Example 3 – Creating a Brick Veneer wall from the Wall Types tab

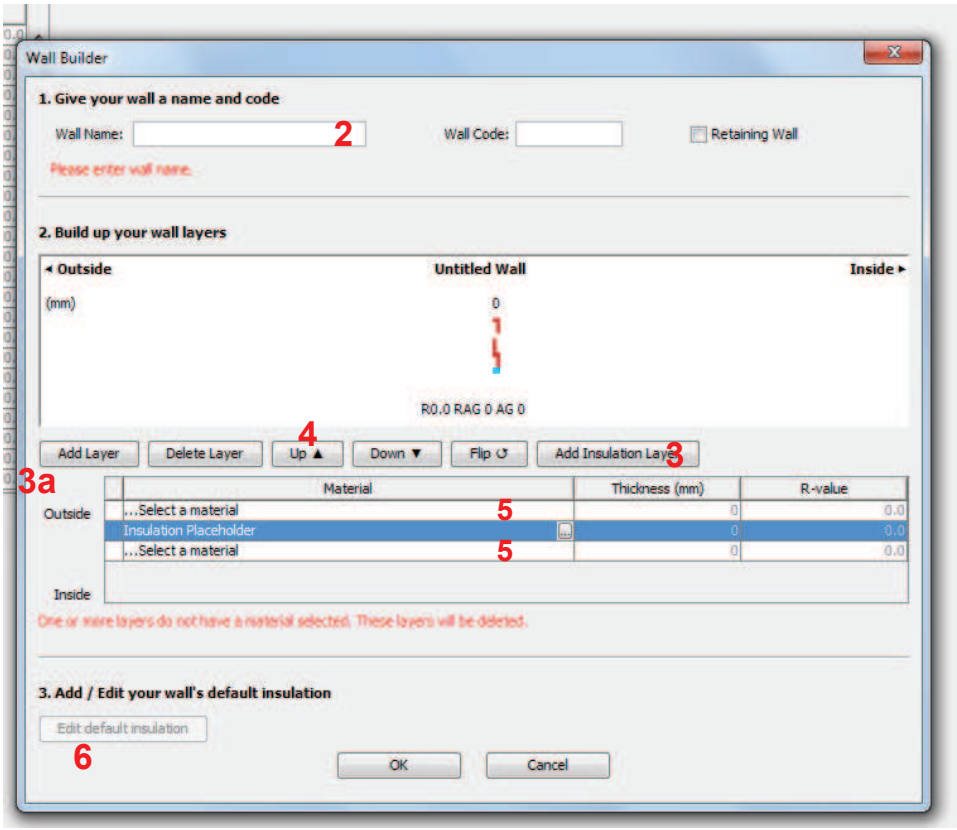
In the following example a Custom wall will be created from scratch in the Wall Types tab and then subsequently saved into the Wall Library. The wall will be built with the following build up:

Outside

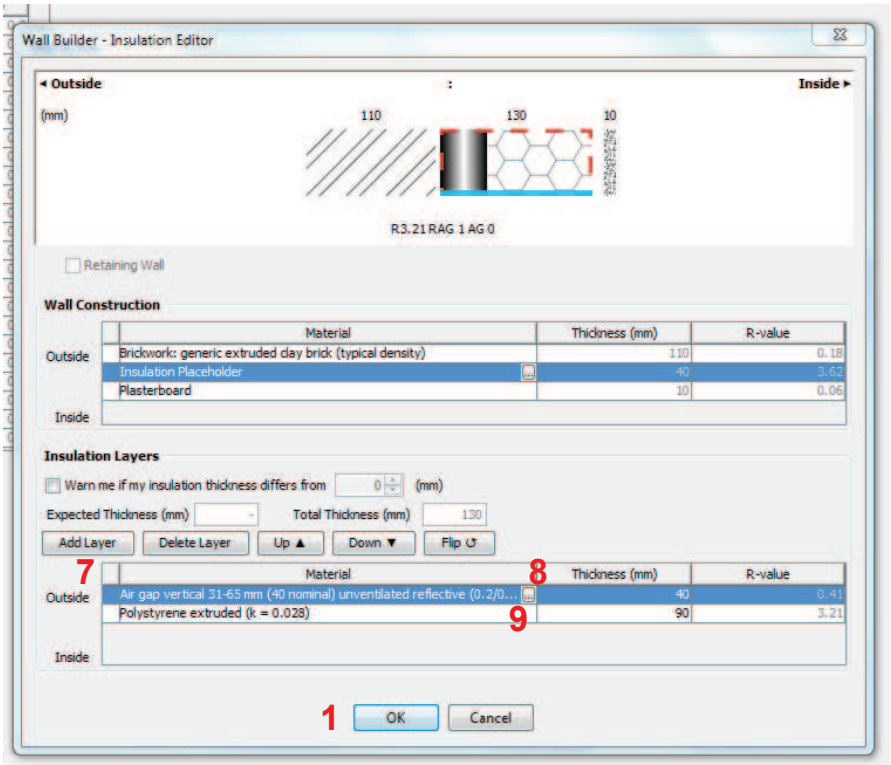
110mm	Brickwork: generic extruded clay brick (typical density)
40mm	Air gap (unventilated with single sided foil (e = 0.2 from manufacturer's literature))
90mm	Rigid insulation with the highest possible R value (lowest conductivity)
10mm	Plasterboard

Inside

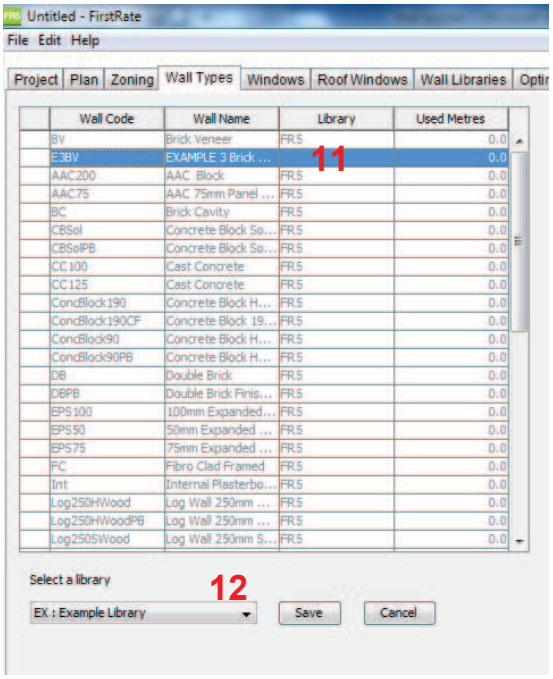
This construction resembles Brick Veneer, so we could use that as a starting point for this Custom wall. However, for the purposes of this exercise we will start from scratch.



1. Go to the Wall Types tab and click on the *New Wall Type* button.
2. Give your wall a name. Note that the Wall Code field will automatically populate with the initials of the wall name.
3. Add two construction layers (click *Add Layer* twice) and one insulation placeholder (click *Add Insulation Layer* once).
4. Move the insulation placeholder between the two construction layers by using the *Up* button.
5. Select the materials for the construction layers and their thickness: *General > Brickwork, generic extruded clay brick (typical density)* and *General > Plasterboard*.
6. Highlight the insulation placeholder and then click on the *Edit Default Insulation* button.



7. Add two insulation layers (click Add Layer twice).
8. Change the outermost layer and select the Air gaps (ventilated 31-65mm; 40 nominal) > Vertical > Air gap vertical 31-65mm (40 nominal) unventilated reflective (0.2/0.9; E = 0. 20) and click OK. Note that the thickness displayed is 40mm (ie the nominal thickness of the selection). As this matches the required width, there is no need for any manual changes.
9. Edit the innermost layer selecting a rigid bulk insulation material from the Specified conductivity list. Select the Extruded Polystyrene which has the lowest k-value (0.028) and click OK. Note that the thickness displayed is 0mm. Manually change this to 90mm.
10. Click OK to save the wall. Note that this has only been created in the Wall Types tab and will be saved project file only.



11. In order to save it to the Wall Library locate the wall in the Wall Types table. Right click on the wall and click on Add To Library.
12. Select the appropriate Custom Library folder and click Save.