

AutoCAD® Revit® MEP Suite 2010  
(Including Autodesk® Revit® MEP 2010 and AutoCAD® MEP 2010)

# Questions and Answers

AutoCAD® Revit® MEP Suite 2010 software is a widely-used engineering design solution for mechanical, electrical, and plumbing (MEP) engineers, designers and drafters, providing building information modeling (BIM), sustainable building design, analysis, and documentation tools.

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# 1. General Product Information

## 1.1 What is the AutoCAD Revit MEP Suite?

AutoCAD Revit MEP Suite 2010 software, which contains Autodesk® Revit® MEP 2010 building information modeling (BIM) software and AutoCAD® MEP 2010 software, is a comprehensive engineering design solution for mechanical, electrical, and plumbing (MEP) engineers, designers, and drafters. Work in a familiar AutoCAD®-based environment while helping to increase drafting productivity with tools designed specifically for building systems design with AutoCAD MEP software. Gain from the competitive advantages of BIM to support better decision making with Autodesk Revit MEP software. More clearly identify, share, and resolve system interferences and clashes when collaborating with other design disciplines. Help accelerate engineering design with tools that help to provide increased drafting productivity and support sustainable design and analysis.

## 1.2 Why should I switch to the AutoCAD Revit MEP Suite?

AutoCAD Revit MEP Suite software turns inherent flexibility to great advantage. By combining the widely-used AutoCAD MEP application with the innovative benefits of the Autodesk Revit MEP building information modeling (BIM) software, this solution protects your investment in technology, training, and design data with a better, faster AutoCAD for MEP designers and drafters; helping to accelerate engineering design and analysis for sustainable building systems design; and enhances coordination of your presentations and documentation. It also enables you to move to BIM at your own pace.

## 1.3 MEP parts and equipment are very important to our business. What Revit families have been added to Autodesk Revit MEP 2010?

In addition to the new parts and equipment of the mid-year content extension, which greatly increases the MEP components available for use in Autodesk Revit MEP, a significant amount of new Revit families have been added to the 2010 version. One of the key focuses of Autodesk Revit MEP 2010 is to provide additional families “out-of-box”. Around 300+ ASHRAE duct fittings and ASME pipe fittings; additionally DW/144 rectangular and round fittings are also provided. In addition, with Autodesk® Seek web service you can find and share product design information with the online design community to enhance designs and to better meet specific customer needs. It allows designers to search for, download, and integrate generic or manufacturer-specific building products or components and associated design information. Visit Autodesk Seek at <http://seek.autodesk.com>

- **ASHRAE Duct Fittings**
  - Caps, Elbow, Offsets, Taps, Tees,
  - Transitions, Wyes, Crosses
- **ASME Pipe Fittings**
  - Gray Iron (Class 25, 125, 250 Flanged)
  - Malleable (Class 150, 300 Threaded)
- **DW/144 Rectangular Duct Fittings**

- Elbows, Offsets, Taps
- Pants Vees, and Transitions
- **DW/144 Round Duct Fittings**
  - Pants and Vees
  - Taps, Tees, Wyes

## 2. Technology

### 2.1 How is Autodesk addressing the growing demand for fabrication in the MEP industry?

AutoCAD Revit MEP Suite 2010 software offers MEP designers, drafters and contractors, fabrication capabilities in two ways:

- Autodesk Inc, and EastCoast CAD/CAM are working together to offer a more comprehensive fabrication solution combining the power of Autodesk's widely-used AutoCAD MEP software, the better, faster AutoCAD for mechanical, electrical and plumbing (MEP), designers and drafters, with the newest HVAC fabrication solution from EastCoast CAD/CAM, Fabrication for AutoCAD MEP providing the a fully embedded fabrication toolset for HVAC and Piping inside AutoCAD MEP. In addition, AutoCAD MEP has had design-to-fabrication capabilities through third-party vendors such as EastCoast CAD/CAM, QuickPen, and others for several years.
- Autodesk Revit MEP 2010, through its ability to import DWG files and ACIS<sup>®</sup> solids from AutoCAD MEP 2010, will also be able to take advantage of the benefits of Autodesk's relationships with the third-party vendors. You can also export architectural building elements from AutoCAD MEP and import them into Autodesk 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 these parts for fabrication

### 2.2 How can I support sustainable design efforts using Autodesk Revit MEP 2010?

In Autodesk Revit MEP 2010, you can perform a heating and cooling loads analysis to determine the energy demands of the building, and to determine space and zone requirements. After spaces have been placed in all areas of the building model and zones have been created, and you have prepared the project, you can perform heating and cooling loads analysis using the integrated Heating and Cooling Load Calculation tool within Autodesk Revit MEP 2010 to calculate loads and create a report.

Built-in duct, pipe, and electrical sizing tools dynamically interact with the 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 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 Revit MEP software to help support sustainable design?

Sustainable design tools in Autodesk Revit MEP include:

- Heating/cooling loads
- Duct sizing
- Pipe sizing
- Plumbing fixture unit sizing
- Electrical feeder sizing
- Panel schedule loads
- gbXML export to trace 700, IES <VE>, and others

## 3. Installation, Configuration, and Licensing

### 3.1 What are the hardware and system requirements?

The hardware and operating system requirements for running Autodesk Revit MEP 2010 software are:

#### 32-bit System Requirements

- Intel® Pentium® 4 1.4 GHz or equivalent AMD® processor
- Microsoft® Windows® XP Home and Professional SP2 or later, Microsoft® Windows Vista® 32 bit Business, Home Premium, Ultimate SP1
- 3 GB RAM (1 GB RAM if no rendering required)
- 2.6 GB disk space
- 1280 x 1024 monitor and display adapter capable of 24-bit color
- Microsoft-Mouse compliant
- Microsoft Internet Explorer® 6.0 SP1 or later
- Download and installation from DVD
- Internet connection for license registration

#### 32-bit System Recommendations

- Intel® Core 2 Duo 2.4 GHz or equivalent AMD processor
- Windows XP Professional SP2 or later
- 4 GB RAM
- 3.2 GB disk space
- Dedicated video card with hardware support for Microsoft® DirectX® 9 or later.
- Two-button mouse with scroll wheel

#### 64-bit System Requirements

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- Intel® Pentium® 4 1.4 GHz or equivalent AMD processor
- Microsoft® Windows® XP® Professional x64 SP1, Microsoft® Windows® Vista® 64 bit Business, Home Premium, Ultimate SP1
- 3 GB RAM
- 2.6 GB disk space
- 1280 x 1024 monitor and display adapter capable of 24-bit color
- Microsoft®-Mouse compliant
- Microsoft Internet Explorer 6.0 SP1 or later
- Download and installation from DVD
- Internet connection for license registration

### **64-bit System Recommendations**

- Intel Core® 2 Duo 2.40GHz or equivalent AMD processor
- Windows XP Professional x64 Edition SP1 and later
- 8 GB RAM
- 3.2 GB disk space
- Dedicated video card with hardware support for Microsoft® DirectX® 9 or later.
- Two-button mouse with scroll wheel

Note that Autodesk Revit MEP 64-bit cannot be installed on a 32-bit Windows operating system

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

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

A native Autodesk Revit MEP 2010 & AutoCAD MEP 2010 64-bit version is available. Local language availability varies. Check with your local Autodesk Reseller for details.

### **3.3 Do Autodesk MEP software solutions work in a Windows Vista® environment?**

AutoCAD Revit MEP Suite 2010 software supports Windows Vista® Home Premium, Ultimate, and Business versions. (Please refer to the AutoCAD MEP 2010 Q&A document for specific information regarding AutoCAD MEP 2010 compatibility) In addition, the AutoCAD Revit MEP Suite 2010 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 Revit MEP software?

MEP designs developed in Autodesk Revit MEP contain a level of information in the digital design that supports more clear and complete information transfer between disciplines on the project, helping to streamline collaborative workflows.

### 4.2 Is Autodesk Revit MEP 2010 software compatible with earlier versions?

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

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

You can exchange drawing information (2D DWG files) between AutoCAD MEP and Autodesk Revit MEP software through their respective Export to AutoCAD features. You can also export architectural building elements from AutoCAD MEP and import them into Autodesk 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, Autodesk 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 Autodesk Revit MEP or Autodesk Revit Architecture software.

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

Your existing third-party applications may or may not be compatible with Autodesk Revit MEP 2010. Contact your third-party software supplier for details.

## 5. Consulting, Training, and Support

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

You can learn about support options from your local Autodesk Authorized Reseller. Visit [www.autodesk.com/support](http://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](http://www.autodesk.com/subscription).

### 5.2 What are my options for training?

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

Training courses are also offered through Autodesk Consulting custom training to match your organization's specific needs. To obtain more information about Autodesk's training services, visit [www.autodesk.com/training](http://www.autodesk.com/training).

You can also enroll in instructor-led training at Autodesk Authorized Training Center (ATC<sup>®</sup>) 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](http://www.autodesk.com/atc).

## 6. Subscription

### 6.1 What benefits do I get by buying Subscription for 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<sup>®</sup> 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. E-Learning may not be available in all languages.

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 through Subscription Center, 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](http://www.autodesk.com/subscription).

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