

Revit Architecture 2017 – Compound Walls

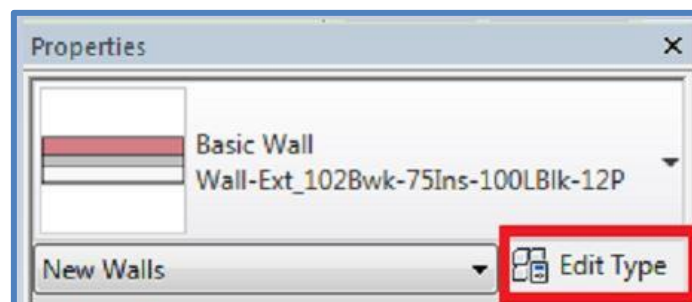
Revit Architecture 2017: Create and Modify Compound Walls

This White Paper shows us how to assign a new concrete block wall layer underneath an existing masonry brick wall layer and also how to create a concrete sill sweep between the brick and block layers.

Create and Modify Compound Walls

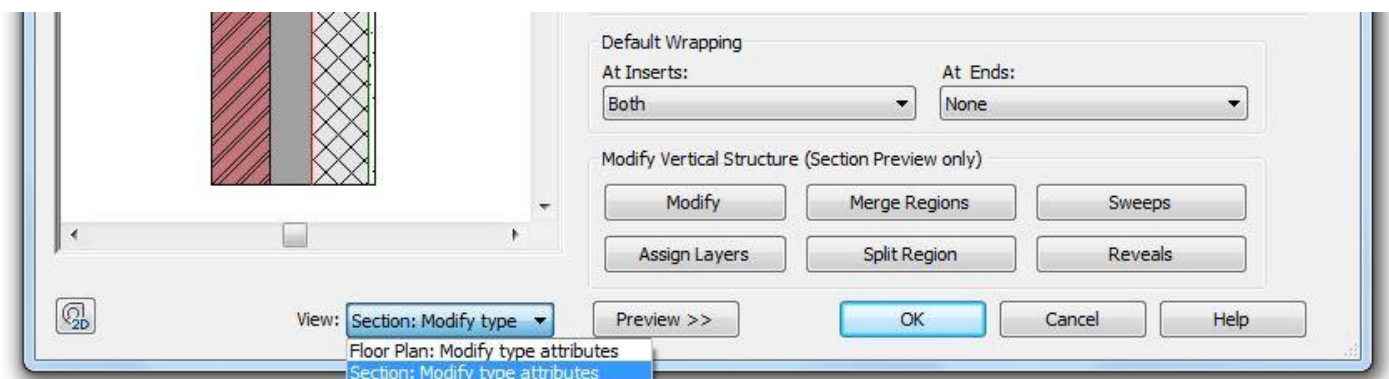
Select the wall tool, and then select a basic cavity wall. For this example, I have chosen a Basic Wall: **Ext-102 Bwk-75Ins-100Blk-12p**.

On the Type Properties click **Duplicate** and create **Ext-102 Bwk and Block-75Ins-100Blk-12p**.

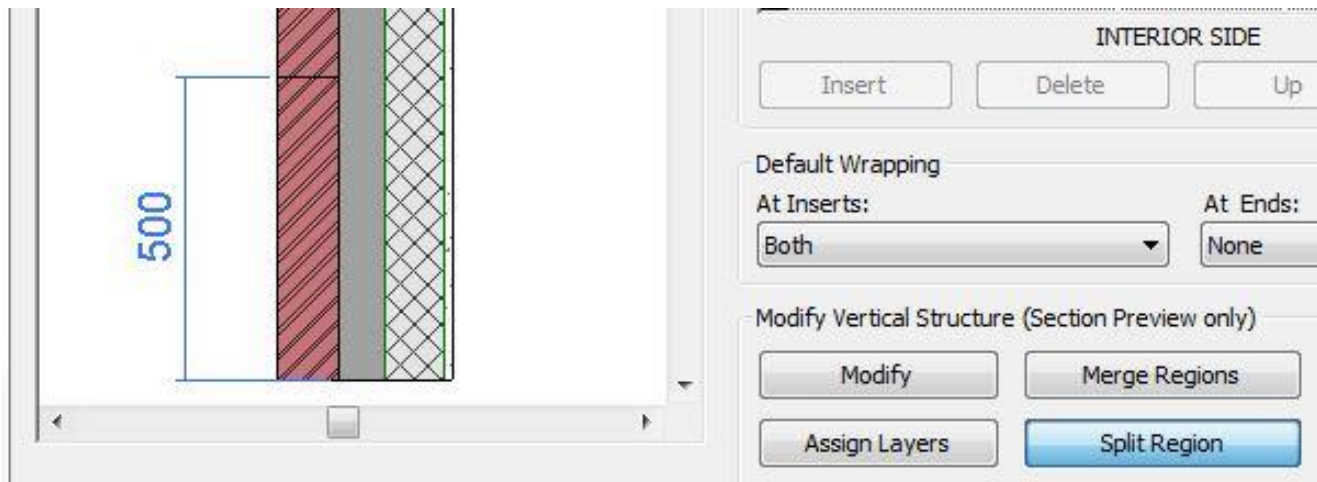


Under **Construction**, for **Structure**, click **Edit...** In the **Edit Assembly** dialogue, click **Preview**.

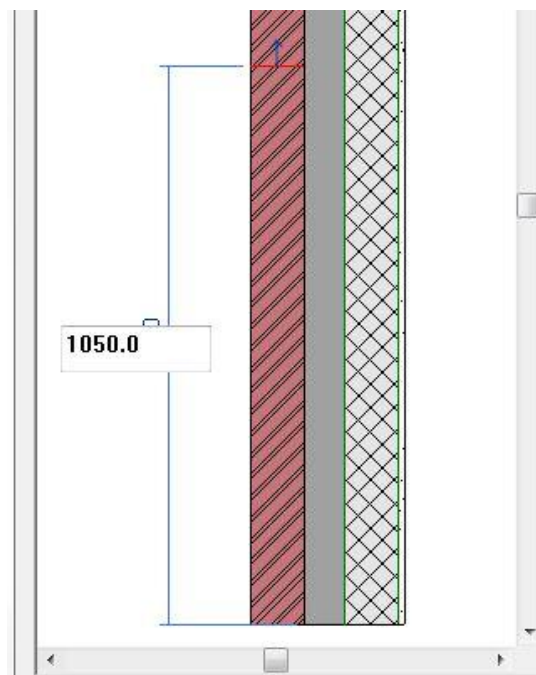
Select the **Section: Modify Type Attributes** to display a **section** preview and allow access to **Sweep** and **Reveal** options.



Select **Split Region**: click the left edge of the **Brick** layer...



Click **Modify** and select the **split black** line, edit the value to **1050**.



Insert a New layer to define the material for the newly created lower split region...

Select row 1.

Click **Insert** to add a new layer at the top of the list.

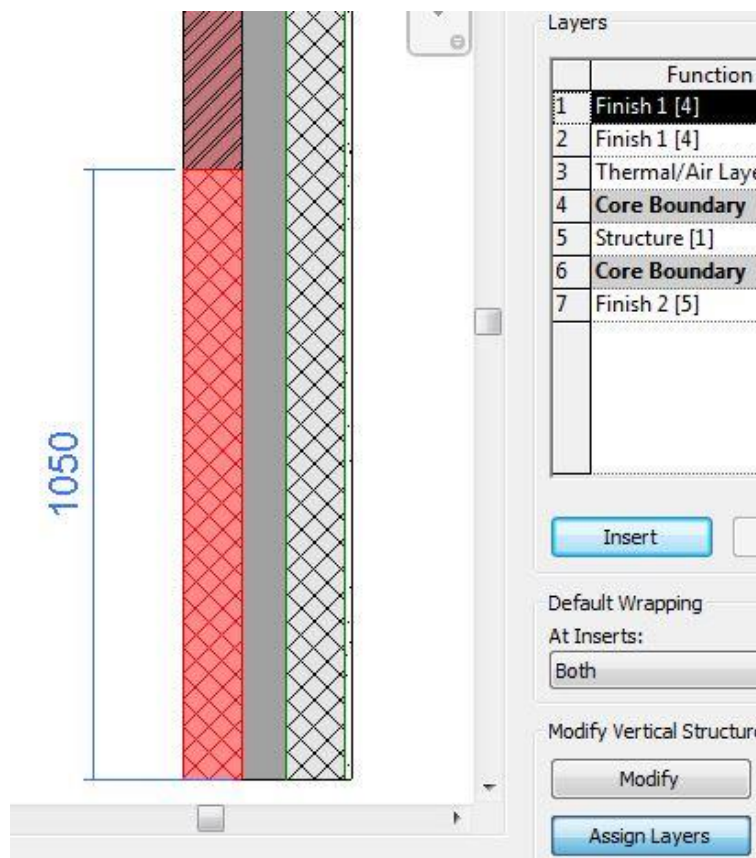
From the **Function** list of the new layer, select **Finish 1 (4)**.

For **row 1**, set the **Materials** to **Masonry Concrete Blocks** or similar.

| Layers | | | |
|--------|-----------------------|------------------------|---------------|
| | | | EXTERIOR SIDE |
| | Function | Material | Thickness |
| 1 | Finish 1 [4] | Concrete Masonry Units | 0.0 |
| 2 | Finish 1 [4] | Brick, Common | Variable |
| 3 | Thermal/Air Layer [3] | Fiberglass Batt | 75.0 |

Note the **0.0 Thickness** value, indicating that row 1 hasn't been assigned yet.

Select **Row 1** and then click the **Assign Layers button**... Place the cursor over the **lower** split layer and click on the area.... The hatch pattern changing signifies if the new assignment has been successfully applied.



Add Wall Sweeps

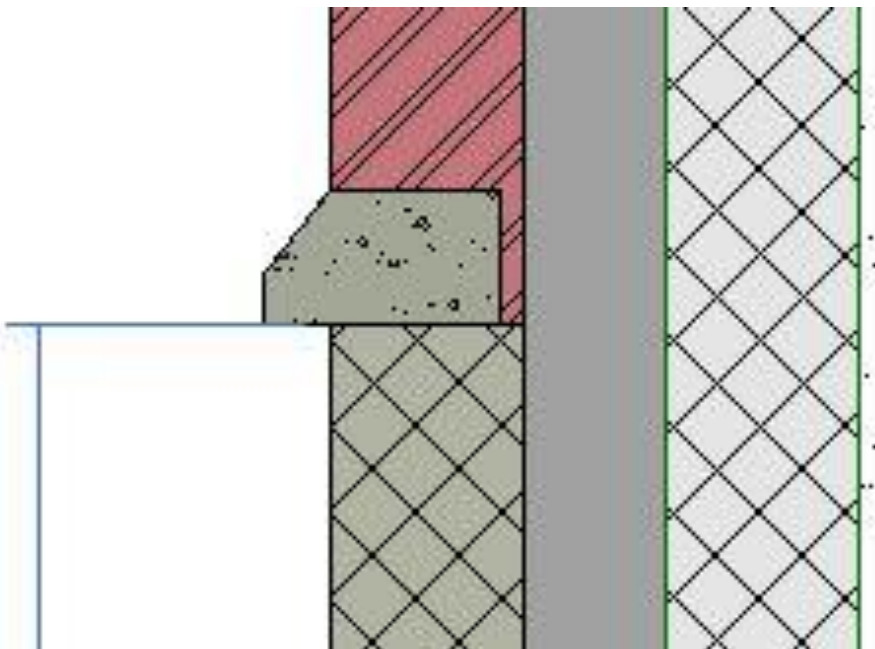
Under Modify Vertical Structure (Section Preview Only), click **Sweeps...**

In the **Wall Sweeps dialogue box**, click **Add** to add a wall sweep.

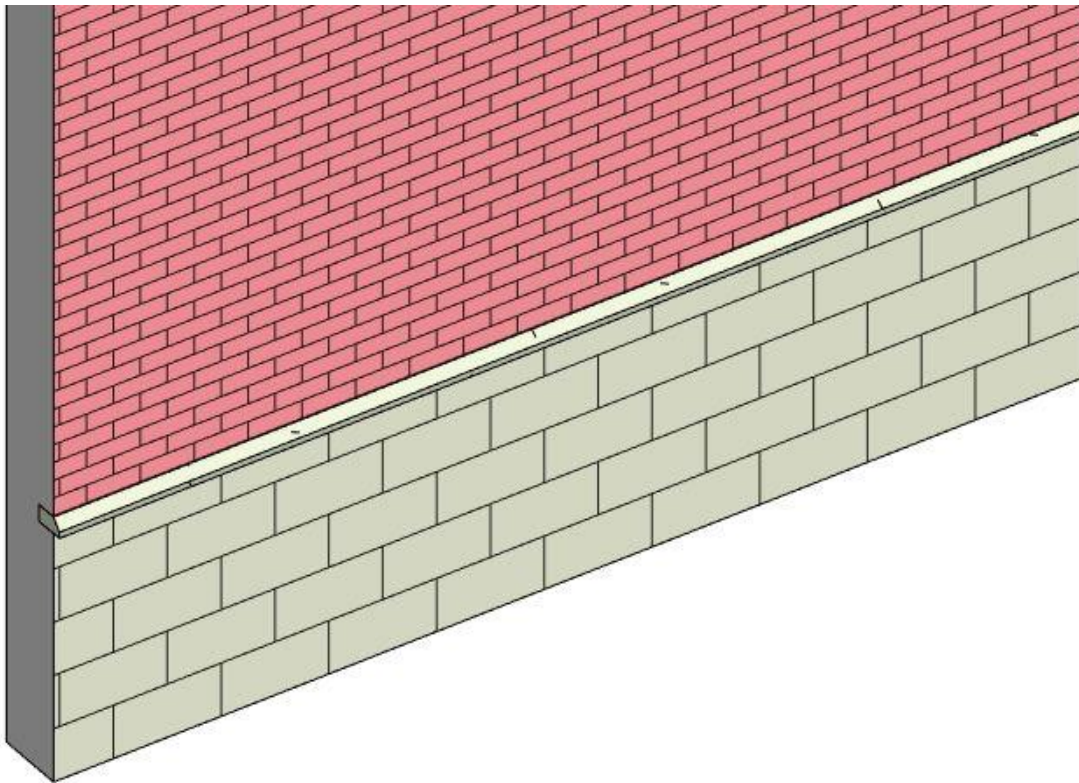
Select **M_Sill-precas:125mm (or similar)**, **Concrete Material**, and **1050** for the **Distance from Base**.



Click **Apply**. Note the Sweep now displays in the Preview Panel.



The new Wall Type should look similar to this.



Remember that sweeps add material and reveals subtract material. Repeat the above procedure by setting reveals at various heights on the wall. Walls are system families that exist in the project, they are not loaded from the metric library like component families. To create a new wall type, you duplicate and modify an existing wall as demonstrated here.

Date: November 2016