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White Paper

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Revit Architecture 2013: Compound Walls

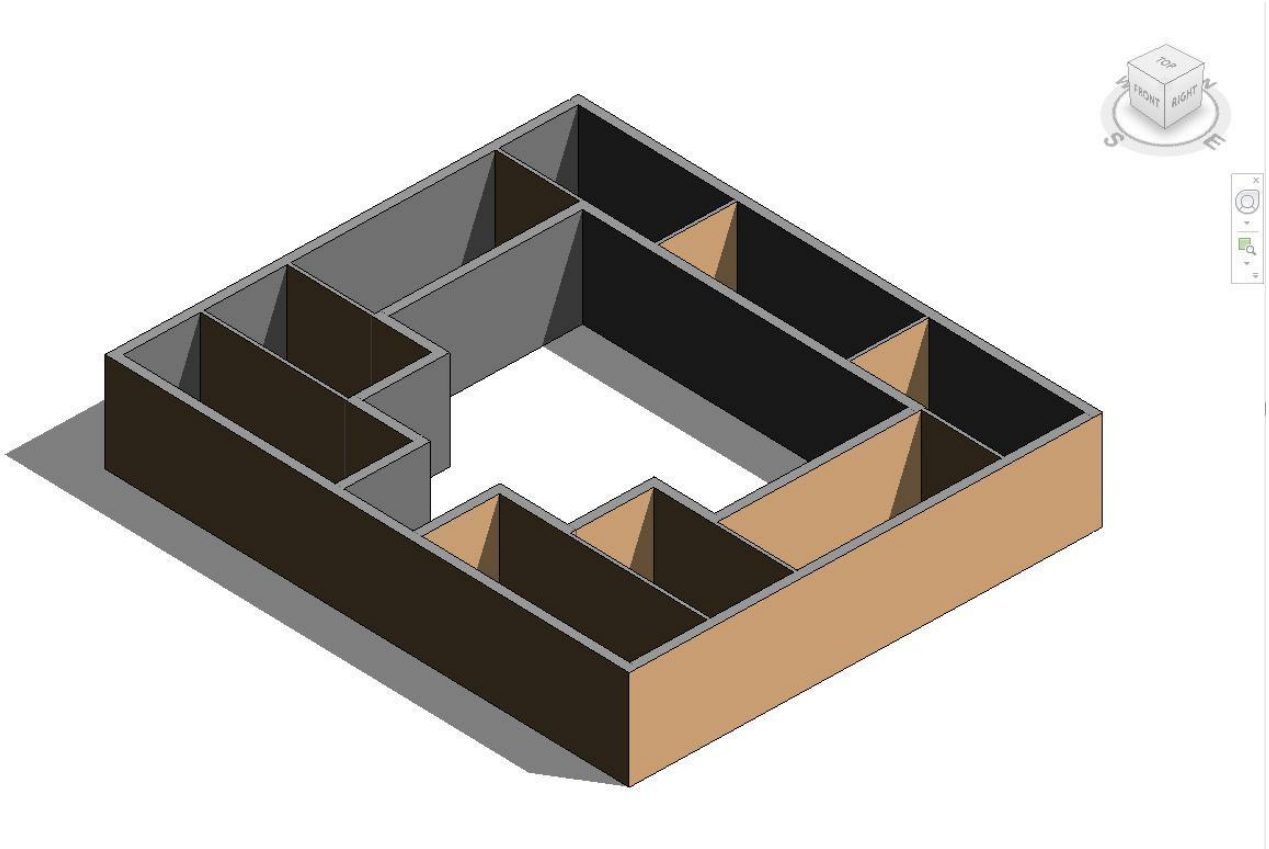
In this White Paper we will create Compound / Layered Wall Types.

All Revit Users

Creating Compound Wall Types

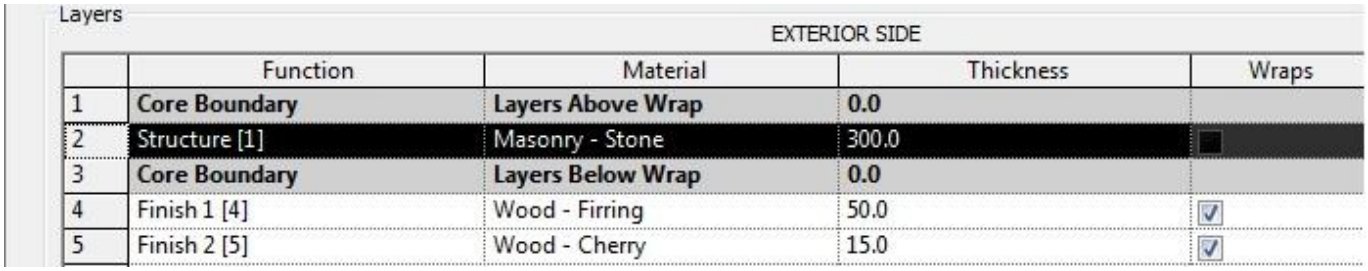
In this practice we will create interior and exterior wall types, and then draw walls using them, as shown in Figure 1.

Fig 1: 3D View



- **1.** Start a new project based on the default template and save it as Compound Walls .rvt.
- **2.** In the *Home* tab>Build Panel, click (Wall).
- **3.** In the *Place Wall* contextual tab>Element panel, expand (Element Properties) and Click (Type Properties).
- **4.** In the Type Properties dialogue box, click Duplicate… and name the new type **Exterior – Adobe.**
- **5.** Next go to the **Structure** parameter, click the **Edit…** button.
- **6.** Set up the layers as shown in Figure 2.

Fig 2: Wall Layers – Exterior - Adobe

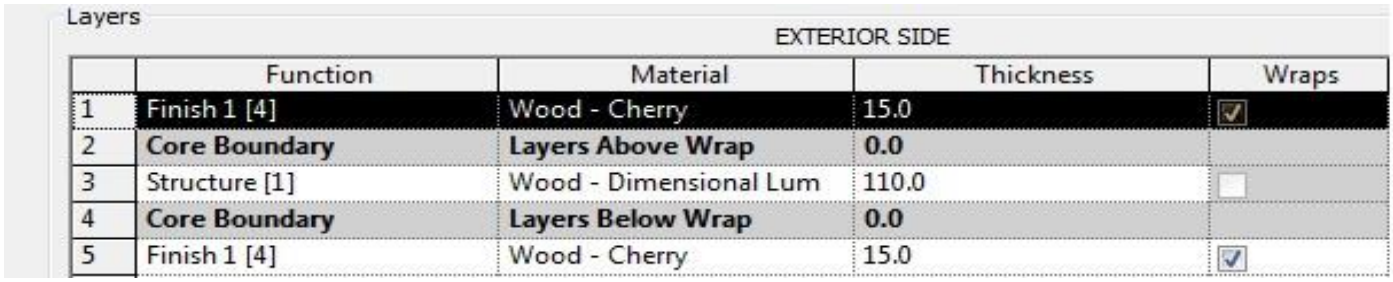

Layers

EXTERIOR SIDE

	Function	Material	Thickness	Wraps
1	**Core Boundary**	**Layers Above Wrap**	**0.0**	
2	Structure [1]	Masonry - Stone	300.0	☐
3	**Core Boundary**	**Layers Below Wrap**	**0.0**	
4	Finish 1 [4]	Wood - Firring	50.0	☑
5	Finish 2 [5]	Wood - Cherry	15.0	☑

- **7.** Click OK to close the dialogue box.
- **8.** Repeat the process to create another new wall type named Interior – Wood Panel. Set up the layer structure as shown in Figure Figure 3.

Fig 3: Wall Layers – Interior – Wood Panel


Layers

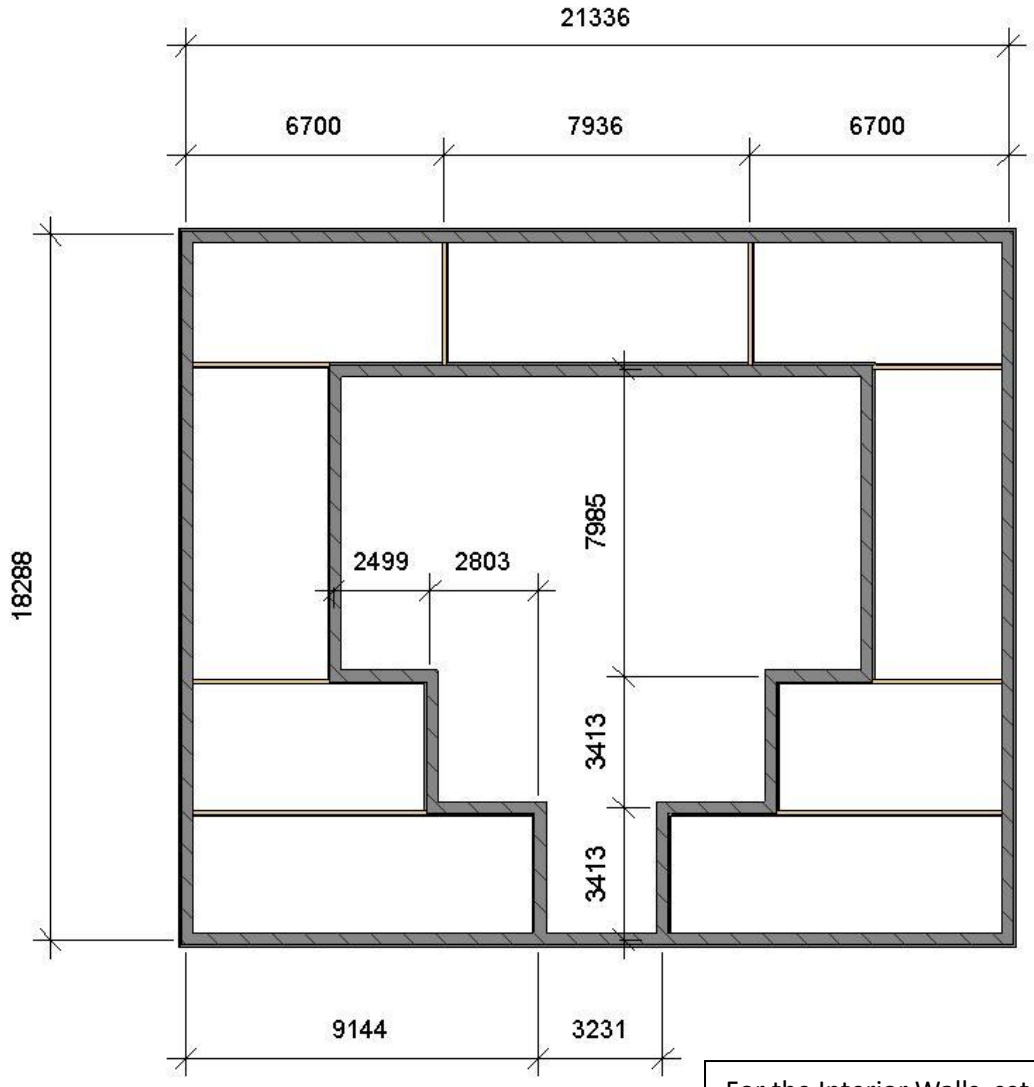
EXTERIOR SIDE

	Function	Material	Thickness	Wraps
1	Finish 1 [4]	Wood - Cherry	15.0	☑
2	**Core Boundary**	**Layers Above Wrap**	**0.0**	
3	Structure [1]	Wood - Dimensional Lum	110.0	☐
4	**Core Boundary**	**Layers Below Wrap**	**0.0**	
5	Finish 1 [4]	Wood - Cherry	15.0	☑

- **9.** Click OK twice to close the dialogue boxes.

- **10.** Set the *Detail Level* to (Medium).
- **11.** Draw the floor plan shown in Figure 4.
  - Exterior: **Exterior – Adobe** and *Height* of 4 meters.
  - Interior: **Interior – Wood Panel** and *Height of* 4 meters.

Fig 4: Ground Floor Plan



For the Interior Walls, set the Location Line to **Finish Face – Interior** or **Finish Face - Exterior** to place the horizontal walls and **Wall Centreline** for the vertical walls.

- **12.** Save the project

On average this exercise should take approximately 15 to 20 minutes and it serves as a good introduction to understading the layering strategies involved in creating compound walls. In my next White Paper (Creating Vertically Compound Walls) we will extend the complexity of the compound walls we have just created by adding sweeps, splitting regions and assining layers. This is in keeping with Revit's premit of working from the general to the specific.

For more general information on generic wall creation in Revit Archiutecture, visit the CADline Community website: www.cadlinecommunity.co.uk to read my latest blog: Understanding Basic Wall Parts **(Ref: jf-18-02-13)**.

15/02/2013