Autodesk® Revit® Architecture 2011

Autodesk® Revit® Architecture 2011 software helps architects and designers work naturally, design freely and deliver projects efficiently. Purpose-built for Building Information Modeling (BIM), Revit Architecture helps you explore design concepts and forms, and better maintain your design data through documentation and construction. With parametric change technology, any change you make is automatically updated throughout your model, keeping your design and documentation coordinated and more reliable. Share essential BIM data with your partners for a more collaborative, integrated building design process. Support a more efficient design process that enables improved sustainable design analysis, clash detection, construction planning and material fabrication.

What's New

Key Features Common to all Revit Platform Software — Autodesk® Revit® Architecture 2011, Autodesk® Revit® MEP 2011 and Autodesk® Revit® Structure 2011 software share a common set of key enhancements for improved design functionality and workflow to help design teams accelerate better design with tools that promote productivity and support sustainable design and analysis. See the Autodesk® Revit® Platform Enhancements for 2011 backgrounder for information on the platform enhancements.

Enhancements specific to Revit Architecture 2011 include:

- Form Editing
    - Sketch editing for conceptual masses in Revit Architecture 2011 has been improved with the ability to edit individual profiles of any type of form without having to delete the form first, similar to "sketch mode" but even more accessible.

    - The Dissolve Form command removes the surfaces from a form, leaving the valuable defining profiles, curves and points.

    - In the past, only voids could be used as cutting elements for Boolean operations, and it was difficult to access them again for further transformations. Now solids can be used to cut other solids, so that when the cut is executed, geometry from both forms remains visible.

- Surface Rationalization

    - The ability to rationalize surfaces has been enhanced. Surfaces can now be split by levels, reference planes and model lines.

    - Now, divided surface patterns can be made up of any combination of UV grids and intersects created by these new elements.

- Adaptive Components — The adaptive component is a generalized implementation of the pattern-based curtain panel family, which was introduced with the 2010 release of Autodesk Revit Architecture. It is designed to handle cases where components need to

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flexibly adapt to many unique contextual conditions. The adaptive component can be used to simply fill in the empty edge panels on a divided surface or for more complex modeling or framing applications.

- Structural Tools — Several features formerly available only in Autodesk Revit Structure software are now available in Autodesk Revit Architecture, such as the ability to create:

  o Curved beams

  o Slanted columns

  o Beam copings

  o Trusses

  o Metal deck profiles, and more

- Rendering Enhancements:

  o Background Images — Revit Architecture now provides the ability to display images in the background of rendered views.

  o Procedural Textures — Create custom procedural textures based on patterns such as checker, gradient, wood or tiles.

  o New Autodesk Material Library — More smoothly exchange material data between Autodesk applications with the new Autodesk Material Library. Materials can be exchanged with certain other supporting Autodesk applications (AutoCAD®, Autodesk® Inventor®, Autodesk Revit MEP and Autodesk Revit Structure software) in a true one-to-one mapping — helping create a consistent definition and rendered look and minimize the need to rework materials after data import.

    Note: The new Material Library in Revit Architecture 2011 will only export materials, lights, or environments to 3ds Max/3ds Max Design 2011.

  o Removal of Four-Core Rendering Limit — Rendering in Revit-based products is no longer limited to the use of four cores on multiprocessor computers. Revit-based products can now take advantage of as many cores as are available on your computer.

- Access to Autodesk® Green Building Studio® Web-Based Services (Available with Subscription to Revit Architecture)

  - More smoothly extend BIM workflows to include sustainable analysis. With more than 1.6 million virtual weather locations across the globe, the climate information used in analyses can be more local, accurate and current.
  - By using the power of cloud computing, Green Building Studio can generate analyses in a matter of minutes, thus helping architects and designers to iterate through multiple design options earlier and more often.
  - For new buildings projects, whole building energy analysis can help predict more accurate building operation costs before construction. For renovation and retrofit projects, the software helps users to make the most efficient design choices.

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