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## What's New for Plumbing in Revit 2012

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# What's New for Plumbing in Revit MEP 2012

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**Who I am...**

**What you want out of this class...**

**Class Goals: to actually use RME  
(Revit MEP) 2012 to...**

- **Learn what's new in Revit MEP 2012, and how that functionality impacts/helps your business.**
- **Learn about some of the basics of plumbing design that just vex the %\$#@ out of those of us who don't have the time for formal training.**
- **Learn about the basics of Revit family (content) creation and content resources (get over your fear of the family editor).**
- **Learn what resources there are out there to help you be more streamlined & successful with Revit MEP.**

# Sloped Piping

New tools assist in laying out pipe slopes with automatic calculation, read-out for invert elevations and on-screen tooltips.

# System Browser Enhancements

Greater flexibility during design - focus on the systems that are important to you with an enhanced system browser feature. Select to view only the system you are working on. For example, you can view only the plumbing systems and hide mechanical and electrical systems from view. Check to see if elements are fully connected and contributing to system load requirements for more accurate sizing. See the total electrical load, air flow, or pipe flow at any point within a system.

# Duct and Pipe Placeholders

Placeholder design has always been an early design stage recommendation, but can be difficult at times without the ability for system assignment and other engineering information. With the new placeholder objects early stage layout can focus on design more than fitting choices and other modeling concerns. Placeholders can be tagged and checked for interferences. When ready, a tool to convert placeholders to more detailed objects is available.

# Enhanced Systems

Create and name custom duct and piping system types. Access properties for graphical overrides such as color, line weight, and line patterns to objects within a specific system. Assign objects to systems without needing to connect to system equipment. Annotate system geometry with a system abbreviation. Limit or turn off system calculations when not required.

# Insulation & Lining for Ducts and Pipes

Easily and quickly add insulation and lining to entire runs and utilize interference checking with these elements. Ducts will also adjust sizes when using the sizing tool of duct segments that include lining. Many more features have been added or enhanced such as Revit Server for multi-site, multi-user collaboration, point cloud support for visualizing scans, systems and system browser improvements, parallel pipe and conduit runs, and much, much more.

# Plumbing Basics in RME 2012

The following make up the basic tips, tricks & techniques a lot of users I meet, have no clue exist in RME. These will remove your headaches:

- Always design in multiple views
- Align tool
- Routing Solutions tool
- Trim tool
- Lock elements
- Connect Into tool
- Select pipe runs, point to point using “select, hover & tab key”
- Zoom & orbit by selecting geometry first
- Creating plumbing riser diagrams from the actual model

# Plumbing for LEED in RME 2012 example

BIM stands for “Building Information Modeling.” We’ll run through an example file to see how Revit MEP manages not only the “Building” geometry, but the all important “Information” about that building and its systems. Without tracking and documenting the “Information” – the “I” in BIM, we would get zero credits from USGBC, even if we had designed and Modeled the best grey water system known to mankind.

# Creating Revit MEP Content/Families

Many Revit users are hesitant (and some even mortified) to even try creating content in Revit MEP. We're going cover

- the basics of family creation in Revit MEP, focusing on basic geometry, connectors and the metadata associated with them, and the all important clearance geometry.
- Using Inventor to create content that can be used by both Revit and AutoCAD platform users
- Seek website, and how to look for the best content, and avoid the bad.

**Cool Free Stuff...**

# Cool Revit MEP Content from Marvin Titlow of Michael Brady Architects

- Dynamic pipe (and duct) elevation tag
- Sprinkler Calculation family

# Cool Revit MEP Content from Joel Londonberg & Jarrod Baumann

- Lavatory with adjustable trap-to-wall offset

# Cool Revit MEP Template file from David Butts' AU class

- If you're on subscription, you now have access to a free, pre-loaded RME template file.

**Fire Protection Designers can now participate along with architects, engineers and all Revit players, in Revit MEP, thanks to 3<sup>rd</sup> party development.**

- Hydratech's *HydraCAD*
- sprinkCAD's *BIMport*

# Questions & Answers...

(as much as ya got)

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