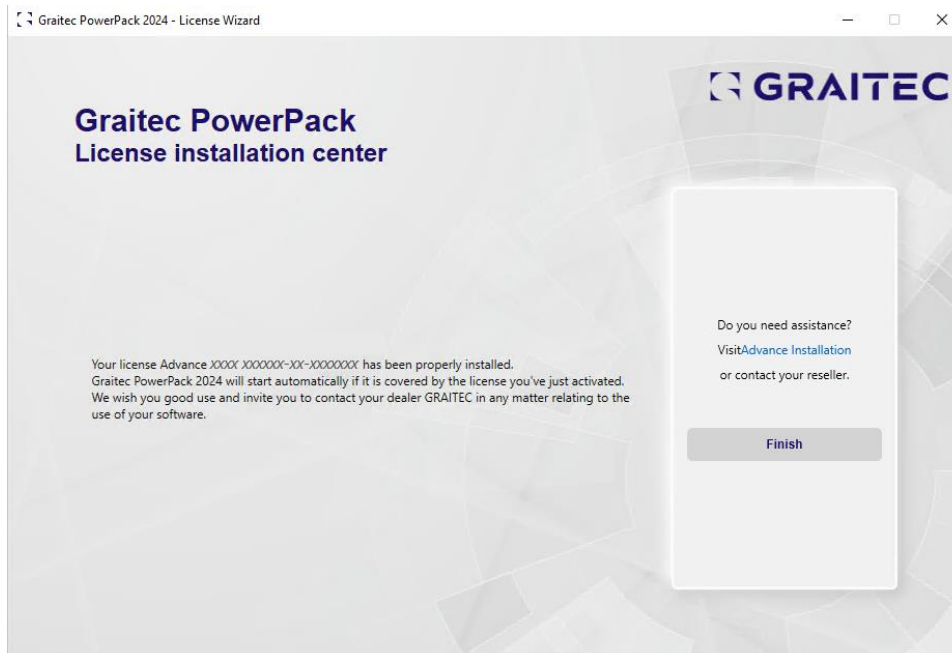
1.1.2. Activate your license

This option is for users you have received their Serial number and Activation code from Graitec.



New Licensing pop up second Step entering licence details

There are several other changes to the general appearance of the dialog, but the activation process remains the same. Select the options to Activate your license and enter required codes etc. The process will complete, and you will then receive a confirmation pop-up at the end of the activation process.



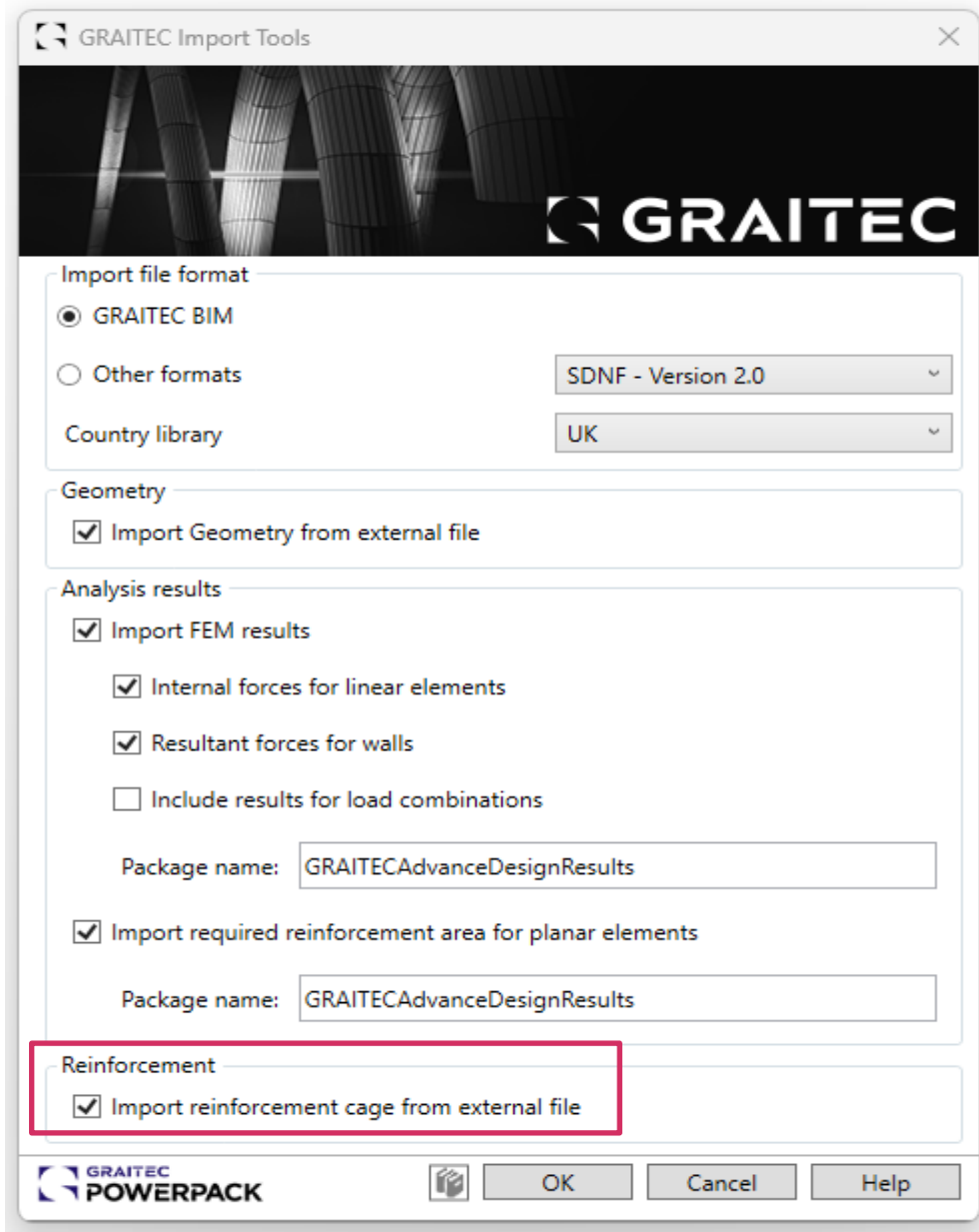
New Licensing pop up License activation installed notification

The Powerpack license process is now complete, and you may start to use the tools available.

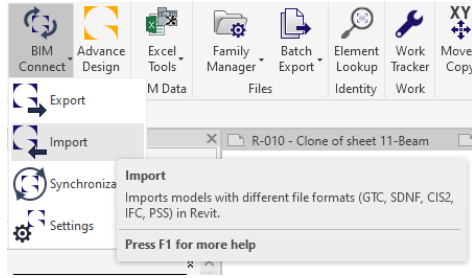
2. PowerPack for Revit

2.1. BIM Connect import of Rebar Cages

In PowerPack for Revit 2024.1, It is now possible to Import reinforcement cages from an external file using Graitec own GTCx file format. The main reason for adding this function is to allow for interoperability with TriCalc, our Spanish structural analysis solution, but can also be used to import cages that have been saved using the Design Template tool in PowerPack Detailing.



To use, simply select the Import option on the BIM Connect drop down.



Make sure that “Import reinforcement cage from external file” is ticked and click OK. Select your GTCx file which contains the cages and click OK. All reinforcement will be imported. You will be given a choice to create a report of all created elements.

```

Revit import log
Date: 26 September 2023 Time: 09:41
Revit document: Project2
GTC document: C:\Users\SimonDickinson\Desktop\footing1.gtcx

Columns imported: 1
Isolated Footing imported: 1
Support imported: 1

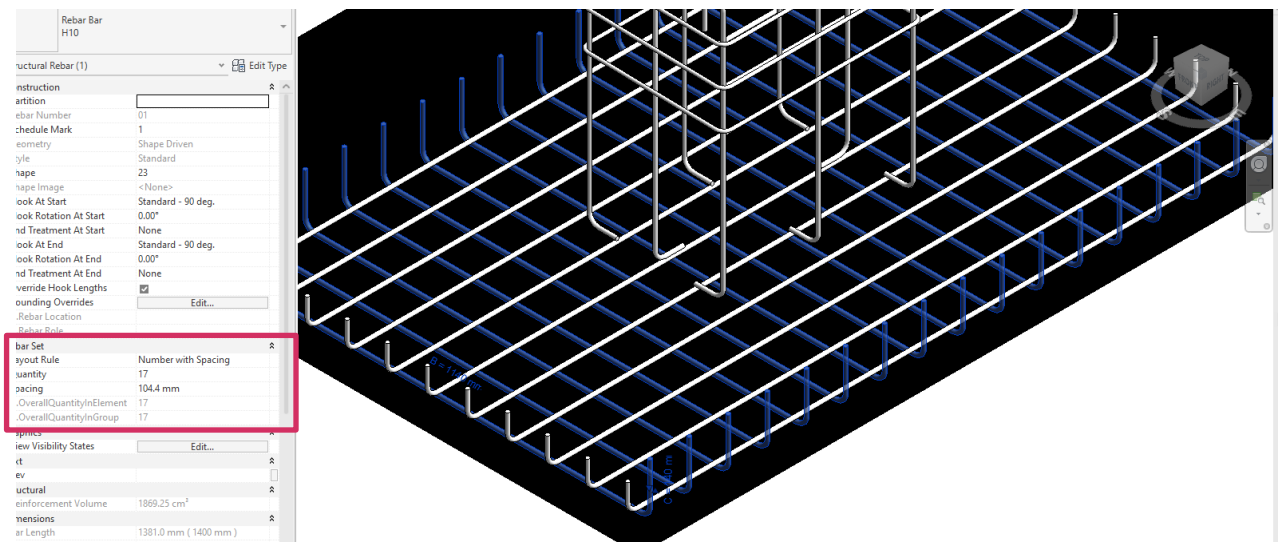
The following GTC elements failed to be imported:
GTC element (Id = 576) has no material associated. Please refer to the exporting application.

-----
Reinforcement import log
GTC element (Id = 96) reinforcement objects imported: 11

Used Rebar Bar types:
Name | Revit Id | Model Bar Diameter | Bar Diameter | Standard Bend Diameter | Standard Hook Bend Diameter | StIRRUP/Tie Bend Diameter |
H8 | 180245 | 8 mm | 8 mm | - | - | 32 mm |
H10 | 180246 | 10 mm | 10 mm | - | 40 mm | - |

Used Rebar Hook types:
Name | Revit Id | Style | Hook Angle | Extension Multiplier |
Standard - 180 deg. | 180226 | Standard | 180.00° | 5 |
Standard - 90 deg. | 180225 | Standard | 90.00° | 10 |
StIRRUP/Tie - 135 deg. | 180227 | StIRRUP / Tie | 135.00° | 10 |
    
```

Unlike the use of IFC which will break all rebar into single bars. BIM Connect will retain the rebar sets. These sets can then be managed using the Standard Revit toolset.



3. PowerPack Detailing and Design

3.1. Clone Drawings - Sheets

Clone Drawing functionality was added to PowerPack for Revit 2024, allowing for the cloning of detail views automatically. At the time this did not duplicate the sheet that the views had been attached to. As of 2024.1 sheets are now automatically created during the cloning process.

Please note the position of the views on the sheet will be retained, but no consideration is made for the size of the new views so these will need to be checked after creation.

Clone Drawings will now hide all elements that are not of the same category as the template element to help make 3D selection easier. Selecting a wall as the template object will hide everything except walls etc.

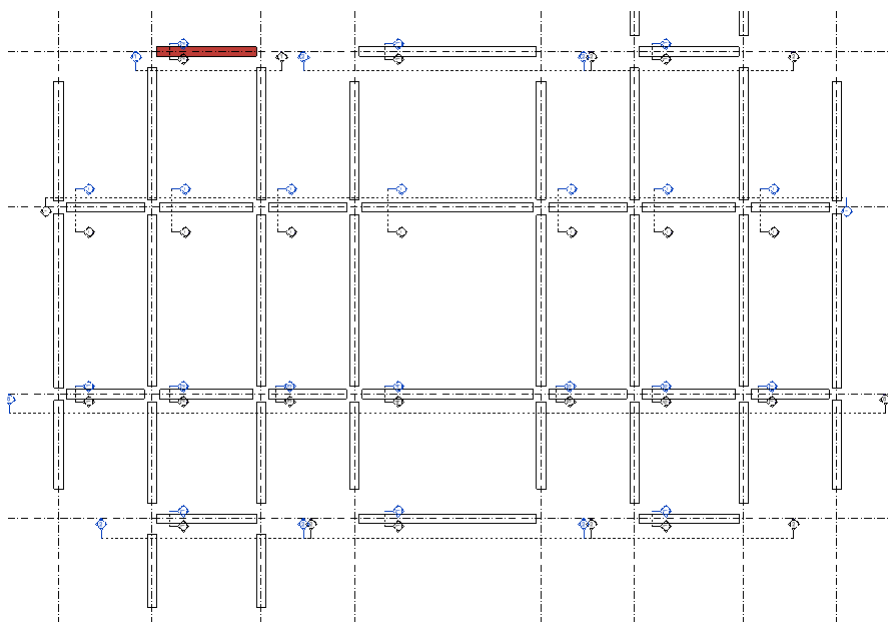
3.1.1. Creating a Clone Drawing

To Create a Clone Drawing including the Sheet, First create the detail you would like to add to a sheet (Callouts, Sections, Elevation, Plan View, etc.) and add all necessary Details. For Clone Drawing to work you will need to add at least one of the following detail items.

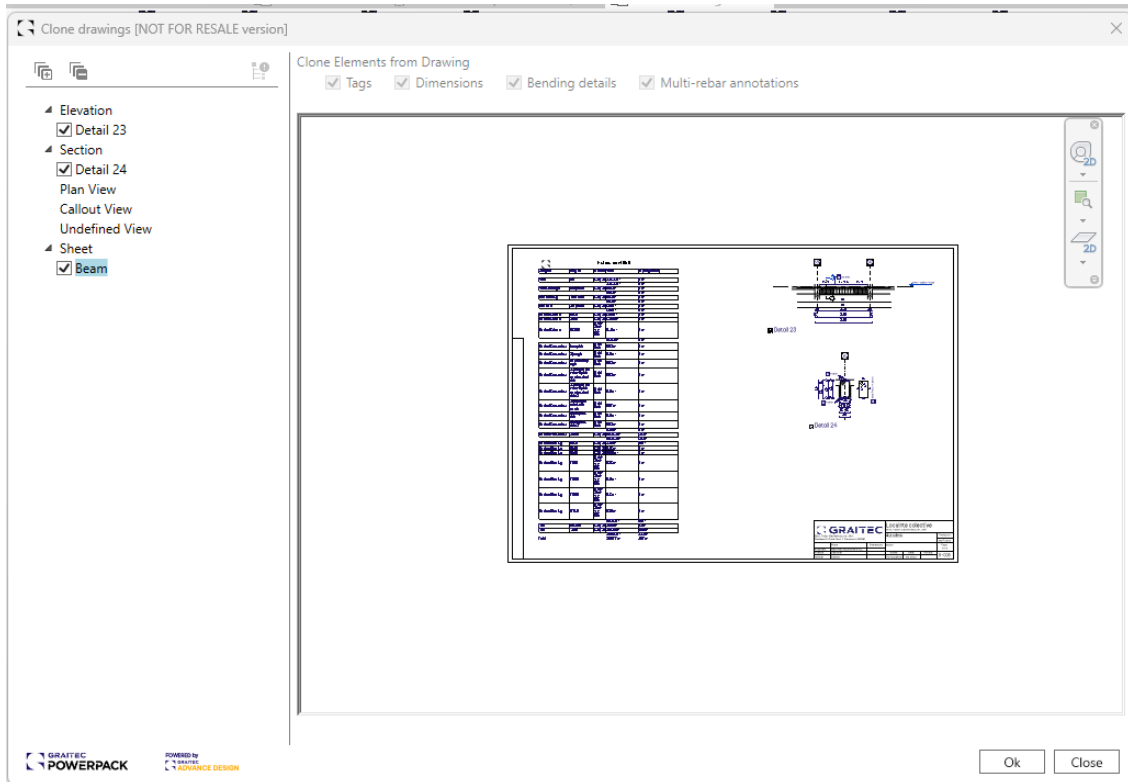
- A Tag on an element
- A Tag on a rebar hosted by an element
- A bending Detail
- Multi rebar Annotation

Dimensions will also be cloned, but are not a requirement for Clone Drawings.

Once you have finished detailing your element, click Clone Drawings, and select the element you have just detailed. This will become the template for Cloning. The selected element will be highlighted and all elements that can be cloned will be displayed.



Select all the elements you wish to create cloned views and click finish in the options bar. The clone drawings dialogue will now be displayed.



You can now select which of the views associated to template element you once to clone. Once you have selected the type of views to clone click OK.

3.2. Clone Drawings – Schedules

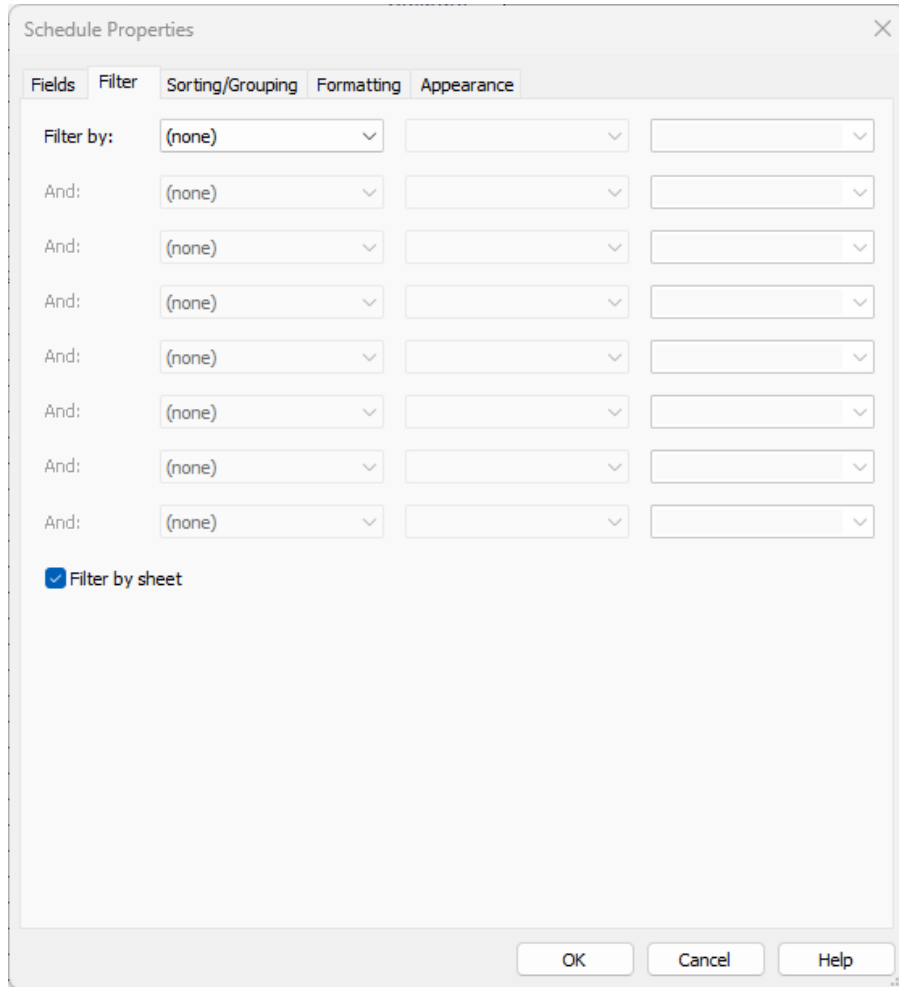
If schedule is place on a sheet during the Clone Drawing process that schedule will also be cloned to the new sheet. The schedule needs to have no filters except filter by Sheets.

Bar Mark	Type	Qty	Length of each bar (mm)	Shape code	Ø (mm)	Er (mm)	C (mm)	D (mm)	E (mm)	Rebar
S	1#16	11	1766	Ø6	1716	6	6	6	6	
S	1#16	11	1766	Ø6	1716	6	6	6	6	
S	1#6	2#		RebarShape-1	125	96	96			
S	1#6	2#		RebarShape-1	125	96	96			
S	1#6	2#		RebarShape-1	125	96	96			
S	1#6	2#		RebarShape-1	125	96	96			
S	1#6	2#		RebarShape-1	125	96	96			
S	1#8	11		RebarShape-2	796	115	115			
S	1#8	11		RebarShape-2	796	115	115			
S	1#6	11		RebarShape-1	116	96	96			
S	1#6	11		RebarShape-1	116	96	96			
S	1#6	11		RebarShape-1	116	96	96			

POWERPACK
for Revit

www.autodesk.com/revit

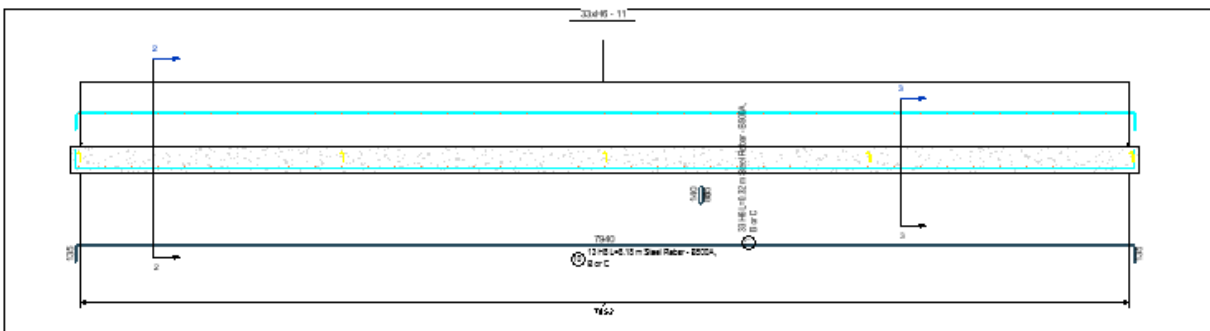
Consultant Address Address Phone Fax	Consultant Address Address Phone Fax
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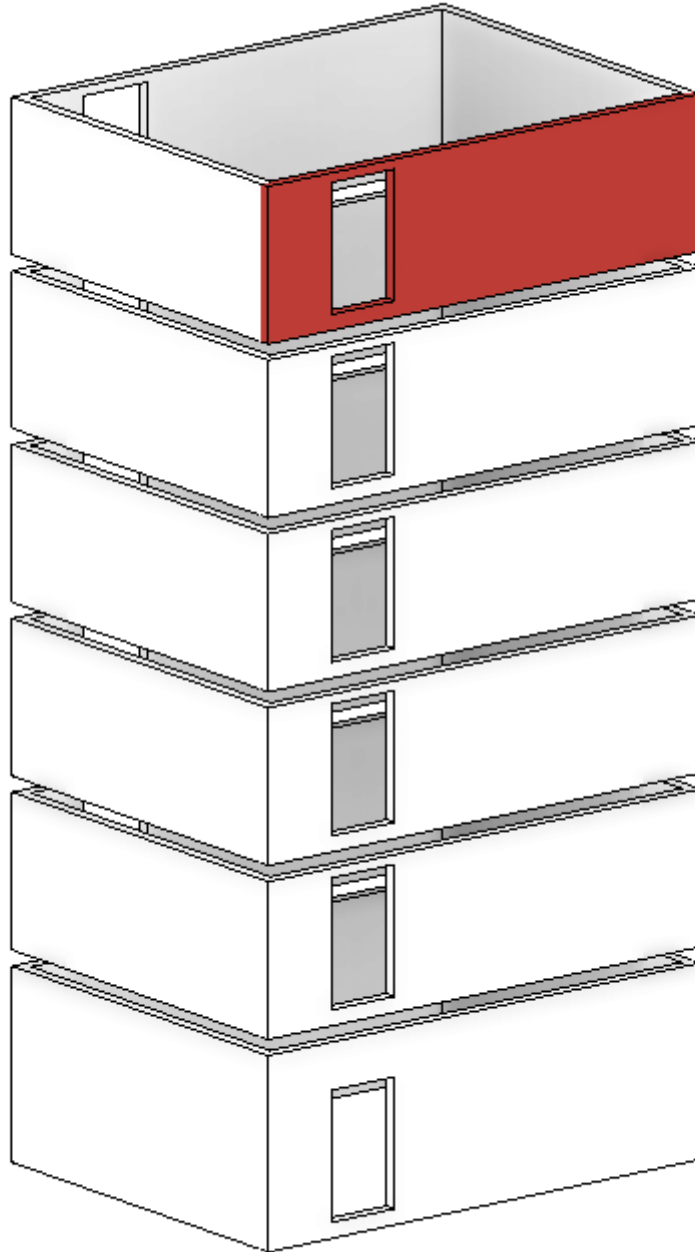
3.3. Clone Drawings – Grouped Walls

When using Clone Drawing on Beams, they will be grouped together so that a multi-span beam can consist of more than one beam, as the tool will automatically group them. This function work in a similar way for Walls.

As with the general function for clone drawings, first create a fully detailed template with all views created and added to sheets if required.



Run the Clone Drawing tool and select the template wall. That wall will be highlighted, and all other categories will be hidden. This makes the selection much easier in 3D.



Selection method of additional grouped walls. When you select a wall by just clicking on it, the Clone Drawing tool will automatically search for connected walls on the level on which you are on. This step will clone only views that are parallel to XY plane.

Holding down the SHIFT key and selecting a wall will only select that wall. It will not look for other connected walls.

Also, keeping the CTRL key and selecting a wall will look for vertically connected walls on other levels. Note this will not search for Horizontally grouped walls. This step will clone only vertical views.

