



User Guide

Copper Press Fittings Usage in Revit Project
ASC ENGINEERING SOLUTIONS

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ASC-ES Project Creation

- Open latest Revit Version and start a new project by selecting “New” beneath the “MODELS” header, and then select a desired template. For Fittings, we can use the Mechanical template. *Image 1* shows the selection.

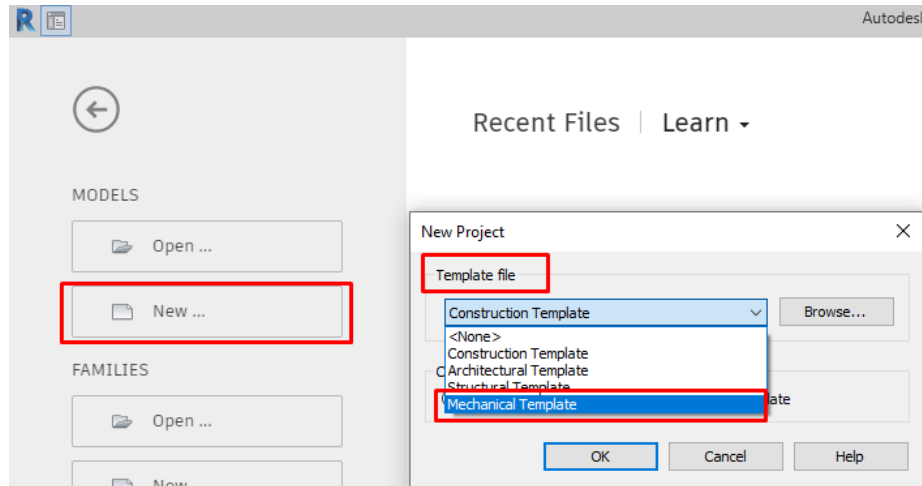


Image 1.

Loading Fitting families into Revit Projects

- Once the project is started, open a plan view or a 3D view by selections under the Project Browser Tab, as shown in *Image 2*.

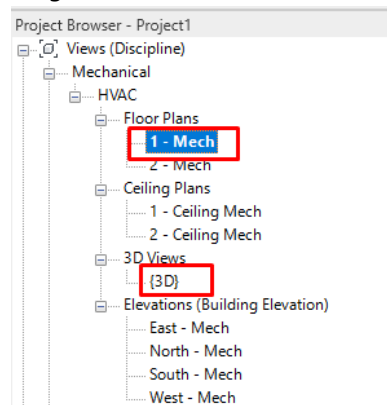


Image 2.

- To load Fittings into your project, go to the “Insert” tab and select “Load Family”, as shown in *Image 3*. Select the RFAs to be loaded from the desired location. A Lookup Table driven RFA contains all the information regarding the different types within the RFA itself. A Type Catalog driven RFA needs a Type Catalog (.txt) file to be placed in same folder location as the RFA (which matching file name as the respective RFA), so that it can be loaded into the Revit project.

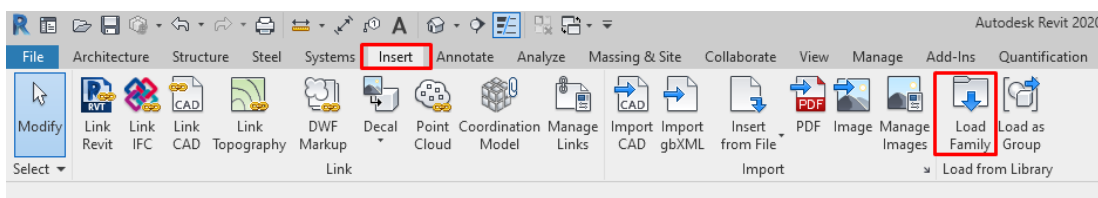


Image 3.

- While loading RFAs, if any of the RFAs are Type Catalog driven, then you'll see a "Specify Types" window pop-up, as shown in *Image 4*. Select each RFA inside of the Family box on the left and then select the Types to be loaded into your Project. Please remember, only Type Catalog driven families will have the Types selection option.

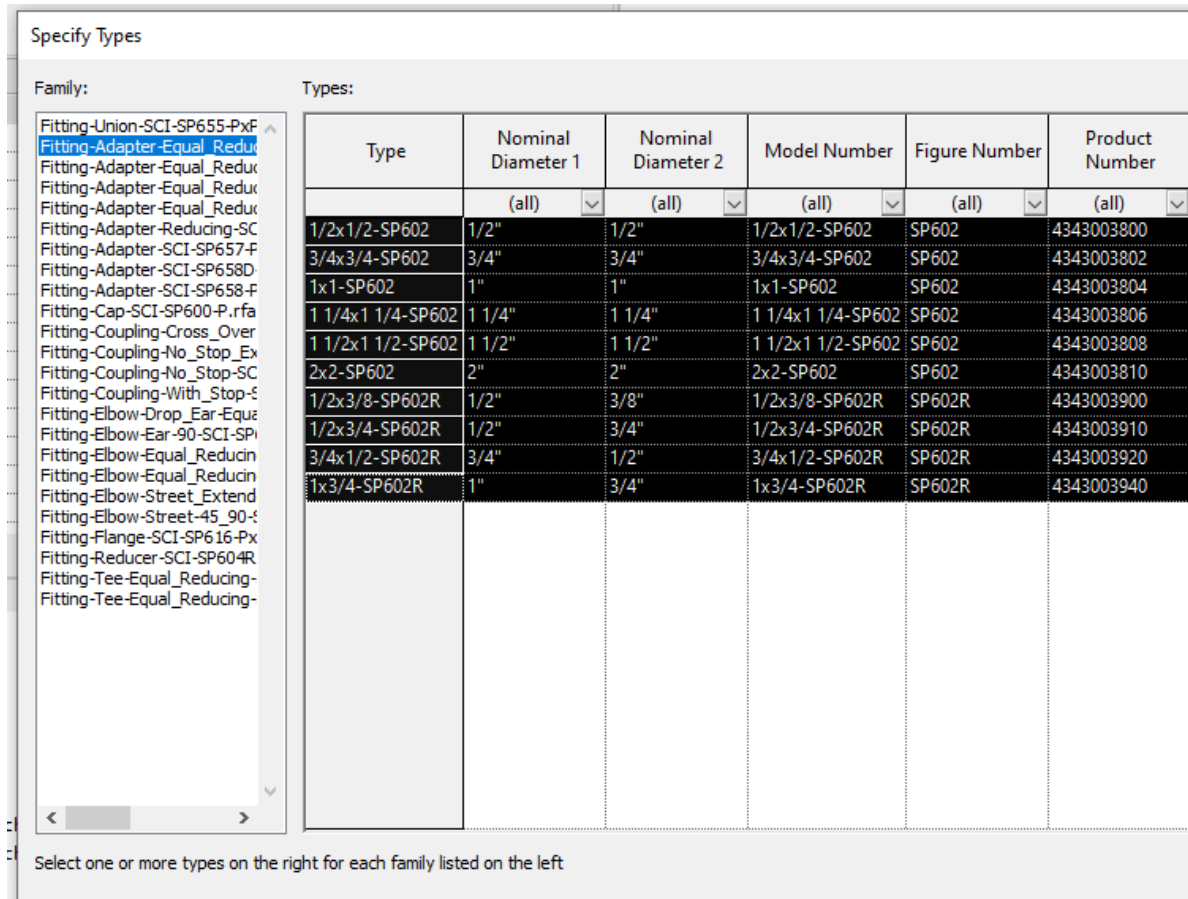


Image 4.

- A message window will pop-up stating "Large Number of Loaded Family Types" have been selected to load, as shown in *Image 5*. Please select "Yes" and proceed.

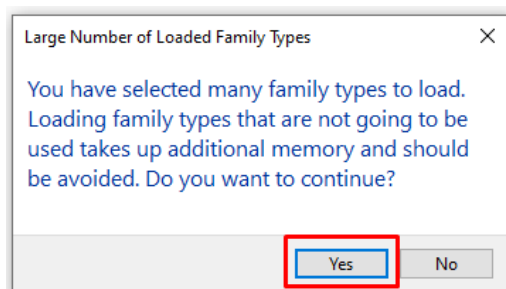


Image 5.

- All of the RFAs you loaded can be found under Project Browser by expanding "Families" tree and the "Pipe Fittings" tree, as shown in *Image 6*. Along with the loaded RFAs, there will be existing Autodesk generic families of various types.

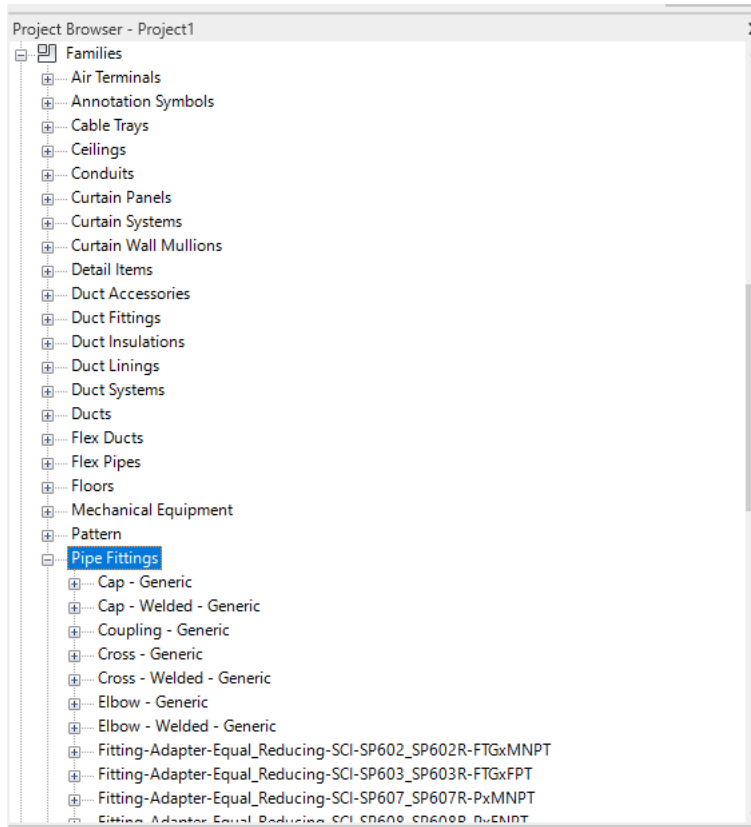


Image 6.

Pipe Type Creation

- To use Fitting families in your project, we need to create at least one Pipe Type. Expand “Pipes” and then “Pipe Types” in the Project Browser, as shown in *Image 7*. There will be an existing Pipe Type named “Standard” that can be used in your project for Fittings creation.

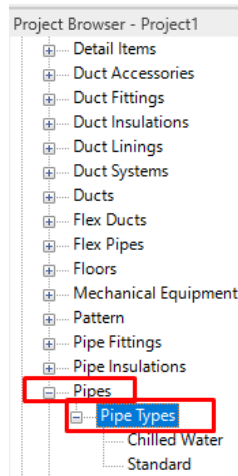


Image 7.

- To create a new Pipe Type, open the “Standard” Pipe Type by double clicking. Then select Duplicate and enter a name for the new Pipe Type, e.g. “Copper Press Fittings”, as shown in *Image 8*. After clicking OK, it will reflect under Type name, as shown in *Image 9*.

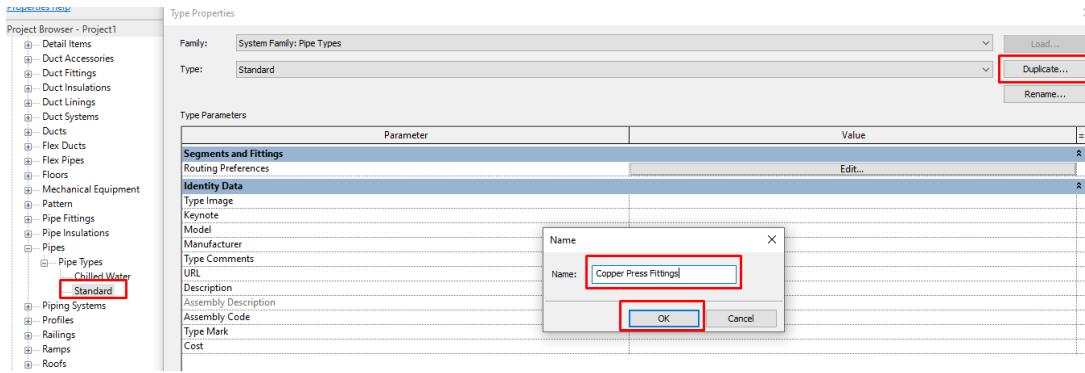


Image 8.



Image 9.

- Once a Pipe Type is created, we can assign the Material and add sizes to it. Select “Edit” in the Routing Preferences, as shown in *Image 10*.

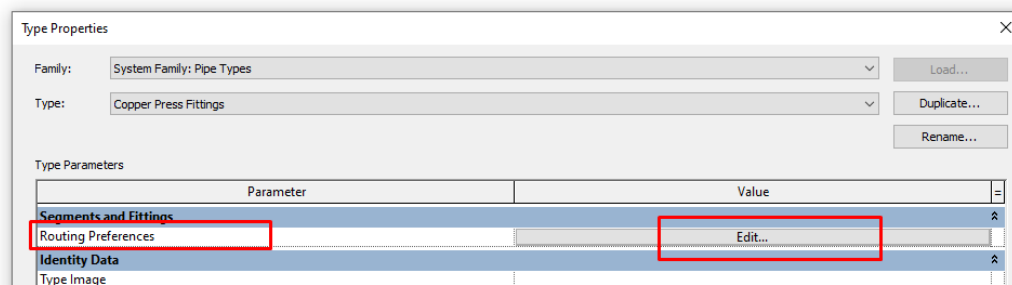


Image 10.

- Then select “Segments and Sizes” under the Routing Preferences Tab, as shown in *Image 11*.

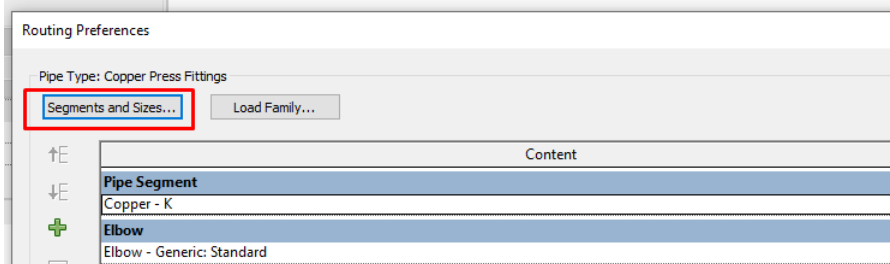


Image 11.

- An existing Pipe Segment can be used, and additional sizes can be added or deleted from it. But to create a new Pipe Segment with desired material and sizes, select the new icon, that is located towards the top right corner, as shown in *Image 12*.

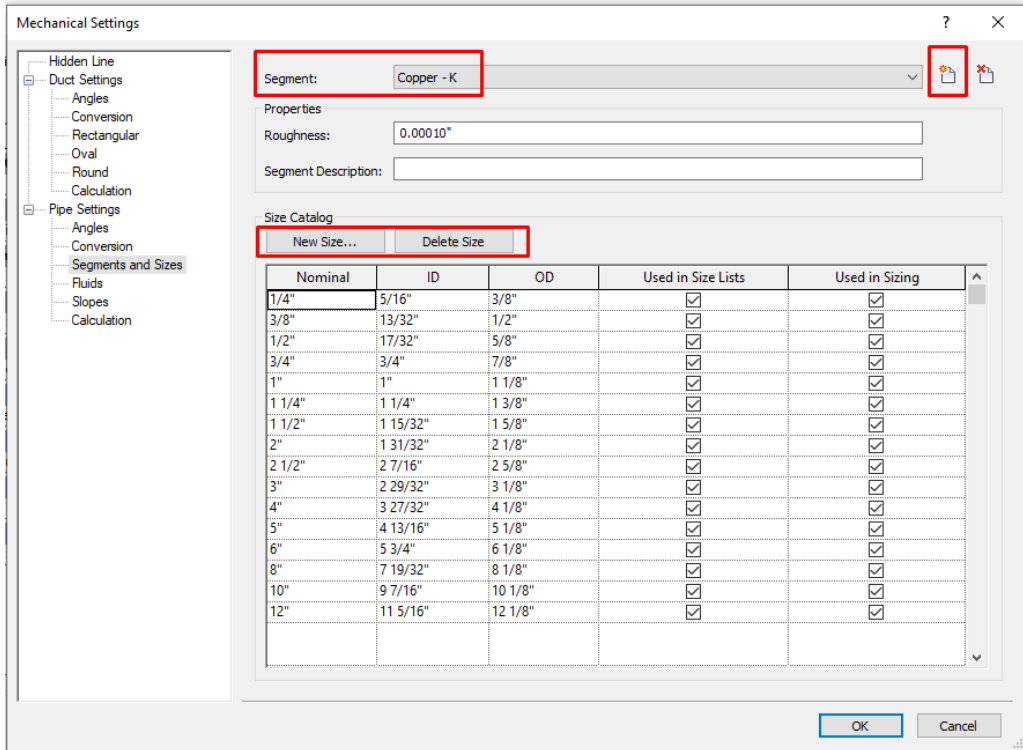


Image 12.

- A new window shows three different selections:
 - First is to just create a new material
 - Second is to create a new Schedule/Type with existing material
 - Third is to create a new material with new Schedule/Type

Let us select the third option and create a new segment with material and schedule. Select Material from the Material browser and enter a name for Schedule. Preview of new segment name can be seen at the bottom of this window, as shown in *Image 13*.

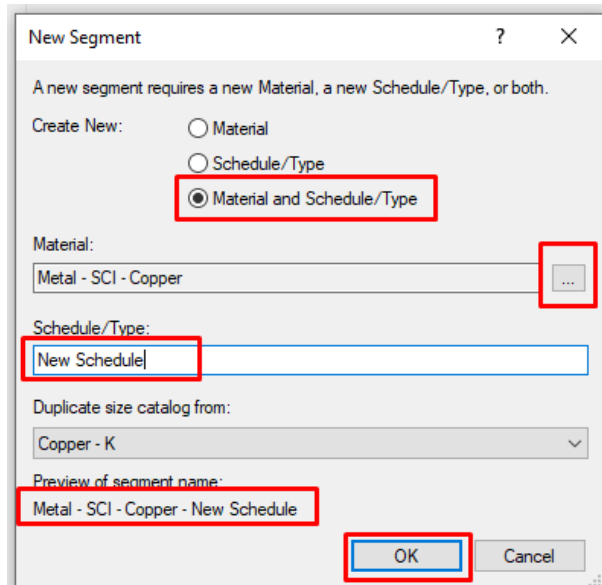


Image 13.

- Make sure that the correct segment is selected and then add/delete sizes under “Size Catalog” section, as shown in *Image 14*.

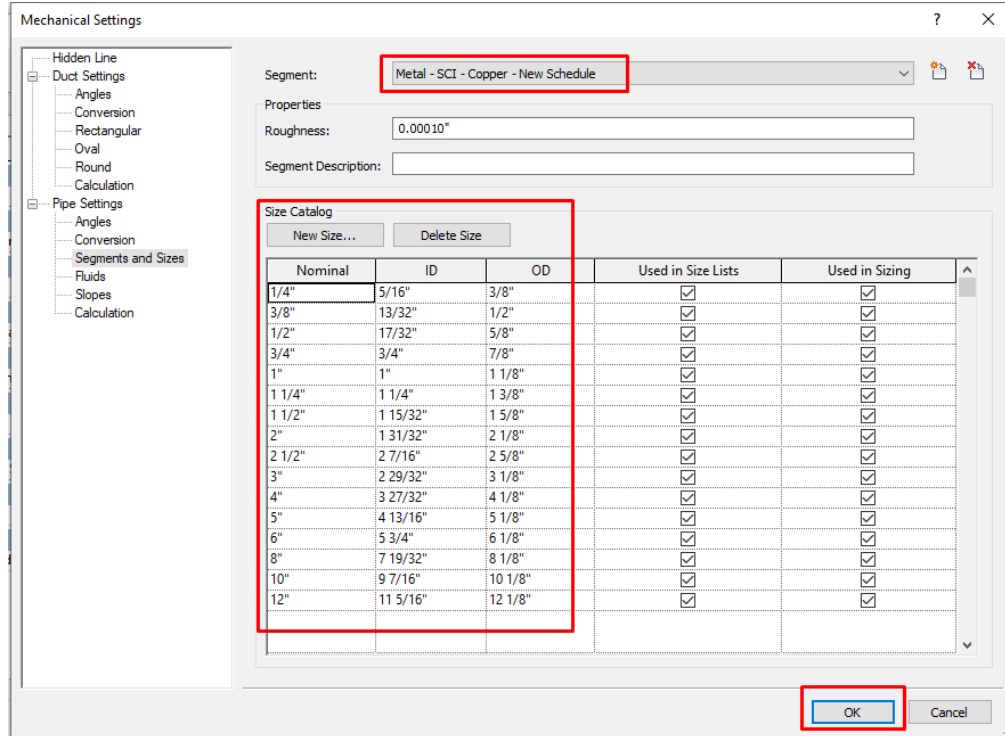


Image 14.

Pipe Type Routing Preferences

- This window shows all the information about a particular Pipe Type: (1) Pipe Segment and its minimum size – maximum size, (2) different types of Fittings that can be routed to a Pipe Type and current routing preferences, and (3) min/max sizes. A Fitting can be routed to a Pipe Type under its specific section, e.g. an elbow can be mapped under “Elbow” and a Reducer can be mapped under Transition”. Multiple families as well as multiple types can be mapped to same section, as shown in *Image 15*. We can see that under “Union” section, multiple types of the same family are mapped. We can also select different minimum and maximum sizes for each family/type. Please note: To map a Tee family, we need to select Preferred Junction Type as “Tee” and then select a Tee family under “Junction”.

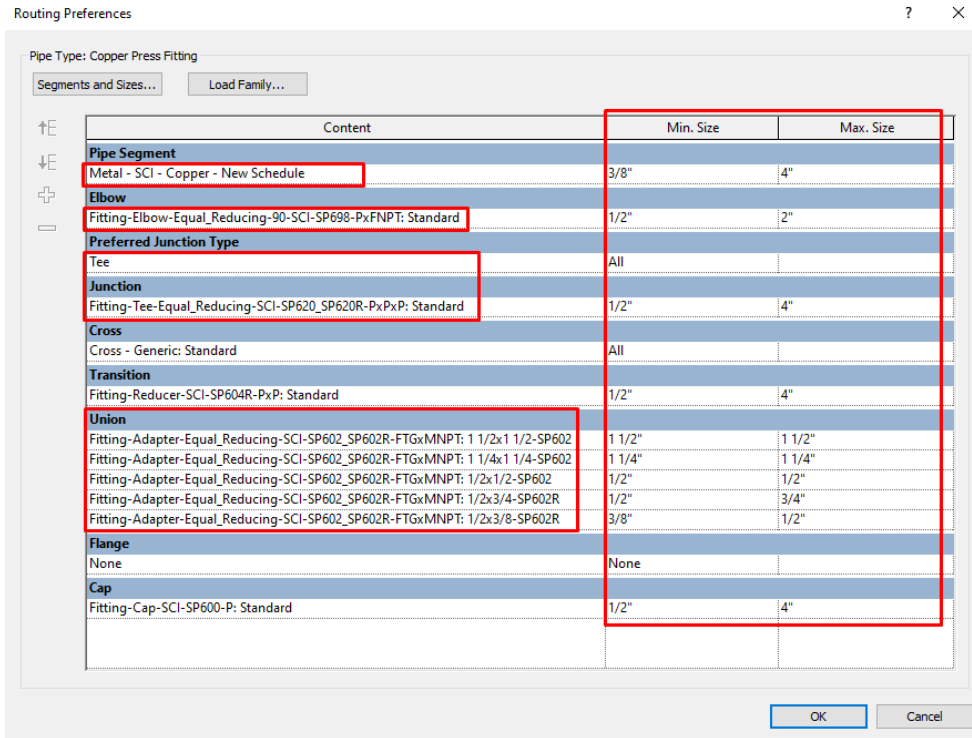


Image 15.

Placing Families into Revit Project

With the above mentioned steps and selections, we are ready to use a Pipe Type to create Fittings in your project.

- Shortcut to create a Pipe is "PI". Open a plan view or 3D view and enter PI on the keyboard. Then select the desired Pipe Type under the Properties drop-down and make sure to select correct Diameter and Elevation of the Pipe to be placed, as shown in *Image 16*.

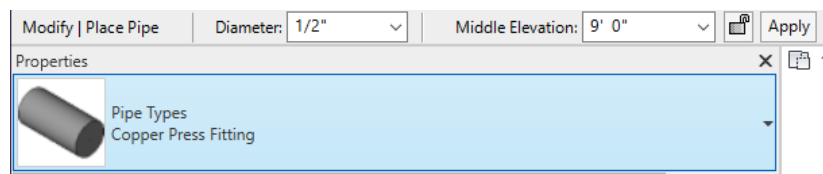


Image 16.

- As shown in *Image 17*, a small number of Fittings are populated with above mentioned Pipe Type.

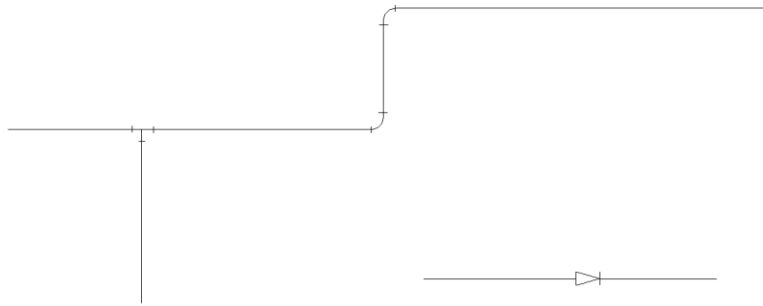


Image 17.