

Feature Summary

The following is a Revit® Extensions for Revit® Structure 2009 (Q3 update) software feature summary that provides an overview of the new functionality in the following categories:

- Framework** (common features)
- New Extensions**
- New Features for existing Extensions**

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Framework

Ability to Work with 64-bit Release of Revit Structure 2009

All extensions except Reinforcement Drawings and Analysis Integration Enabler for Autodesk® Concrete Building Structures 2009 work with the 64-bit release of Revit Structure 2009.

New Extensions

Static Analysis of Beams

This extension allows you to perform static analysis of a single or multi-span beam defined in a Revit Structure model. It utilizes information directly from Revit Structure such as: beam geometry, constraints/supports, load cases, load combinations and loads. Results are displayed in both graphical (diagrams) and tabular form. Additionally, results may be presented in the form of a report (in the HTML format). The report for a beam can be printed, saved to a file or sent to a MS Excel® or MS Word® document.

Static Analysis of Frames

This extension lets you perform static analysis of a 2D frame defined in a Revit Structure model. It utilizes information from Revit Structure such as: frame geometry, frame members, constraints/supports, load cases, load combinations and loads. Results are displayed in both graphical (diagrams) and tabular form. Additionally, results may be presented in the form of a report (in the HTML format). The report for a frame can be printed, saved to a file or sent to a MS Excel® or MS Word® document.

Reinforcement of Retaining Walls

This extension creates true 3D “intelligent” rebar data in Revit Structure. It helps you define reinforcement for a wall, footing, key and shelves, including inclined walls.

Reinforcement of Slab Corners

This helps you define both simple and complex reinforcement patterns for slab corners. It creates true 3D “intelligent” rebar data in Revit Structure. It aids you in defining various types of reinforcement in corners with angles between 45 and 135 degrees.

Automatic Reinforcement Generation

This extension lets you automatically generate reinforcement for a complete building or a selection of elements in the current project. The reinforcement is generated using default values of parameters for each typical reinforced concrete element, based on templates previously stored in data files, or defined by the user on an ongoing basis.

New Features for Existing Extensions

Analysis Integration Enabler

Structural Grids/Axes Transfer from Revit Structure to Autodesk Robot Structural Analysis Professional 2009

Revit Structure grid lines aligned with global X & Y axes with the same range of levels are grouped and converted to a structural axis set in Autodesk Robot Structural Analysis

Professional. This feature is available only when you work with Autodesk® Robot™ Structural Analysis Professional 2009.

Transfer of Parametric Profiles from Autodesk Robot Structural Analysis Professional to Revit Structure

There are certified Revit families (describing various types of parametric sections that can be defined in Autodesk Robot Structural Analysis Professional) that are installed with Analysis Integration Enabler. These families are used when transferring parametric sections to Revit Structure. This feature is available only when you work with Autodesk Robot Structural Analysis Professional 2009.

Transfer of Rigid Links from Revit Structure to Autodesk Robot Structural Analysis Professional

A column rigid link parameter is converted to a rigid link attribute when the “Send” command is executed. This feature is available only when you work with Autodesk Robot Structural Analysis Professional 2009.

Transfer of Offsets Defined in Revit Structure to Autodesk Robot Structural Analysis Professional

Optional transfer of Revit model offsets to Autodesk Robot Structural Analysis Professional analytical model offsets is now available when the Send command is executed. This feature is available only when you work with Autodesk Robot Structural Analysis Professional 2009.

Timber Materials and Profiles

Definition and transfer of timber materials and sections are now supported. This feature is available only when you work with Autodesk Robot Structural Analysis Professional 2009.

Gamma Angle of Autodesk Robot Structural Analysis Professional Profiles

An internal section gamma angle is now considered when elements are transferred in both directions. This feature is available only when you work with Autodesk Robot Structural Analysis Professional 2009.

Supporting Collaborative Work: Update in Revit Structure of a Subset of an Autodesk Robot Structural Analysis Professional Model

A new Update options dialog has been implemented. It is now possible to select, either in Revit Structure or Autodesk Robot Structural Analysis Professional, objects/elements that should be updated during the command execution. This powerful feature makes it possible to assign model modification tasks to more than one engineer. For instance: one person could work on one story of the building and just this story can be selected when updating. This feature is available only when you work with Autodesk Robot Structural Analysis Professional 2009.

More detailed descriptions of each feature in may be found in Revit Extensions help file.



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