Autodesk[®] Revit LT™ 2013 AutoCAD[®] Revit LT™ Suite 2013

Questions and Answers

Autodesk[®] Revit LT[™] software delivers intuitive, 3D Building Information Modeling (BIM) software based on the Autodesk[®] Revit[®] platform. Create higher quality designs and documentation working in a coordinated 3D model-based environment. Share designs with stakeholders using other Autodesk Revit and AutoCAD[®] platform software, and produce renderings in the cloud with Autodesk[®] 360, available to Autodesk Subscription customers.

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1. General Product Information

1.1 What is Autodesk Revit LT?

Autodesk[®] Revit LT[™] software is an intuitive, 3D Building Information Modeling(BIM) software application built on the Autodesk[®] Revit[®] software platform that helps you create higher quality, more accurate design and documentation. Autodesk Revit LT allows building professionals to create designs efficiently working in a single, coordinated 3D model-based environment that automatically updates your design when changes are made. Revit LT can help you better support client and stakeholders needs by offering fluid file exchange using software based on the Autodesk Revit or AutoCAD[®] platform software.

1.2 How does Revit LT support the BIM process?

Revit LT supports the BIM process by creating coordinated, consistent, and quantifiable information about a building project throughout design and construction. BIM helps give design professionals insight to their projects with the ability to keep design information up-to-date, and extract information from the building model during any stage of design. This insight helps professionals design more efficiently, obtain earlier approvals, and deliver higher quality, more easily constructible projects with fewer complications during the construction process.

For more information about BIM and to read white papers, case studies, and other information, visit *www.autodesk.com/bim*.

1.3 Who is Revit LT for?

Revit LT is intended for building design professionals working on projects that can be completed independently or with limited internal collaboration but could benefit from a BIM-based workflow to produce more accurate, coordinated designs and documentation. Revit LT is ideal for single users who do not need to collaborate in the same project file simultaneously with others in the firm, and who do not need access to energy or structural analysis tools. (For information on the differences in capabilities of Revit LT and Autodesk Revit software, see section 2.1.)

1.4 What is AutoCAD Revit LT Suite 2013 software?

AutoCAD[®] Revit LT[™] Suite 2013 is a bundle consisting of Autodesk Revit LT 2013 and AutoCAD LT[®] 2013 software with a single serial number and a single authorization code. This combination enables you to maintain your investment in AutoCAD LT, while, when you're ready, offering the flexibility to move to BIM with help from Revit LT. For more information about AutoCAD Revit LT Suite, visit <u>www.autodesk.com/revitlt</u>.

1.5 What other Autodesk Revit software products are available?

There are four other Autodesk[®] Revit[®] platform software products: Autodesk Revit, Autodesk[®] Revit[®] Architecture, Autodesk[®] Revit[®] MEP, and Autodesk[®] Revit[®] Structure.

Autodesk Revit 2013 is a version of Revit that combines the capabilities of Autodesk Revit Architecture 2013, Autodesk Revit MEP 2013, and Autodesk Revit Structure 2013 software into a single, comprehensive application. It is exclusively offered in the Autodesk[®] Building Design Suite 2013 Premium and Ultimate edition. For more information on Autodesk Revit, visit www.autodesk.com/revit.

If you are transitioning to BIM from AutoCAD LT, AutoCAD Revit LT Suite software was created for just that purpose.

2. Revit LT Features

2.1 What are the differences between Autodesk Revit and Revit LT?

Autodesk Revit LT contains a subset of the features in the Autodesk Revit software, available in Autodesk[®] Building Design Suite Premium and Ultimate editions. A basic summary of additional functionality included in Autodesk Revit is below:

Feature	Autodesk [®] Revit LT [™] 2013	Autodesk [®] Revit [®] 2013
Single, Coordinated Model	\checkmark	\checkmark
Autodesk [®] 360 Rendering*	\checkmark	\checkmark
Intelligent (Parametric) Components	\checkmark	\checkmark
Worksharing (Multiuser Environment)		\checkmark
Autodesk [®] 360 Energy Analysis for Autodesk Revit*		\checkmark
Near-Photorealistic Rendering within the Product		\checkmark
Conceptual Massing, Adaptive Components		\checkmark
Exports to gbXML, and IFC file format		\checkmark
Interference Checking, Copy/Monitor		\checkmark
Construction Modeling - Parts and Assemblies		\checkmark

*Available to Subscription Customers during the term of their Subscription

2.2 Can I create near-photorealistic renderings using Revit LT?

Although a near-photorealistic rendering feature is not included in the Revit LT desktop application, Autodesk[®] Subscription customers may produce renderings in the cloud with Autodesk[®] 360 Rendering services. With the click of a button and a few simple settings, Autodesk 360 Rendering allows you to send Revit LT 3D views to the cloud to produce near-photorealistic still images and panoramas—without tying up your desktop or requiring specialized rendering hardware. For more information, visit <u>www.autodesk.com/bim360</u>.

2.3 What are families in Revit LT, and how many are included in the library?

All elements in Revit LT are based on families. The term *family* describes a powerful concept that helps users more easily manage data and make changes. It refers to an element's ability to have multiple types defined within it, each of a different size and shape. Even though the types can look completely different, they are all still related and come from a single source, hence the term *family*. Families are similar to *blocks* in AutoCAD or AutoCAD LT but a family offers more control, intelligence, and flexibility. Changes to a family or type definition ripple through the Revit model and are automatically reflected in every instance of that family or type in the model. This capability keeps the model coordinated and helps save users the time and effort of manually tracking down components to update.

The Revit LT library contains tens of thousands of families and includes components in both imperial and metric units. Revit LT family files are also available from the Revit LT web library (accessible from within the product) and from other publicly accessible websites, including the Autodesk[®] Seek web service. Revit LT and other Revit platform families are fully compatible. Each family file can produce many components. Because each file typically includes several sizes or types, the number of parts available is in the tens of thousands.

2.4 Do I need to know a programming language to create content in Revit LT?

No. Parametric components are open, graphical systems for design thinking and form making, and are a powerful way of expressing design intent at increasingly detailed levels. No programming language or coding is required to drive this powerful system; Relationships can be expressed directly in the system.

2.5 What does parametric mean, and how does Revit LT keep designs and documentation updated and consistent as design changes are made?

The term *parametric* in this context refers to the relationships among and between all elements of the model that enable the coordination and change management that Revit LT provides. These relationships are created either automatically by the software or deliberately by users as they work.

An important characteristic of certain BIM applications is the ability to coordinate changes and maintain consistency at all times. The user does not have to intervene to update drawings, links, tags, etc.

This concept is important because it is this capability that delivers the fundamental coordination and productivity benefits of Revit LT—a change anywhere is a change everywhere. Revit LT coordinates that change throughout the entire model.

2.6 Do I have to regenerate sections and schedules manually? Can I work in the section view?

You do not have to regenerate sections and schedules manually. In Revit LT, a section view is "live" and presents itself instantly when the user creates it. The section view will automatically update if the defining section line is moved. Designers can work (add or edit components) in the section view without restrictions.

Schedules are created using the same principle. They are simply a non-graphic type of view. So they are also "live" and they update as the designer changes the model. In fact, designers can change things in the schedule and Revit LT updates the model and drawings.

2.7 How does Revit LT support conventional drafting and detailing, and produce construction documents? Do I still need AutoCAD or AutoCAD LT for that?

Architects and building design professionals can work entirely in Revit LT to generate construction documentation. AutoCAD or AutoCAD LT software is not required. Revit LT offers a large collection of 2D details and components that can be used for drafting and detailing, in a very similar manner as AutoCAD or AutoCAD LT.

In addition, Revit LT enhances documentation quality, since Revit LT automatically manages iterative changes to your building model throughout the documentation process. As a result, a consistent representation of the building is maintained, improving drawing coordination and helping to reduce errors. Instead of manually coordinating the detail

Use parametric components to generate elaborate assemblies—including those with intricate, iterative, algorithmic, and behavioral characteristics—as well as the most elementary building parts.

Designers can make changes in sections, elevations, or schedules and Revit LT propagates the changes throughout the model. number to the proper sheet, Revit LT automatically coordinate the information for you. Below is a basic summary of the differences between Autodesk Revit LT, AutoCAD LT.

	Autodesk [®] Revit LT™ 2013	AutoCAD LT [®] 2013
Documentation		
Create documentation with 2D drafting and detailing tools	\checkmark	\checkmark
Place annotations and dimensions to communicate additional design information	\checkmark	\checkmark
Automate the creation of schedules based on building components	\checkmark	
Automatically calculate and track material quantities in cost estimates	\checkmark	
Automatically update every documentation view when revisions are made to your design	\checkmark	
3D Modeling		
Use specialized architectural modeling tools for BIM to concurrently design and document	~	
Visualization and Presentation		
More easily generate 3D orthographic or perspective views from any angle of the model to visualize the space	\checkmark	
Produce compelling, near-photorealistic renderings with Autodesk 360 Rendering* without tying up your desktop	\checkmark	
Create real-time animations/walkthroughs to visualize the building virtually	\checkmark	
Collaboration		
Design, document, and share files in the DWG [™] format for smoother collaboration with project stakeholders	\checkmark	\checkmark
Reference other file formats, including DWF™, image formats, and others	\checkmark	\checkmark
Exchange Revit files with stakeholders using other Autodesk Revit software products	\checkmark	

*Autodesk 360 Rendering is available to Autodesk Subscription customers of Revit LT during the term of their contract.

3. Interoperability

3.1 What standards and file formats does Revit LT support?

Revit LT supports a wide range of industry standards and file formats, including:

- Files that can be imported or linked: Revit, CAD, DWF Markup, and Image
- Files that can be exported: DWG, DXF™, DGN, DWF/DWFx, BMP, JPEG, PNG, TIFF, TARGA, FBX[®], and NWC

3.2 Can Revit LT produce DWG deliverables for clients or consultants?

Revit LT can produce DWG deliverables just as AutoCAD LT can. Revit LT provides DWG compatibility using the RealDWG[®] toolkit. And because these DWG deliverables were created in a modeling environment, they are well structured and easier to change.

Revit LT supports the process most firms use with their consultants by producing wellorganized and layered DWG files based on any layering standard the user wants. Revit LT helps to see that nothing in an exported DWG file ends up on the wrong layer, easing consultant interactions and helping to accelerate the design and construction process.

Revit LT provides features that help integrate your work with other consultants. Import or link DWG files directly into Revit LT to use as reference geometry or as the starting point for a new design, such as a site plan. Any CAD system that supports the DWG, DGN, or DXF file formats can work effectively with Revit LT.

3.3 Does Revit LT use layers like the products based on AutoCAD software? How does Revit LT organize data?

Revit LT uses a system of categories and subcategories to organize information within the building information model. Users can create their own subcategories for organizing data and graphic override techniques for visibility and graphic control.

Categories and subcategories can be mapped for export in a way that creates layered DWG, DGN, or DXF files based on various CAD standards.

Four default mappings ship with the product: AIA CAD Standard 2000 (United States), BS1192 (United Kingdom), ISO13567 (Europe), and CP83 (Asia). Users can also create their own project-specific layer mappings.

3.4 Can Autodesk Revit 2013, Revit Architecture 2013, Revit MEP 2013, or Revit Structure 2013 files be opened in Autodesk Revit LT 2013?

Revit LT 2013 can directly open projects that are created in other Revit 2013 applications, including Autodesk Revit 2013, Autodesk Revit Architecture 2013, Autodesk Revit MEP 2013, and Autodesk Revit Structure 2013. At the same time, other Revit platform products can open Revit LT files. This ability to more easily pass files back and forth makes it easier to work with other users who are already on Revit platform.

Also, if you decide you want to move to other Revit platform products for more capabilities later, you can make the transition more smoothly.

3.5 What is the data compatibility between AutoCAD or Bentley MicroStation software products and Revit LT 2013?

Revit LT 2013 provides several important interoperability capabilities for AutoCAD and Bentley[®] MicroStation[®] users. First, Revit LT 2013 users can import, export, and link any

Revit LT supports the process most firms use with their consultants by producing layered DWG or DGN files using any layering standard the user wants. version of DWG and DGN (V7 and V8) format files. Users can draw on imported files to create Revit LT parametric model geometry. Revit LT manages imported or linked files so that detail libraries in either DWG or DGN file format can be placed on sheets and all callouts are automatically managed. Further, Revit LT can map a specific DWG layer on import to a specific DGN level number on output or vice versa in any combination.

3.6 How does Revit LT compare with Autodesk Vasari?

Autodesk[®] Vasari software is a BIM-based conceptual modeling and early building performance analysis tool that is currently available as a public beta. Autodesk Revit LT is a BIM-based tool that supports the design and documentation of projects, from conception to completion.

3.7 Can I use Revit LT 2013 with Autodesk Showcase 2013 or Autodesk 3ds Max Design2013?

Users can transfer geometry from a Revit LT 2013 model into the Autodesk[®] Showcase[®] 2013 or Autodesk[®] 3ds Max[®] Design 2013 applications through FBX file export. Revit LT translates the model geometry along with the near-photorealistic materials assigned in the model to Autodesk Showcase 2013 and Autodesk 3ds Max Design 2013, helping to create a seamless workflow to create compelling visualizations.

3.8 Is there an application programming interface (API) or other third-party development tools for Revit LT?

Autodesk Revit LT does not support 3rd party API.

4. Licensing Revit LT

4.1 Can I use Revit LT in trial mode or viewer mode?

You can use Revit LT software in a free* trial mode for a 30-day period without an activation code. You can also use the product in free* viewer mode, which enables all features except save, plot, and export. To download a trial of Revit LT, visit *www.autodesk.com/revitlt/trial*

4.2 Is Autodesk Subscription available for Revit LT?

Yes, Subscription is available for many of Autodesk's products including, Revit LT and the AutoCAD Revit LT Suite.

Autodesk Subscription is the best way to keep your design tools and learning up-to-date. For an annual fee you get the latest versions of your licensed Autodesk software for which you have purchased Subscription, self-paced training options, and a broad range of other technology and business benefits.

Autodesk Subscription includes direct web support. You get one-to-one online communication with Autodesk support technicians for fast, complete answers to your installation, configuration, and troubleshooting questions. Web and email communications deliver support straight to your desktop. Plus you have web access to your account, so you can track and manage questions and responses.

Autodesk Subscription gives customers an advantage with Autodesk[®] BIM 360[™] cloud capabilities, such as Autodesk 360 Rendering and more storage capacity. As a result, they can view and share more design files on web or mobile devices, improve project results with web-based collaboration and data management solutions.

For more information about Autodesk Subscription, contact your Autodesk Authorized Reseller or visit *www.autodesk.com/subscription*.

4.3 Does AutoCAD Revit LT Suite user have to put both Revit LT and AutoCAD LT applications on the same computer?

Both software applications (Revit LT and AutoCAD LT) within AutoCAD Revit LT Suite must be installed on the same machine.

4.4 Is network licensing available for Revit LT or AutoCAD Revit LT Suite?

No. Network licensing is not offered for Revit LT and AutoCAD Revit LT Suite.

5. Consulting, Training, and Support

5.1 What consulting services are available for Revit LT?

Check with your local Autodesk[®] Premier Solutions Provider or Autodesk[®] Authorized Reseller for consulting services they offer.

Autodesk[®] Consulting also provides consulting offerings for project assessments, process audits, and a range of Revit LT implementation services. Custom consulting offerings are also available to meet your specific project needs. For more information on Autodesk Consulting, contact your local Autodesk Authorized Reseller or Autodesk Account Executive, or visit *www.autodesk.com/consulting.*

5.2 What resources are available to help users learn Revit LT?

A variety of learning tools are available to familiarize users with how Autodesk Revit LT works. A series of Essential Skills videos appear when a user launches Autodesk Revit LT on the Recent Files page. <u>Autodesk[®] WikiHelp</u> (<u>http://wikihelp.autodesk.com/Revit_LT/enu/2013</u>) is also available specifically for Autodesk Revit LT, containing a Getting Started Guide, tutorials, videos, help

documentation, and a discussion group.

5.3 Where can I find training courses for Revit LT?

Check with your local Autodesk Authorized Reseller for a schedule of training classes.

5.4 How can I get technical support information?

Technical support information is available from several sources.

Autodesk Authorized Resellers provide telephone support services for Autodesk Revit LT, and other Autodesk products. In the United States and Canada, call 800-964-6432 to locate a reseller near you, or visit <u>www.autodesk.com/reseller</u>.

You can locate the answers to frequently asked technical questions in the support knowledge base on <u>www.autodesk.com/revit-support</u> as well as ask questions and read information about the use of Autodesk products in the peer-to-peer discussion groups on <u>www.autodesk.com/discussion</u>. Autodesk hosts topical discussion groups about specific products including Revit LT

Autodesk provides a variety of support offerings to help you implement Autodesk solutions faster, maximize productivity, and minimize downtime. These flexible support offerings are designed to meet your support needs, help enhance your business performance, and suit your budget. They are available to purchase from Autodesk Authorized Resellers:

- Autodesk[®] Basic Support is included with Autodesk Subscription. It provides web support from Autodesk and expedited community forum support.
- Available to Autodesk Subscription customers, Autodesk[®] Advanced Support features unlimited, priority, one-to-one, extended hours, global phone support from senior Autodesk support specialists, remote desktop assistance, and prioritized web support options.
- Autodesk[®] Pre-Incident Support is available without Autodesk Subscription. It provides access to Autodesk global phone support for products in the Autodesk portfolio on an as-needed basis for a per-incident fee.

For complete information, visit <u>www.autodesk.com/support-offerings,</u> <u>www.autodesk.com/revit-support</u>, or contact your Autodesk Authorized Reseller.

*This product is subject to the terms and conditions of the license and services agreement that accompanies this software.

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