

# Revit MEP Project Setup Procedure

**NOTE:** The following summarize the steps required to set up a Revit MEP project from scratch where an architectural model is linked into the MEP project. This information is not authorized by Autodesk and is not guaranteed to be accurate.

The steps include:

1. **Entering Project Information**
2. **Linking an Architectural Model**
3. **Copying Levels & Rooms**
4. **Creating Floor Plans**
5. **Copying Architect's titleblock**
6. **Creating Sheets**
7. **Saving to Central**
8. **Creating a Local Copy**
9. **Working in the Local Copy**

## 1-Project Information

1. Start a new project
2. Go to **Settings → Project Information...**
3. Under **Energy Data** ~~Construction~~, click **Edit...** next to ~~gbXML Settings~~.
4. Select **Office** for *Building Type* from the list.
5. Enter the building's ZIP Code.
6. Click **OK** to close the **Type Properties** dialog box.
7. Next, fill in the **Other** information. For example:

Issue Date: **01/01/07**  
Client Name: **Autodesk**  
Project Address: **Anytown, USA 12345**  
Project Name: **Sample Project**  
Project Number: **6789**

On a real project, this information should be available. It can be filled in at a later date if unknown.




## 2-Linking an Architectural Revit model

1. Save architectural Revit model(s) on the server in the appropriate job folder. **DO NOT RENAME FILE.**
2. Open the architectural file(s). **BEFORE clicking open**, check the **Detach from Central** option. Accept any warning prompt that appears.
3. Once the file is open, go to **File → Purge Unused...**
4. Click on **Check All** then click **OK**.
5. Save and close the file.

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6. ~~Start a new project.~~ (Already have new project open)
7. Go to **File → Import/Link → Revit...**
8. Browse for the Revit building model file. **BEFORE clicking Open**, check the **Origin to Origin** option. Click Open.

## 3-Copying Levels & Rooms

1. Once the file is open, double-click on one of the default elevation views within the **Project Browser** if not already selected.
2. Zoom (Zoom Region - ZR) into the edge of the building where it shows the Levels (typically on the right hand side of the elevation view). Revit sets up two levels (Level 1 & Level 2) by default. Ignore those level designations during setup. If you click on the model, the level designations associated with the model will turn red (as will the rest of the model) and the default levels will remain black.
3. Go to **Tools → Copy/Monitor → Select Link** (or Click the Copy/Monitor toolbar button  and click **Select Link**.)
4. Select the building model and left-click. In the Design bar (on the left), the Copy/Monitor mode is activated.
5. In the Copy/Monitor menu, click **Options**.
6.  **Select the Rooms tab, then**
6.  Click **Edit...** next to **Phases**.
7. Change **Phase from link file** for Existing from **(none)** to **Existing (x Rooms)**.
8. Change **Phase from link file** for New Construction from **(none)** to **New Construction (x Rooms)**
9. Click **OK** twice to close Copy/Monitor Options.
10. In the Copy/Monitor menu, click **Copy**.
11. Individually click on each Level of the building model. Allow time for Revit to process the information after each click. Accept any warnings that may appear.
12. After each Level has been copied, click on **Copy Rooms** in the Design Bar.
13. A dialog box should appear indicating that **“## Rooms were copied”**
14. Click **OK**.
15. Click **Finish Mode** in the Design Bar to close the Copy/Monitor menu.
16. If more than one model is linked into the project, you'll have to follow steps 11-28 for each model.

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## 4-Creating floor plans

1. Go to **View → New... → Floor Plan...**
  2. In the **New Plan** dialog box, the levels that you copied in the previous section should be listed. Select them all and click **OK**.
  3. By default, Revit sets these new floor plans up as Architectural plans. In the Project Browser, expand the Architectural heading and you'll see the new plans that you just created.  
**Duplicate View > Duplicate**
  4. Right-click on each plan individually and then select **Duplicate**. Rename the duplicated plans with the floor description and discipline. For example, change **Level 1** to **FIRST FLOOR PLAN-MECHANICAL**, **Level 2** to **SECOND FLOOR PLAN-MECHANICAL**, and **Level 3** to **THIRD FLOOR PLAN-MECHANICAL**. These will be used as the plan titles when you set up sheets so name them accordingly. They can be renamed later if necessary.
  5. After you duplicate and rename each floor plan, select all of the Mechanical plans and click **Properties**. Change the **Discipline** to **Mechanical** and set the **Sub-Discipline** to **HVAC**.
  6. Notice that in the Project Browser, the floor plans have moved to under the Mechanical-HVAC Discipline heading.
  7. Again, select all of the HVAC plans and right-click. Select Apply View Template.
  8. In the **Select View Template** dialog box, select Mechanical Plan, then check the **Apply automatically to new view of same type** option. This will set the default display setting for each discipline. For example, when you set the plumbing plans to a Plumbing Plan View Template, things such as diffusers, light switches, ductwork, etc. won't display unless you manually turn on those objects (similar to layer states in AutoCAD).
  9. Click OK.
-  (Steps 4-9)
10. Repeat the same procedure for the other disciplines such as Plumbing, Power, Lighting, and Systems as required.
  11. Optional: Once you have created, renamed, set the disciplines and view templates for all of the floor plans, right-click on **Views (Discipline)** (at the top of the Project browser) and click **Properties...**
  12. Optional: Change the Type from **Discipline** to **Type/Discipline**. This is an optional step that just groups the plans together in a different method that is a little easier to navigate.

At this point the floor plans are set up, not the plot sheets. All of the modeling (ductwork, piping, light fixtures, receptacles, etc.) will be done in these floor plans.

## 5-Copying Architect's titleblock

When you link in an architectural model, none of the sheets or families come with it. Therefore you have to copy the titleblock into the new project. To do this,

1. Open the architectural model and find the titleblock within the Project Browser. It will be under "Annotation symbols"

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2. Right-Click on the titleblock and click **Save**.
3. Browse for the project ~~file~~<sup>folder</sup> you wish to copy the titleblock into and click **Save**.
4. Close the architectural model.

## 6-Creating Sheets

1. When you are ready to create a sheet, go to **View → New → Sheet...**
2. In the Select a Titleblock dialog box, browse for the titleblock within the project ~~file~~<sup>folder</sup> and ~~select it~~<sup>click Open</sup>.
- 2a. **Select Titleblock and click Open.**
3. The titleblock will appear and a new sheet will be listed under **Sheets (all)** in the Project Browser.
4. In the Project Browser, left-click (and hold) one of the floor plans such as FIRST FLOOR PLAN-MECHANICAL. Drag it over to in the middle of the titleblock and unclick the left mouse button. A “viewport” showing the first floor mechanical plan will appear along with a plan title that has the same name as the floor plan title.
5. The floor plan tile appears on the left side of the view window. However, it can be dragged to anywhere on the sheet.
6. By default, Revit brings in an extension line with the plan title. To turn it off, click on the plan ~~tile~~<sup>title</sup> and then click the Properties button (or right-click and select properties).
7. Click Edit/New... at the top and uncheck **Show Extension Line**. Click **OK** twice and the extension line will turn off. There may be a way to turn this off by default but I haven't found it yet.
8. To add a north arrow, click **Symbol** under *Drafting* in the Design Bar and select North Arrow. Place it next to the plan title as you normally would.

## 7-Enabling Worksharing

1. Go to **File → Worksets...**
2. Click **OK** in the **Worksharing** dialog box.
3. The **Worksets** dialog box will appear showing two default worksets.
4. Click **OK** to close the **Worksets** dialog box.

## 8-Saving to Central

1. Go to **File → Save As...**
2. Click on the **Options...** button and verify that **Make this the Central location after save** option is checked. (It may already be checked and grayed out which is okay). Click **OK**.
3. Save the file as **(name).rvt**. On a real project, one person will initially set up the project and save the central file in the project folder on the server.

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## 9-Creating a Local Copy

1. Go to Windows Explorer and copy/paste the Central file to a location on your local work station in your C:\Revit Projects folder (for example).
2. It's good practice to rename the local file with your name to help differentiate it between the Central file. For example, rename the file **Project.rvt** to **Project-Joe.rvt**. Each person who is working on the project will have to copy the Central file to his C: drive. **All modeling is to be done in the local file.**

## 10-Working in the Local Copy

1. Periodically as you are working on the model, go to **File → Save to Central...** (You will receive reminders to do so.)
2. Verify that the *Central Location* is pointed to the Central file on the server, not the one on your C: drive. Check the **Save the local file after “Save to Central” completes successfully** option and click **OK**. This will save your work to the central file and to your local copy and allow others to see your work.
3. To get an update of all the work in the central file, periodically go to **File → Reload Latest**. You may be prompted to “Save to Central” before it will reload the latest central file information.