



What's New

in PowerPack for Revit 2023.1



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1. WELCOME TO GRAITEC POWERPACK FOR REVIT 2023.1

GRAITEC is pleased to introduce the update of PowerPack for Revit 2023.1, now available. This update adds multiple enhancements and new features that we will explore in this document.

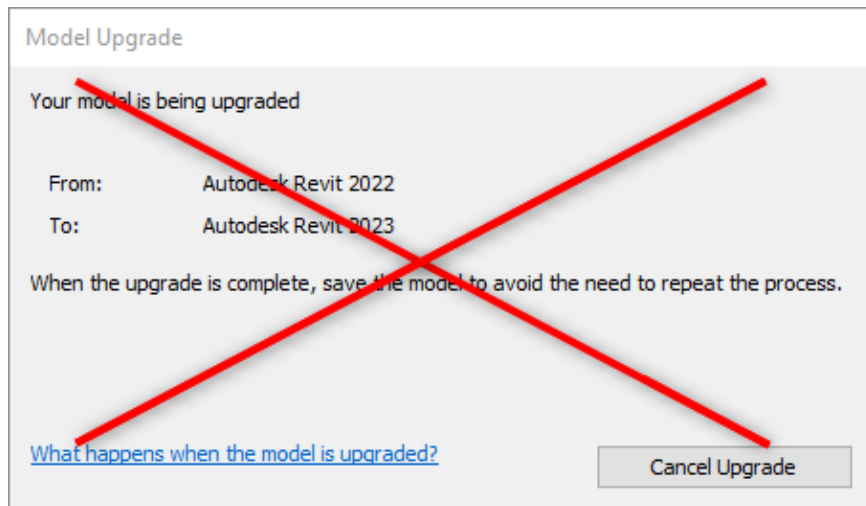


2. General

2.1 Upgrade of all Graitec Libraries

As the PowerPack 2023 is only compatible with Revit 2023, all content provided with the PowerPack has been updated to the current version of Revit.

This means that every library, template, and content such as Rebar Schedules Template, Legends dimension, and Graitec's families have been updated. This update will result in much better-performing software since automatic updates are not performed anymore when loading those elements.



2.2 Graitec on the web panel

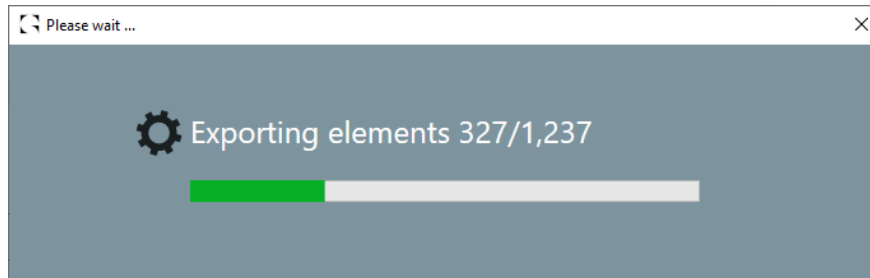
To clarify the interface of the launchpad of the PowerPack when starting Revit, the panel “*Graitec on the web*” has been disabled by default.

This is still accessible via the “Help” menu.

3. PowerPack Standard

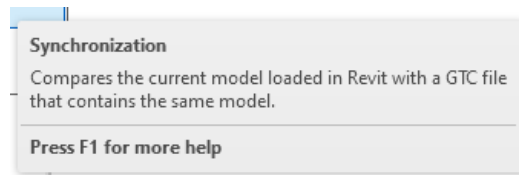
3.1. BIM Connect: Progress Bar during Import and Export.

A progress bar has been added when performing an export or an import. The progress bar allows users to see the status of the Import or Export action. Thus, it is possible to know at any time the progress of the export or import, which is important when working on large-scale projects.

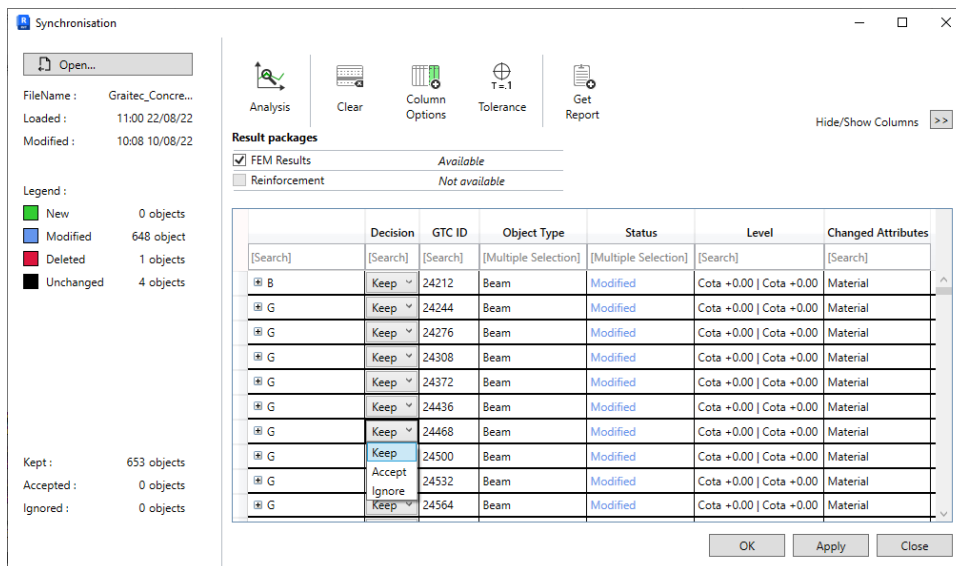


3.2. BIM Connect: Tooltips inside Synchronize commands

Tooltips have been added when the mouse hovers over the commands from the synchronization window. Those tips will help users understand the workflows involved with the import, export, and synchronization of .gtcx files.

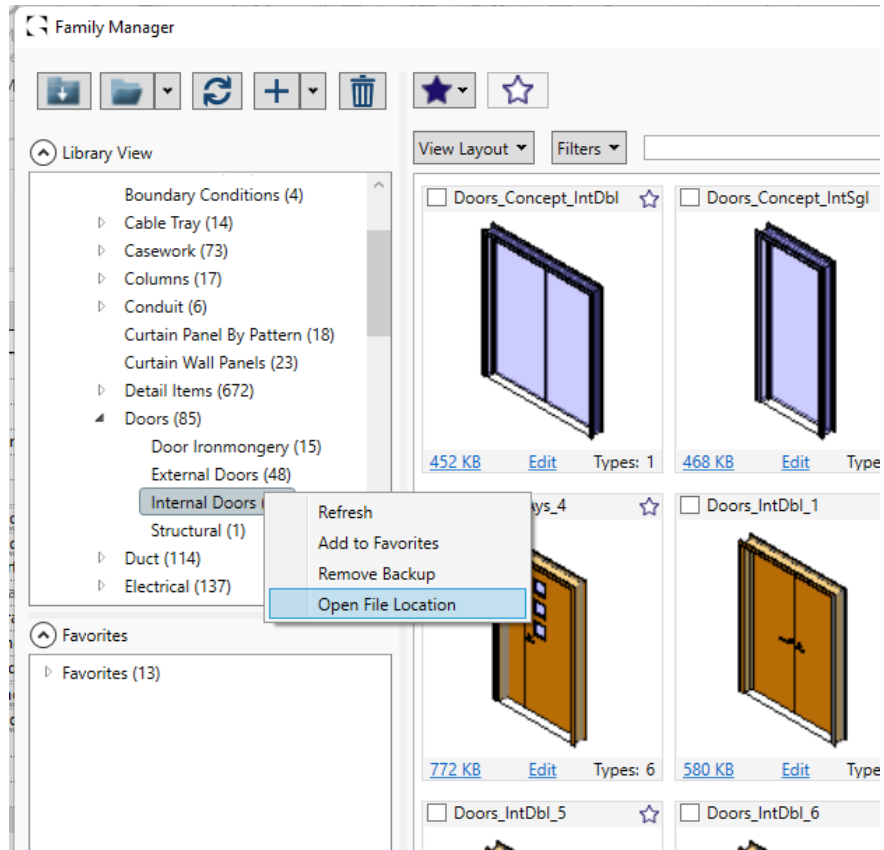


A description of the actions that will be performed is displayed on the screen when the mouse stays on the commands, Open, Analysis, Clear, Keep, Accept, Ignore, Apply ... These tooltips have been added on all the commands for the synchronization window and in all the child windows.



3.3.Family Manager: Open File Location

When using the family manager if you right-click on any folder or subfolder you will be given the option to “Open File Location”, very useful when adding additional content to your Libraries.



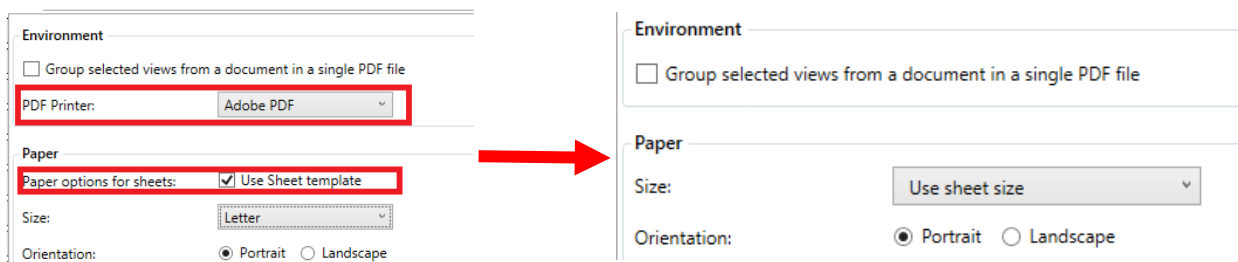
4. PowerPack Professional

4.1 Improvements to Batch Export

Since 2022 Autodesk proposes the export to PDF, however, the PowerPack was still using the PDF Printer Driver defined by default on the user workstation. This is not the case anymore, from now on, the PDF driver that is used by the Batch Export Command is Autodesk's PDF driver.

This change corrects an issue that often occurs when launching the Batch Export command, resulting in the closure of Revit.

This change also simplifies the use of the command. The checkbox "Use sheet template" has been removed", and is now integrated into the Paper Size combo box.



4.2 Better performance for the Numbering tool

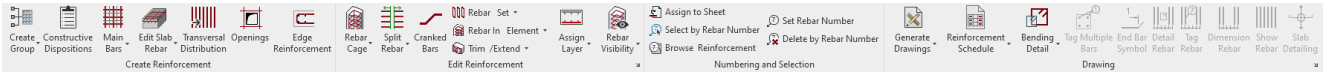
The numbering tool took some time to read the project's parameters. This step has been accelerated, and the time to use the numbering tool is considerably reduced. Now the command can be used almost instantly after launch.

5. PowerPack Premium Concrete

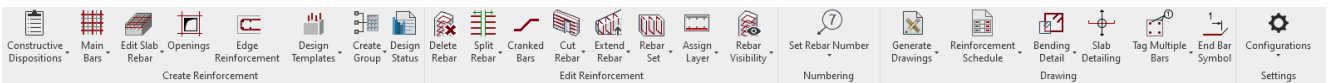
5.1 New Ribbon "PowerPack Detailing"

The ribbon "PowerPack Detailing" has a new layout and new commands. From now on, all the useful commands for Design are grouped in the PowerPack Design ribbon, and all the useful commands for Detailing are grouped in the PowerPack Detailing ribbon. This implies that some commands are sometimes present in both ribbons at the same time.

2023:



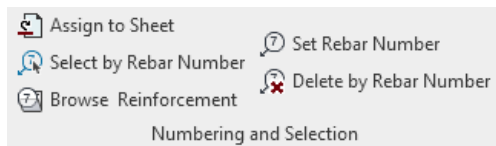
2023.1:



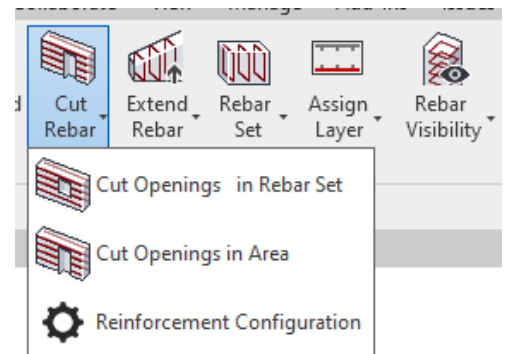
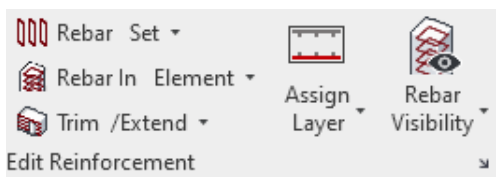
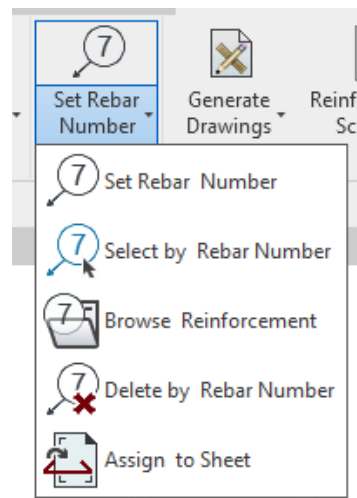
The new ribbon respects the steps of the workflow: From left to right have grouped the functions allowing to Create Reinforcements, then to edit Reinforcements, then to the number and finally to Draw. In more detail, major changes are presented as follows:

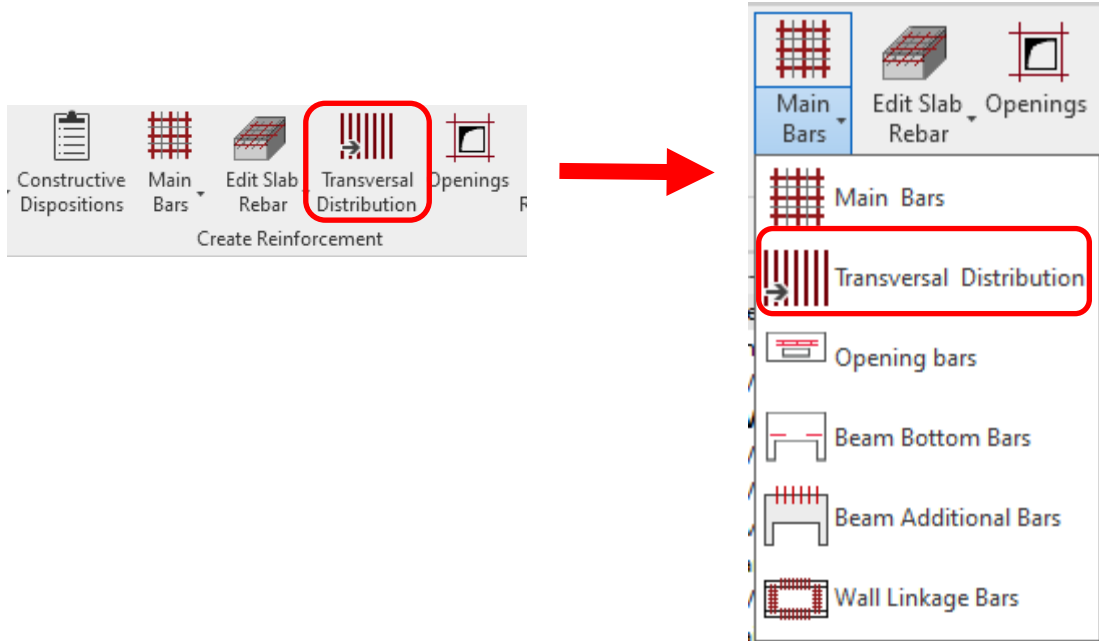
- Functions are grouped in drop-down lists, as shown below

PowerPack 2023

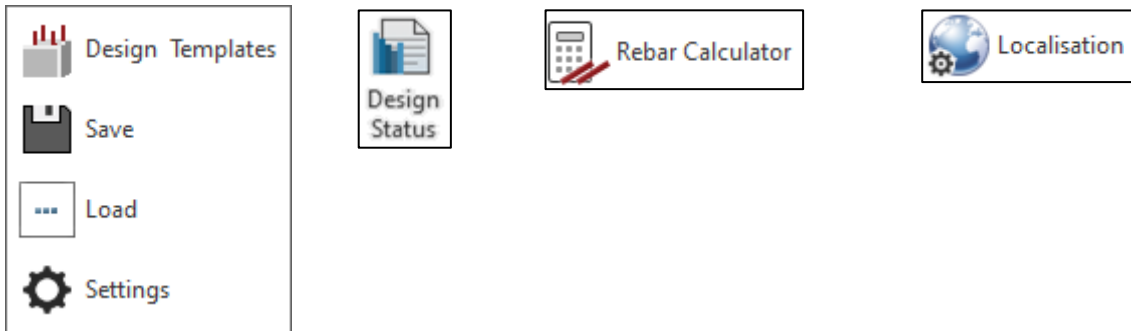


PowerPack 2023.1





- Functions added to the ribbon “Detailing”:

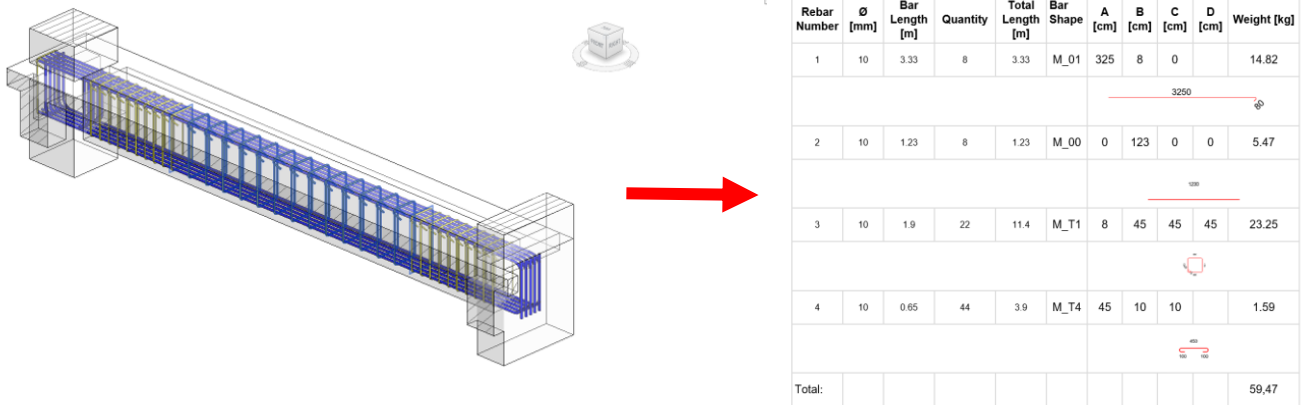


- Functions removed from the ribbon “Design”:



5.2 New template for Word Export

In 2023, a new command called “Export Schedule” has been introduced to the PowerPack. This command allows users to export rebar schedules to Microsoft Word.



In this new release, we have improved the template used by default. Now it is easier to generate a Word Schedule with bending details and Rebar dimensions. Totals for lengths and weights are also performed with this new template. Therefore, you can create a Word Rebar Schedule with the same level of information as Revit Schedules.

When using this new template users should also pay attention to units used in the Revit project. To set the correct units, go to Manage / Projects Units / Discipline / Structural. And sets the correct units for Reinforcement Lengths and Reinforcement Volume.

Units	Format
Point Spring Coefficient	1234.6 kN/m
Pulsation	1234.6 rad/s
Reinforcement Area	1234.57 cm ²
Reinforcement Area per Unit	1234.57 cm ² /m
Reinforcement Cover	1235 cm
Reinforcement Length	1235 m
Reinforcement Spacing	1235 cm
Reinforcement Volume	1234.57 m ³
Rotation	1234.568 rad
Rotational Line Spring Coeff	1234.6 kN-m ² /m
Rotational Point Spring Coef	1234.6 kN-m ²
Section Area	1234.6 cm ²
Section Dimension	1234.6 cm
Section Modulus	1234.6 cm ³
Section Density	1234.6

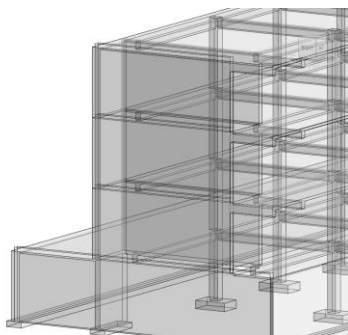
5.3 Word Export in every language

Previously the language of Revit had to be the same language used inside the Word Export template. As the template provided by default was in English, it was possible to use Word Schedule Commands only with Revit in English with the default template.

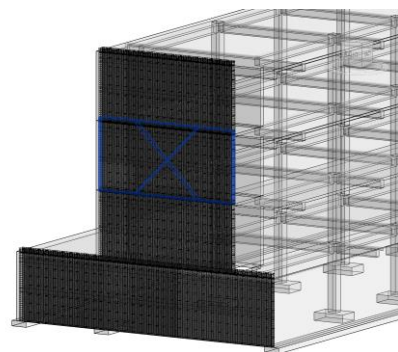
With the 2023.1 release, we made a new template, compatible with every language of Revit. Now, whatever your localization is, you will be able to perform a Word Export with the template by default. You can still edit and create your template inside the template editor.

5.4 Reinforcements Visibility for fabrics

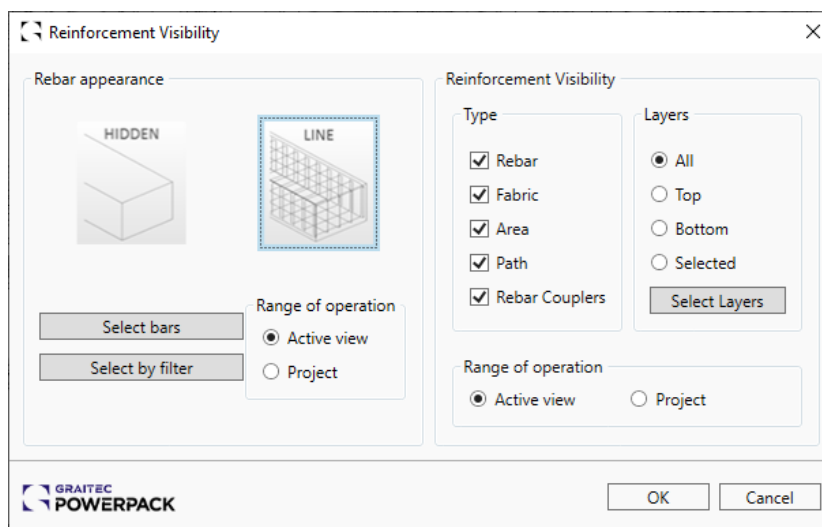
Structural Fabric Reinforcement is now a category taken into account by the Reinforcement Visibility Tool. Before this release Tool was only used to Hide or Show the category Structural Fabric Area. Now when the rebar appearance 'Line' is selected, both categories Structural Fabric Reinforcement and Structural Fabric Area will be View unobscured.



Before Update

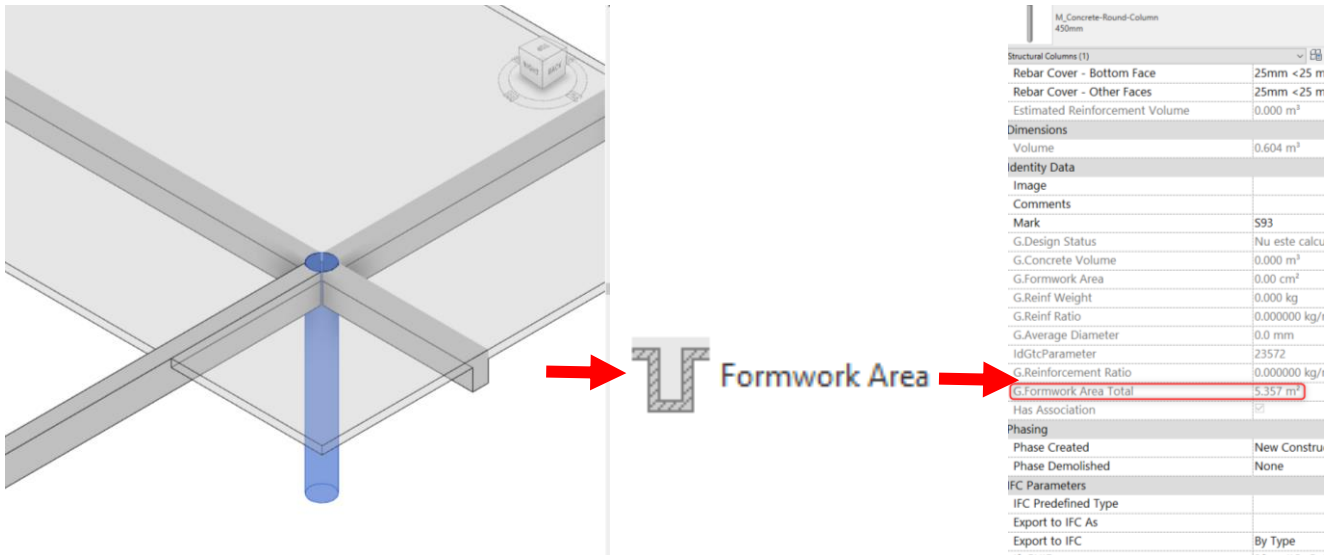


After Update



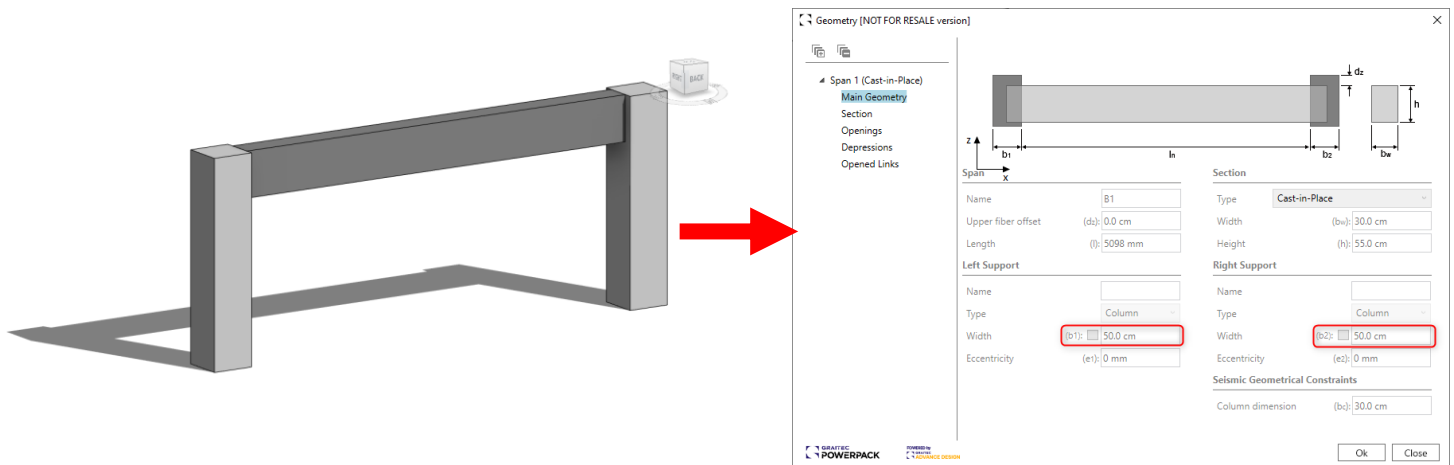
5.5 Correction: Formwork Areas

Correction of a problem causing an error in the calculation of formwork areas for circular columns: Previously the intersection between slabs and circular columns wasn't taken into account in the calculation of formwork area. But this is now the case.



5.6. Define custom support width

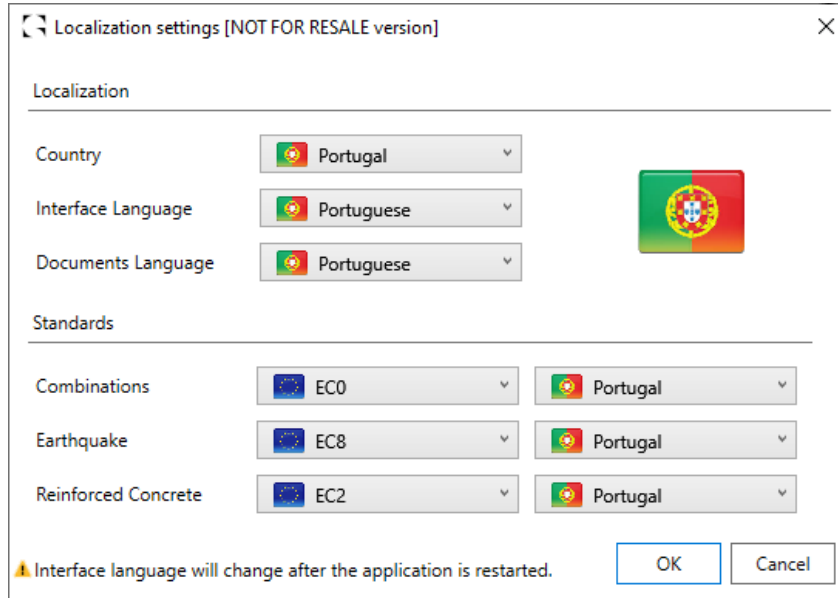
Users are now able to define a custom support width for beams. Inside the Geometry window of beams, a new checkbox has appeared.



Users can check the checkboxes to define a custom value that will be used for calculation. If the checkbox is unchecked, the used value will be defined automatically, with the detection of nearby structural elements.

5.7 New Location: Portugal

Graitec's libraries have been updated to meet the requirements of Portuguese users. Therefore when installing the PowerPack, you will find custom Annotations, Bar Schedules, Bending Detail, Drawing configurations, and families targeted toward Portuguese professionals.



5.8 Continuous footing: Drawings include above wall

When using the command “Generate Drawings” with continuous footings, the elevation wall is now displayed on the detail view. This means that elevation walls are visible by default on the drawings of continuous footings.

