

AutoCAD® Revit® MEP Suite 2009
(Including Revit® MEP 2009)

Questions and Answers

Purpose-built for building information modeling (BIM), Revit® MEP software enables cost-effective and environmentally sustainable design and better coordination across integrated project teams.

Revit MEP works the way engineers and designers of mechanical, electrical, and plumbing systems think, with tools to intuitively create, design, and document building systems. Revit MEP helps engineers and designers visualize their designs before they are built, to minimize design coordination errors between the engineering and architecture teams working on integrated projects. With its parametric change technology, any change is automatically coordinated everywhere in the project, including model views, drawing sheets, schedules, sections, and plans. Design and documentation stay coordinated, consistent, and complete. Partner applications and built-in tools for building performance analysis support better design decision making.

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1. General Product Information

1.1 Why should I switch to the AutoCAD Revit MEP Suite?

AutoCAD® Revit® MEP Suite software turns unparalleled flexibility to maximum advantage. By combining the industry-leading AutoCAD® MEP application with the immediate benefits of the Revit MEP building information modeling (BIM) software, this solution protects your investment in technology, training, and design data; accelerates engineering design and analysis; and enhances coordination of your presentations and documentation. It also enables you to move to BIM at your own pace.

1.2 Content is very important to our business. What content has been added to Revit MEP 2009?

In addition to the new content of the mid-year content extension, which more than doubled the MEP components available for use in Revit MEP, a significant amount of new content has been added to the 2009 version:

- Commercial condensing units up to 130 tons
- Air-cooled and water-cooled vertical packaged systems up to 60 tons
- Horizontal and vertical belt-drive DX and CW fan coils, stacked fan coils, and ceiling-mounted fan coils
- Packaged air handlers up to 25 tons
- Gas-fired and electric commercial packaged rooftop units to 130 tons
- Down-flow, vertical, and horizontal high-efficiency water source heat pumps up to 20 tons
- Occupancy and daylighting sensors
- Consolidation of Revit® Architecture light catalogs with Revit MEP catalogs
- Volumetric and direct-indirect lights

2. Technology

2.1 How is Autodesk addressing the growing demand for design-to-fabrication in the MEP industry?

AutoCAD Revit MEP Suite 2009 software offers design-to-fabrication capabilities in two ways:

- AutoCAD MEP has had design-to-fabrication capabilities through third-party vendors such as EastCoast CAD/CAM, QuickPen, and others for several years. For AutoCAD MEP 2009, a strategic partnership was formed with EastCoast to integrate its sheet metal and piping capabilities into AutoCAD MEP. EastCoast CAD/CAM is now able to offer a unique, seamless design-to-fabrication solution inside AutoCAD MEP 2009.
- Revit MEP 2009, through its ability to import DWG™ files and ACIS® solids from AutoCAD MEP 2009, will also be able to take advantage of the benefits of Autodesk's relationships with the third-party vendors just mentioned. You can also export architectural building elements from AutoCAD MEP and import them into Revit

MEP software using the International Alliance for Interoperability's Industry Foundation Class (IFC) standards. With AutoCAD MEP, you can also manually assign IFC classifications for MEP objects such as ducts, pipe, and etc., which enables you to take advantage of the design-to-fabrication capabilities of AutoCAD MEP.

2.2 How can I support sustainable design efforts using Revit MEP 2009?

Built-in duct, pipe, and electrical sizing tools dynamically interact with the BIM and built-in heating and cooling load analysis tools to optimize system design for maximum efficiency and more accurately predict the performance of building systems. Export to gbXML (green building extensible markup language) and API (application programming interface) links allow industry-standard tools such as Integrated Environmental Solutions' <Virtual Environment> (IES <VE>) to further optimize building designs for energy analysis, lifecycle cost, CFD, daylight, solar gain studies, and many other types of building performance analysis.

2.3 What integrated tools are available in Autodesk's MEP software solutions to help support sustainable design?

Sustainable design tools in AutoCAD Revit MEP Suite include:

- Duct sizing (AutoCAD MEP, Revit MEP)
- Pipe sizing (Revit MEP)
- Plumbing fixture unit sizing (AutoCAD MEP, Revit MEP)
- Electrical feeder sizing (Revit MEP)
- Panel schedule loads (AutoCAD MEP, Revit MEP)
- Heating/cooling loads (Revit MEP)
- gbXML export to trace 700, IES <VE>, and others (AutoCAD MEP, Revit MEP)
- API link to IES <VE> (Revit MEP)
- API link to Elite software (AutoCAD MEP)
- API link to EC-CAD® (AutoCAD MEP)

3. Installation, Configuration, and Licensing

3.1 What are the hardware and system requirements?

The recommended hardware and operating system requirements for running Revit MEP 2009 software are:

System Requirements

- Intel Pentium IV 1.4 GHz or equivalent AMD Athlon processor
- Windows Vista® 32-bit (Business, Ultimate, Home Premium), Windows Vista 64-bit (Business, Ultimate, Home Premium), Windows XP Professional x64 Edition, Windows XP Home SP2, Windows TabletPC SP1 or SP2
- 3 GB RAM (1 GB RAM if no rendering is required)

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- 3 GB disk space
- 1280 x 1024 True Color display resolution
- 256 MB Video Adapter Card
- Microsoft®-Mouse compliant
- Microsoft Internet Explorer 6.0, SP1 or later
- Download and installation from DVD

System Recommendations

- Intel Core™ 2 Duo, 2.4 GHz or equivalent AMD Athlon processor
- Windows XP Professional SP2 or later
- 4 GB RAM
- 4 GB disk space
- Dedicated video card with hardware support for OpenGL spec 1.3 or later

Please ensure that you have read these requirements before making your purchasing decision.

3.2 Can Autodesk's MEP software application take advantage of a 64-bit environment?

A native AutoCAD MEP 2009 64-bit version is available. Local language availability varies. Check with your local Autodesk Reseller for details.

Autodesk will not offer native 64-bit support for Revit MEP at launch. However, the benefits of running a 32-bit application in a 64-bit operating system apply. In a 64-bit environment, the Revit MEP process can use up to 4 GB versus the 3 GB limit of a 32-bit environment.

3.3 Does Autodesk MEP software work in a Windows Vista® environment?

AutoCAD Revit MEP Suite 2009 software supports Windows Vista® Home Premium, Ultimate, and Business versions. (Please refer to the AutoCAD MEP 2009 Q&A document for specific information regarding AutoCAD MEP 2009 compatibility) In addition, the AutoCAD Revit MEP Suite 2009 software takes advantage of some new Vista capabilities, specifically thumbnail previews for DWG and DWF files in Windows Explorer, display of properties in the Detail tab of Windows Explorer, and the ability to use the Windows Vista search tools to locate text strings found in drawing properties, text, mtext, and so forth, in the DWG file.

4. Compatibility and Interoperability

4.1 How can I support my clients' demands for integrated project delivery using Autodesk's MEP software solutions?

MEP designs developed in either AutoCAD MEP or Revit MEP contain a level of information in the digital design that supports clear and complete information transfer between disciplines on the project, streamlining collaborative workflows.

4.2 Is Revit MEP 2009 software compatible with earlier versions?

Yes. You can open files created in earlier releases of Revit MEP software but you cannot subsequently save them as earlier release versions of Revit MEP.

4.3 Are AutoCAD MEP software and Revit MEP software files interoperable?

You can exchange drawing information (2D DWG files) between AutoCAD MEP and Revit MEP software through their respective Export to AutoCAD features. You can also export architectural building elements from AutoCAD MEP and import them into Revit MEP software using the International Alliance for Interoperability's Industry Foundation Class (IFC) standards. With AutoCAD MEP, you can also manually assign IFC classifications for MEP objects such as ducts, pipe, and etc.

In addition, Revit MEP software has the ability to read and write ACIS solids. This capability gives users a way to export their models from AutoCAD MEP software and then import or link this 3D information to Revit MEP or Revit Architecture software.

4.4 Will third-party applications work with the current version of Revit MEP software?

Your existing third-party applications may or may not be compatible with Revit MEP 2009. Contact your third-party software supplier for details.

5. Consulting, Training, and Support

5.1 Where can I find technical support information for Revit MEP software?

You can learn about support options from your local Autodesk Authorized Reseller or distributor. Visit www.autodesk.com/support to find a knowledge base of commonly asked support questions. Autodesk software manuals and documentation are also a great source of answers to your support questions.

In addition, Autodesk® Subscription customers can get access to direct web support. One-to-one online communication with Autodesk support technicians provides fast, complete answers to your installation, configuration, and troubleshooting questions. For more information about Autodesk Subscription, contact your Autodesk Authorized Reseller or visit www.autodesk.com/subscription.

5.2 What are my options for training?

Check with your local Autodesk Authorized Reseller for a schedule of Revit MEP software training classes. To locate a reseller, visit www.autodesk.com/reseller.

Training courses are also offered through Autodesk Consulting and include Autodesk Virtual Classroom Training (online, instructor-led), custom training to match your

organization's specific needs, and Autodesk Classroom Training. To obtain more information about Autodesk's training services, visit www.autodesk.com/training.

You can also enroll in instructor-led training at Autodesk Authorized Training Center (ATC[®]) sites around the world. These training centers use Autodesk Official Training Courseware (AOTC) to deliver comprehensive courses for new and intermediate AutoCAD Revit MEP Suite users. To learn more, visit www.autodesk.com/atc.

6. Subscription

6.1 What benefits do I get by subscribing to the AutoCAD Revit MEP Suite?

Autodesk Subscription is the best way to keep your design tools and learning up to date. For an annual fee you get any new upgrades of your Autodesk[®] software and any incremental product enhancements, if these are released during your subscription term, as well as self-paced training options, access to subscription-only modules, and a broad range of other technology and business benefits.

With Autodesk Subscription, you can take advantage of Autodesk e-Learning. Its concise, self-paced online lessons are designed to address crucial application functions and industry practices. Experts in their respective industries developed the lessons to challenge and enhance your existing knowledge. By the end of each 15- to 30-minute lesson, you will have worked with the content, demonstrated your knowledge, and have access to the files used in each exercise.

Autodesk Subscription also includes direct web support. You have access to one-to-one online communication with Autodesk support technicians, so you can quickly get 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.

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

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