

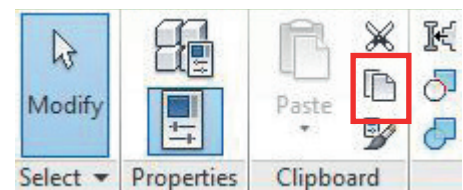
LOADING THE COMPONENT INTO YOUR PROJECT

The Guttermaster **Serpentine gutter systems** are modelled as face-based '**Speciality Equipment**'. For ease of insertion into your project they have been added into a separate project. You can add these objects into your project using the following methods:

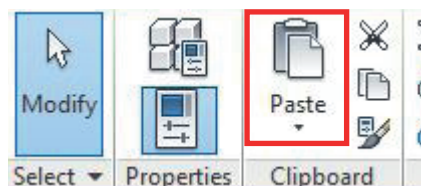
Method A:

1. Open the Revit file containing your project and navigate to an appropriate 3D view.
2. Now open the **Serpentine Range** Project that you have downloaded. The default view that will be open is a 3D view. Select the instances of the gutter systems you wish to copy.

3. Copy these components to your clipboard (**Ctrl+C**: shortcut) or click the copy button on the Revit ribbon as shown:

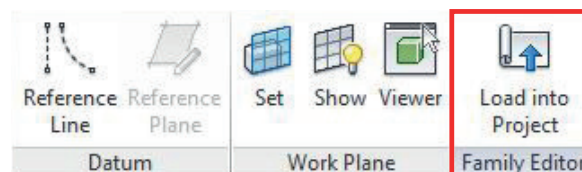


4. Now go to your project (appropriate view) and you can paste these into your project (**Ctrl+V**: shortcut). There is a Paste button under the modify tab on the Revit ribbon, as shown below:



Method B:

1. Open the Revit file containing your project and navigate to an appropriate 3D view.
2. Now open the required component (.rfa). Use the Revit ribbon at the top of the screen to navigate to the '**Family Editor**' and click the '**Load into Project**' button.



3. The component can now be placed into your project and can also be selected from the '**Components**' (**CM**: shortcut) drop down on the main Revit ribbon.



Note: This component is for design intent only and the data contained within should be treated as such. Please contact Guttermaster for more details and product literature.

USING THE COMPONENT

The gutter system has a number of options to assist the user when specifying and placing the BIM object, these include visible geometry, material finishes and overall dimensions;

1. With the component loaded and positioned in your project, select the gutter system. Once selected the **'Properties'** dialogue box will appear.
2. Choose the preferred Gutter Size from the 'Type Selector' dropdown menu.

SG/135	SG/175
135(w)x100(d)mm	175(w)x130(d)mm

2. Scroll down the **'Properties'** dialogue box until you reach the heading **'Constraints'** as illustrated. Here you have a number of selectable features.

Specialty Equipment (1)		Edit Type
Constraints		
CornerAngleType<Specialty ...	Guttermaster_Gttrs_SG135_...	
DownPipeType<Specialty Eq...	Guttermaster_Gttrs_Pipes_...	
Host	Fascia : Standard	
Elevation	110.0	
Construction		
HasBaseOffset	☐	
HasCornerAngle	☐	
HasDownpipe	☐	
HasEavesOffset	☐	
HasLHSStpEnd	☒	
HasLHSUnionJoint	☐	
HasRHSStpEnd	☐	
HasRHSUnionJoint	☒	
HasShoe	☐	
IsDownPipeSquare	☒	
Materials and Finishes		
DownPipeMtrl	<By Category>	
GutterMtrl	<By Category>	
Electrical - Loads		
Dimensions		
BaseOffset	150.0	
DownPipeLength	1500.0	
DownPipeOffsetfromLHS	750.0	
EavesOffset	200.0	
GutterLength	2269.0	
SpigotDepth	76.0	
SpigotWidth	76.0	

'HasBaseOffset': This feature will enter a predetermined figure to calculate the base offset. Once selected the **'BaseOffset'** parameter in the **'Dimenions'** category will control the overall offset distance from the downpipe.

'HasCornerAngle': This feature will include an angle on the right hand edge of the Gutter length. Once selected the **'CornerAngleType'** parameter in the **'Construction'** category will allow changes between the various corner options.

'HasDownPipe': This feature will include a downpipe length. Once selected the **'DownPipeLength'** parameter in the **'Dimenions'** category will control the overall length of the downpipe. The **'DownPipeType'** parameter in the **'Construction'** category will allow changes between the various downpipe options.

'HasEavesOffset': This feature will enter a predetermined figure to calculate the eaves offset. Once selected the **'EavesOffset'** parameter in the **'Dimenions'** category will control the overall offset distance from the Gutter.

'HasLHSStpEnd', 'HasRHSStpEnd': This feature will include a stop end on either the left or right hand edge of the Gutter length.

'HasLHSUnionJoint', 'HasRHSUnionJoint': This feature will include a union joint on either the left or right hand edge of the Gutter length.

'HasShoe': This feature will include a shoe at the base of the downpipe length.

'DownPipeMtrl', 'GutterMtrl': Amend the models material properties using these parameters.

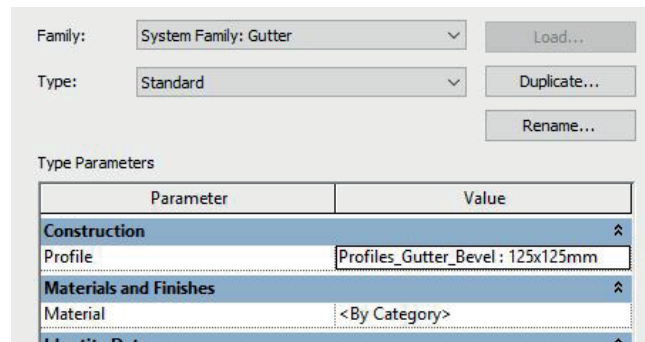
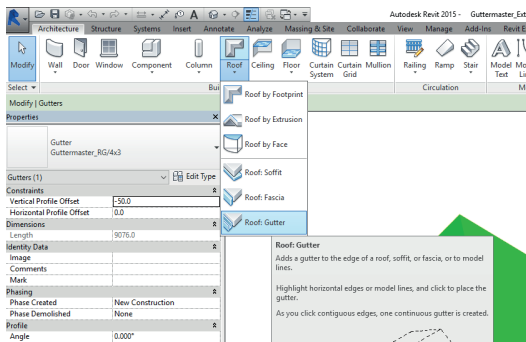
Click **'Apply'** to activate the changes.

Note: When specifying the **'DownPipeType'**, you will also need to amend the **'IsSpigotSquare'** parameter to ensure graphical consistency. **'SpigotDepth'** and **'SpigotWidth'** may be amended to match the downpipe dimensions.

USING THE PROFILE COMPONENT

The **Serpentine** components have also been modelled as a 'Profile Object' and used within the 'Roof: Gutter' function. These objects can be loaded into your project using the following method;

1. Open the Revit file containing your project and navigate to an appropriate 3D view.
2. Now open the **Serpentine Profile** object that you have downloaded.
3. In the 3D view, select 'Roof' under the 'Architecture' tab and select 'Roof: Gutter'. In the 'Properties' dialogue box there will be a 'Gutter: Standard' loaded. Click the 'Edit Type' button, then duplicate and rename the 'Type'. Under the 'Construction' property set there will be a 'Profile' parameter.



Choose the preferred **Gutter Size** profile from the table below:

SG/135	SG/175
135(w)x100(d)mm	175(w)x130(d)mm

With the 'Edit Type' box still open, select the 'Material' parameter. Amend the properties to suit.

4. Place the component on the chosen roof edge.
5. Once the family is selected, the 'Properties' dialogue box will appear on screen. Adjust the vertical and horizontal position and angle of the **Gutter** if required.

Click 'Apply' to activate the changes.

Note: The 'Profiles' created can also be used to create a 'Model in Place Sweep'. However this will not retain the product information.