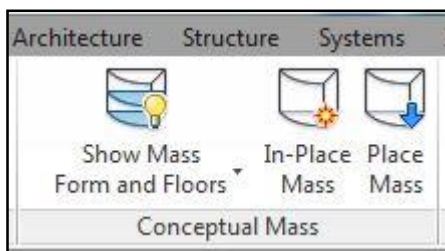


# Revit Architecture 2016: Create a Curved Curtain Wall using an In-Place Mass

During training courses, I frequently get asked about curved curtain walling. The following procedure demonstrates how to create a curved curtain wall using Revit's In-Place Mass functionality.

- Start a new project by opening the default metric Architectural Template in Revit. Click on the Massing and Site tab and then click on the In-Place Mass icon on the Conceptual Mass Panel.

**Fig 1: In-Place Mass Location**



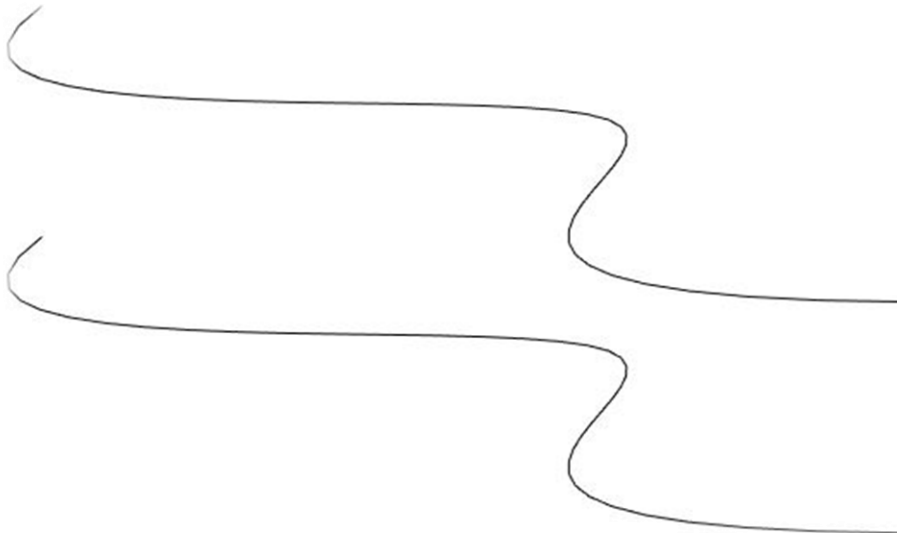
- Next select the spline tool from the draw panel and sketch a simple curved line on level zero similar to the one illustrated in fig 2. After placing the line you can select it and use the control grips to alter its shape.

**Fig 2: Spline Line – Level 0**



- Select the line, copy to clipboard, paste aligned to selected levels, level 1.
- Open the default 3D view, orient the view to show the two spline lines. They should look similar to figure 3.

**Fig 3: Spline Lines – 3D View**



**Fig 4: Create Form Location**

- Still in the 3D view, select both lines and then click the Create Form icon and select the solid forms option.



**Create Form**

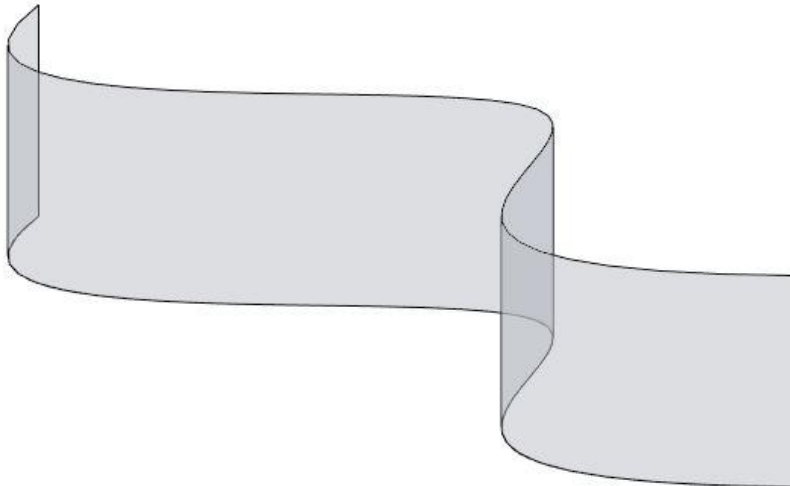
Creates a form from selected lines.

To create a form, first select lines (or edges from existing geometry), and then click Create Form.

Use this tool to create a wide range of forms, including lofts, extrusions, revolves, and sweeps.

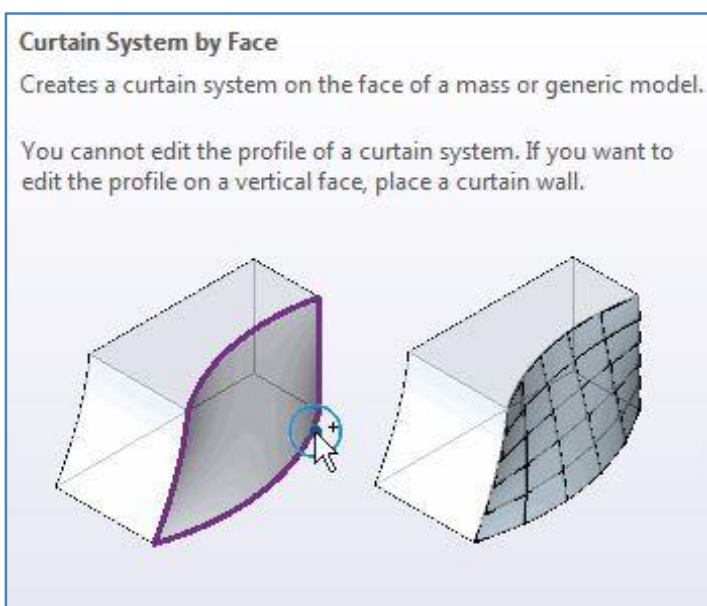
- This will create a mesh like mass similar to that shown in fig 5. You can ignore the warning that pops up.

**Fig 5: Mass Mesh**



- On the Massing and Site tab click on the Curtain System icon and then select the mass.

**Fig 6: Curtain System Location**



- Click the Create System icon on the green focus part of the Ribbon to create the grids.

**Fig 7: Create Curtain System Location**

**Create System**  
 Creates curtain systems from the selected mass faces.  
 These curtain systems do not automatically update if you change the mass face. To update the curtain systems, use the Update to Face tool.

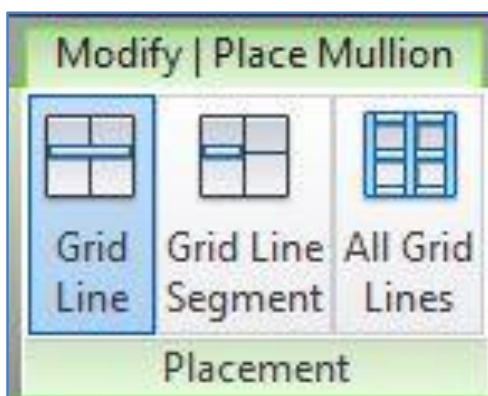


If the grid pattern appears a bit chunky select the curtain wall and edit type from the properties palette. Duplicate the curtain wall and rename it 700mm x 700mm. In the Type Properties dialogue box enter the following figures:

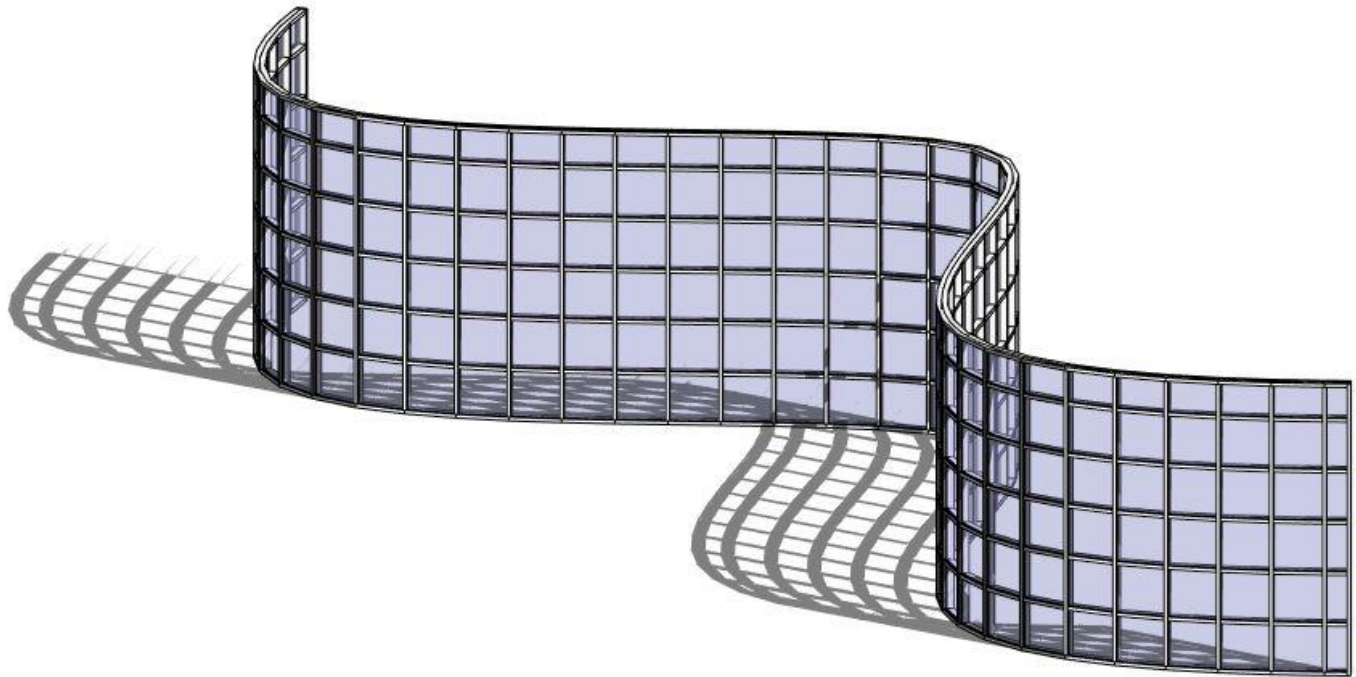
<b>Grid 1</b>		^
Layout	Fixed Distance	
Spacing	700.0	
Adjust for Mullion Size	<input type="checkbox"/>	
<b>Grid 2</b>		^
Layout	Fixed Distance	
Spacing	700.0	
Adjust for Mullion Size	<input type="checkbox"/>	

Click Apply and OK. The facets should look smaller and neater without any leaks.

- Attach Mullions to all Grid Lines.



**Fig 8: Curved Curtain Wall with Mullions.**



This completes this White Paper on Curved Curtain Wall Creation.

**Note:** If you want a crisper appearance to your curtain wall try using the Smooth Lines with Anti-Aliasing function.

Fig 9: Smooth Lines with Anti-Aliasing.

