DATE: 09/09/2022
PROJECT: Revit-Speckle-Topologic-Pollination by Streamlit
DRAWN BY: JPS

FROM: Ripcord Engineering
TO: Revit Users

SUBJ: Revit-Speckle Workflow

REF: 1. Revit 2021
         2. Speckle 2.7

Revit-Speckle Workflow:

1. Use Model Lines to outline exterior of background.

2. Use Space Separation Lines to partition interior volume.

3. Create exterior boundary w/building elements:
      +Walls (by Dynamo)
      +Floor (by Dynamo) >> Bottom floor only
      +Roof (by Dynamo)
      +Windows (by Designer) >> As required.

4. Place Spaces:
      +Upper Limit >> By level.

5. Transform Spaces into Mass families and place (by Dynamo).

6. Transmit Masses and Windows to Speckle.
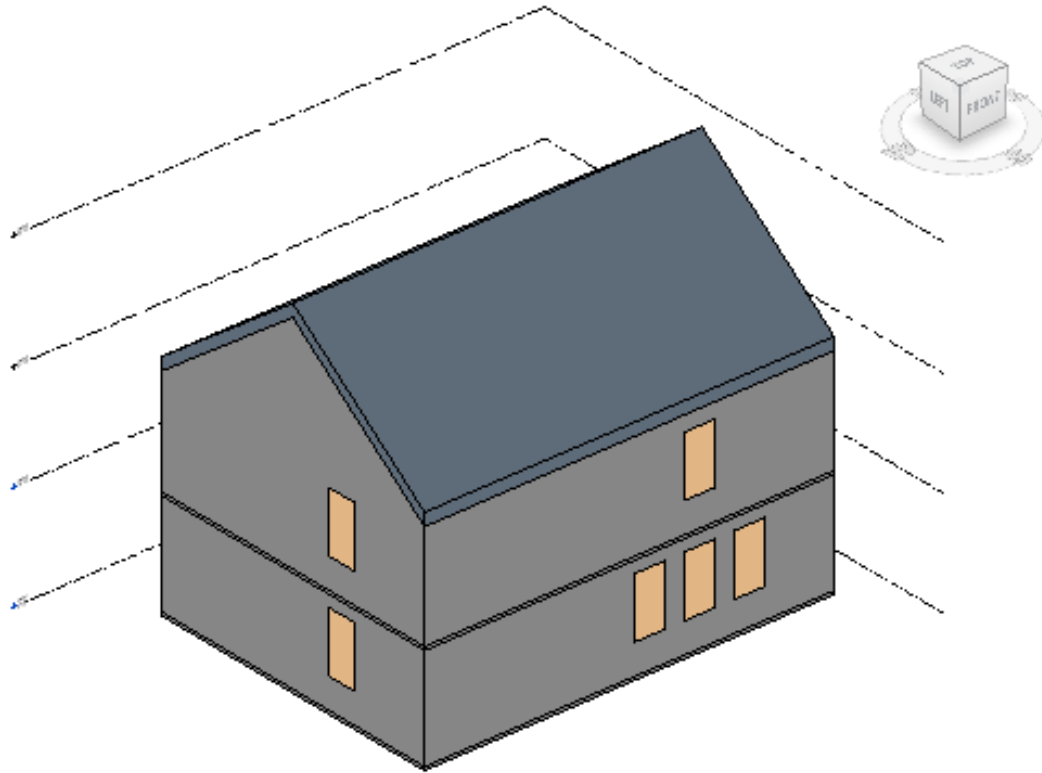
Figure 1. Architectural background model.

Figure 2. Use Model Lines to outline exterior of background - First floor.
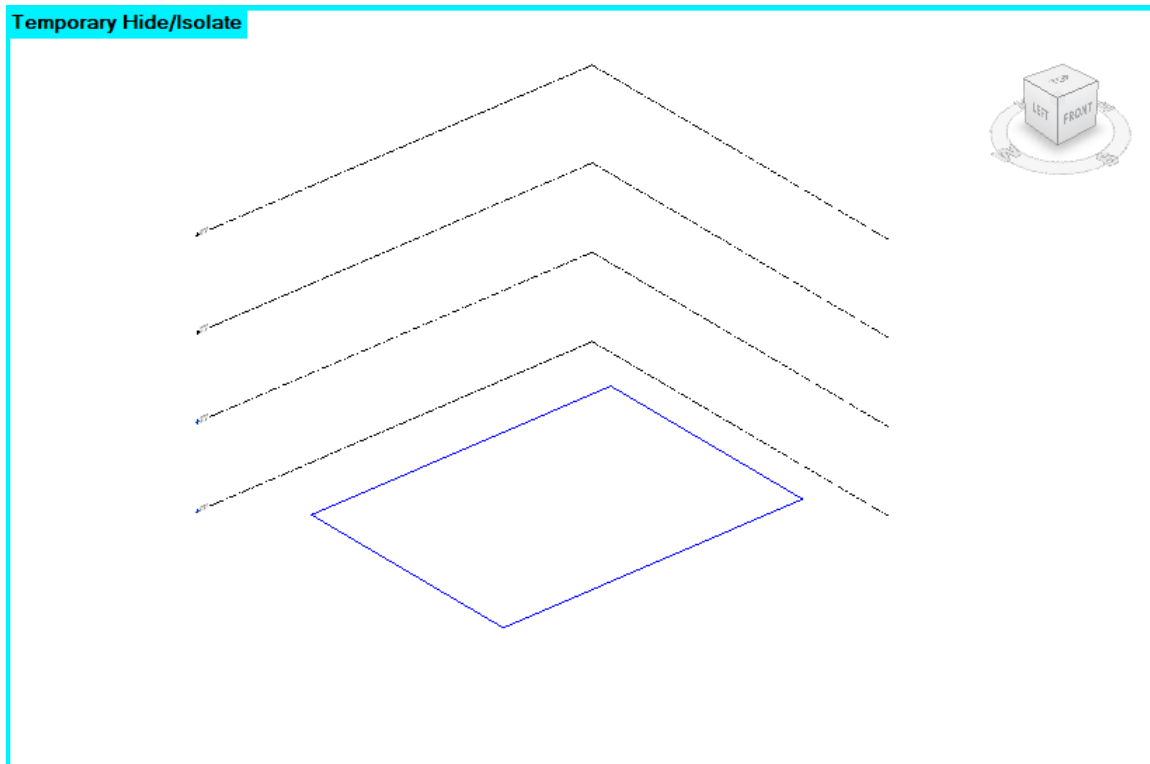
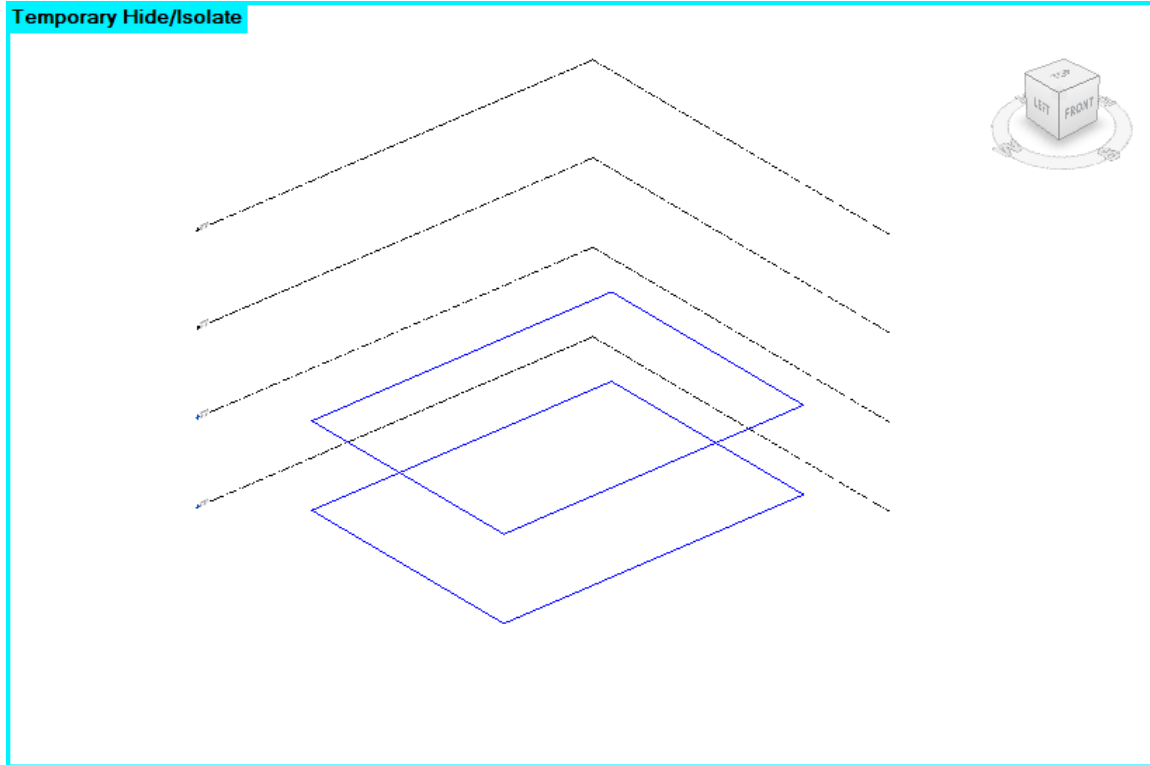Figure 3. Use Model Lines to outline exterior of background - Second floor.

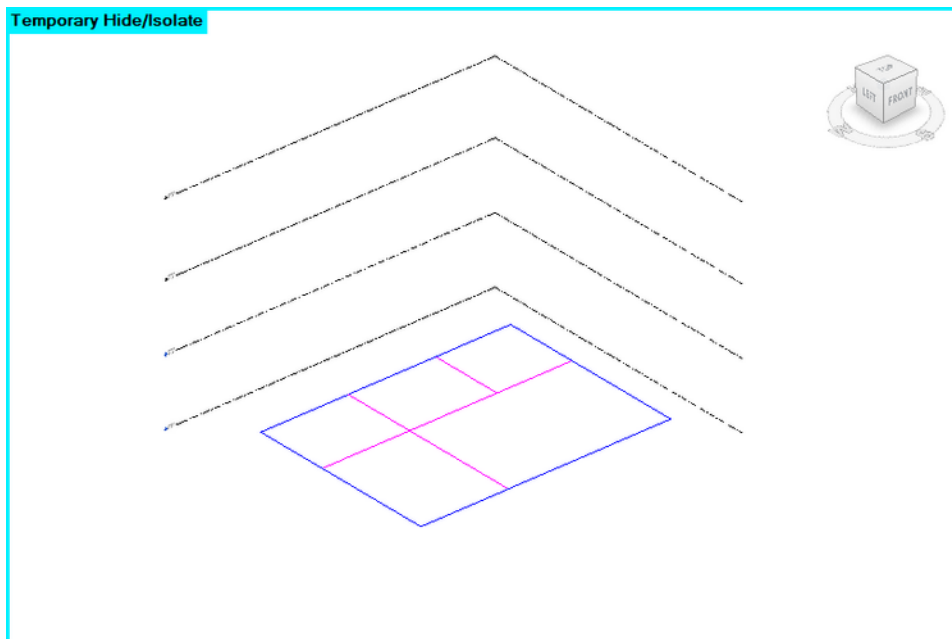Figure 4. Use Space Separation Lines to partition interior volume - First floor.

Figure 5. Use Space Separation Lines to partition interior volume - Second floor.
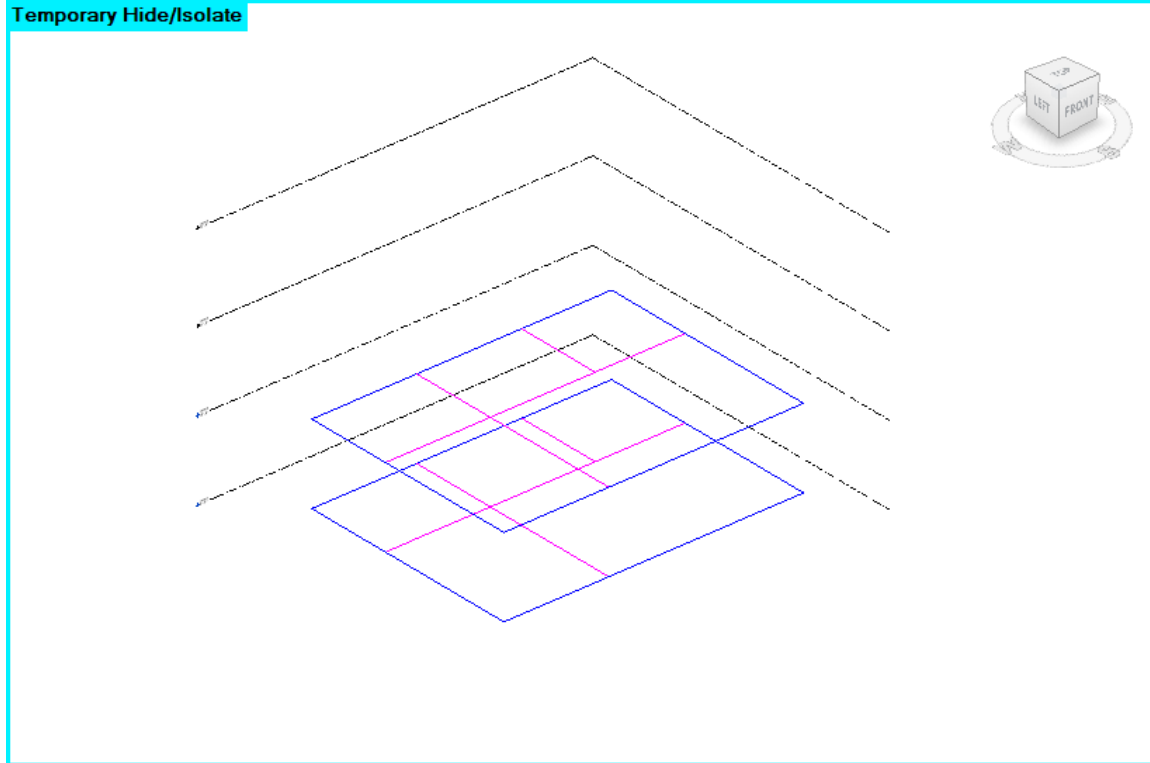

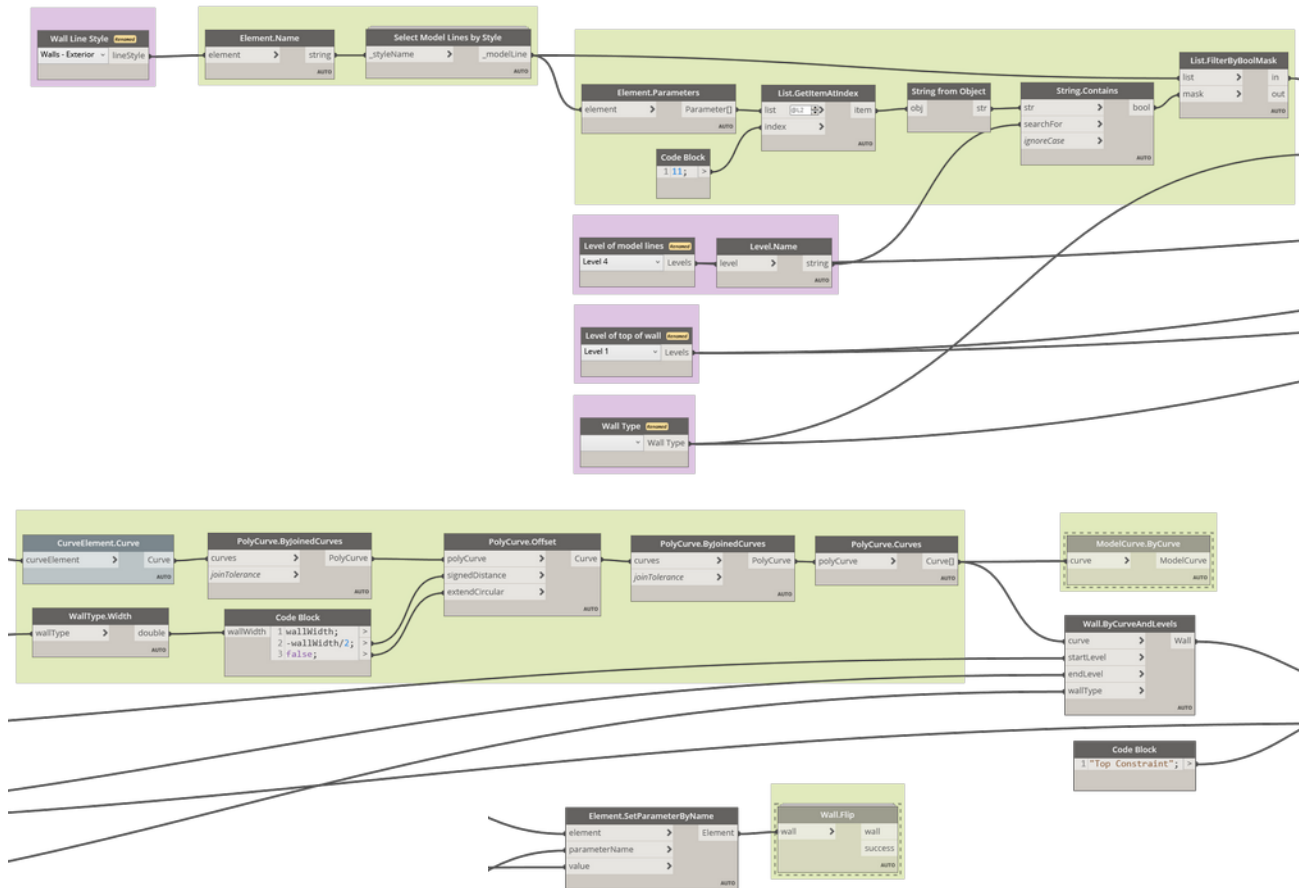Figure 6. Dynamo - Create walls with exterior outline.

Figure 7. Create exterior boundary w/walls - First floor.

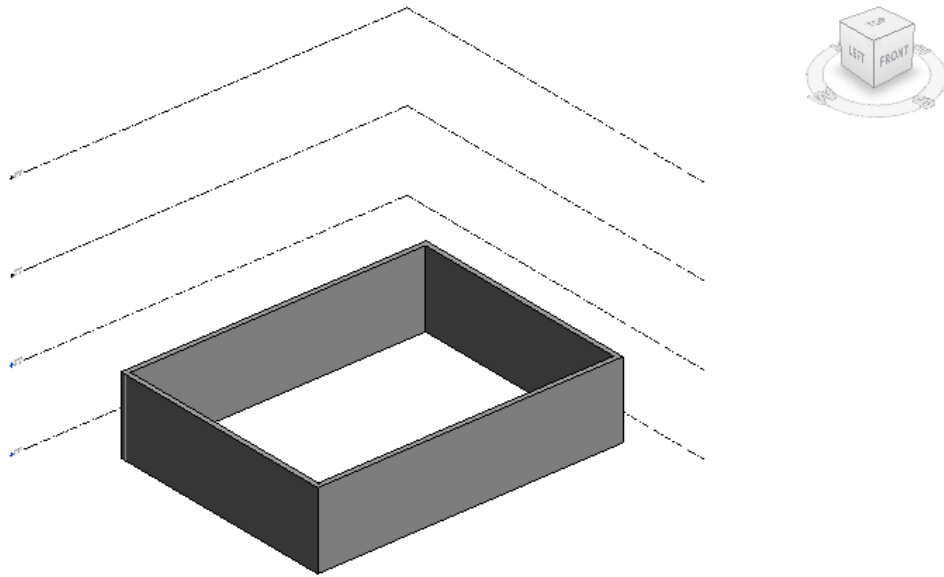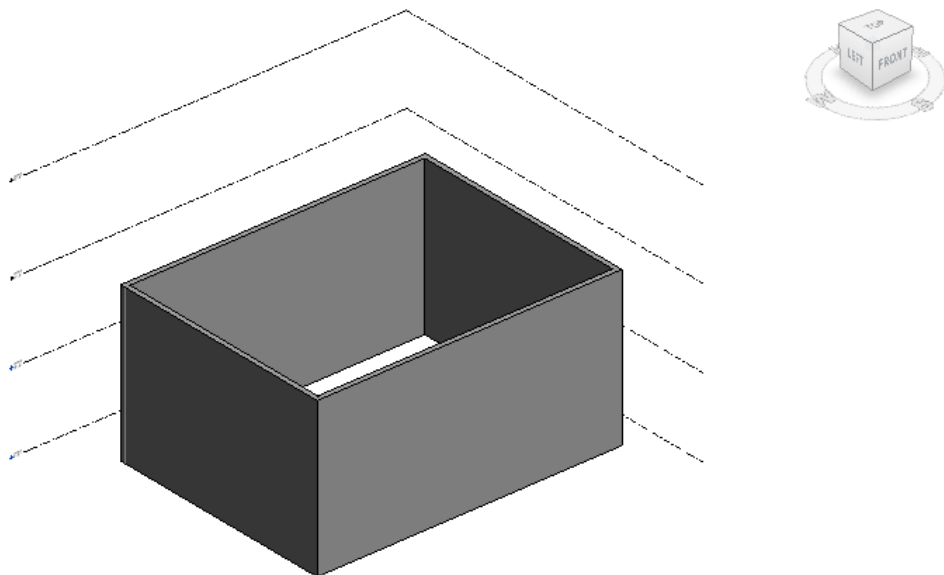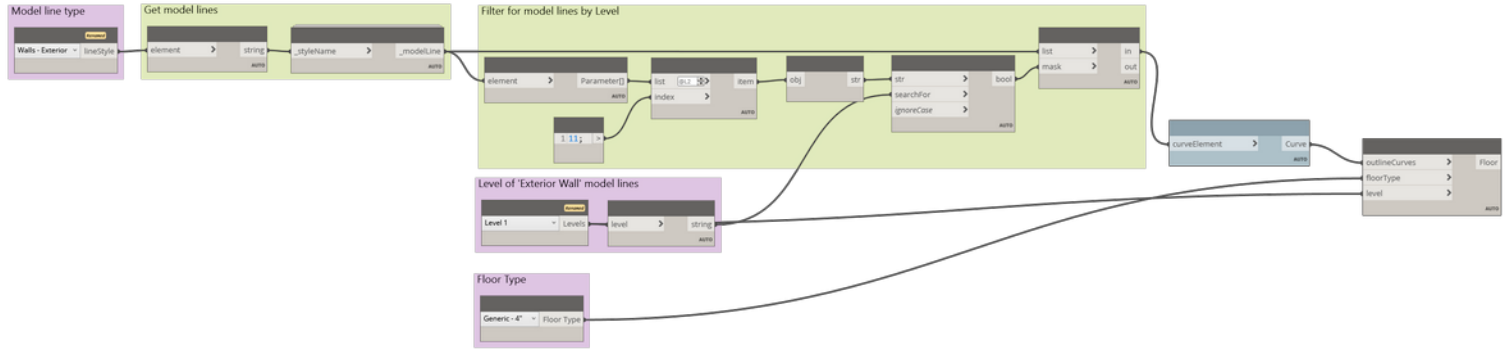Figure 8. Create exterior boundary w/walls - Second floor.

Figure 9. Dynamo - Create floor with exterior outline.

Figure 10. Create exterior boundary w/floor - First floor.
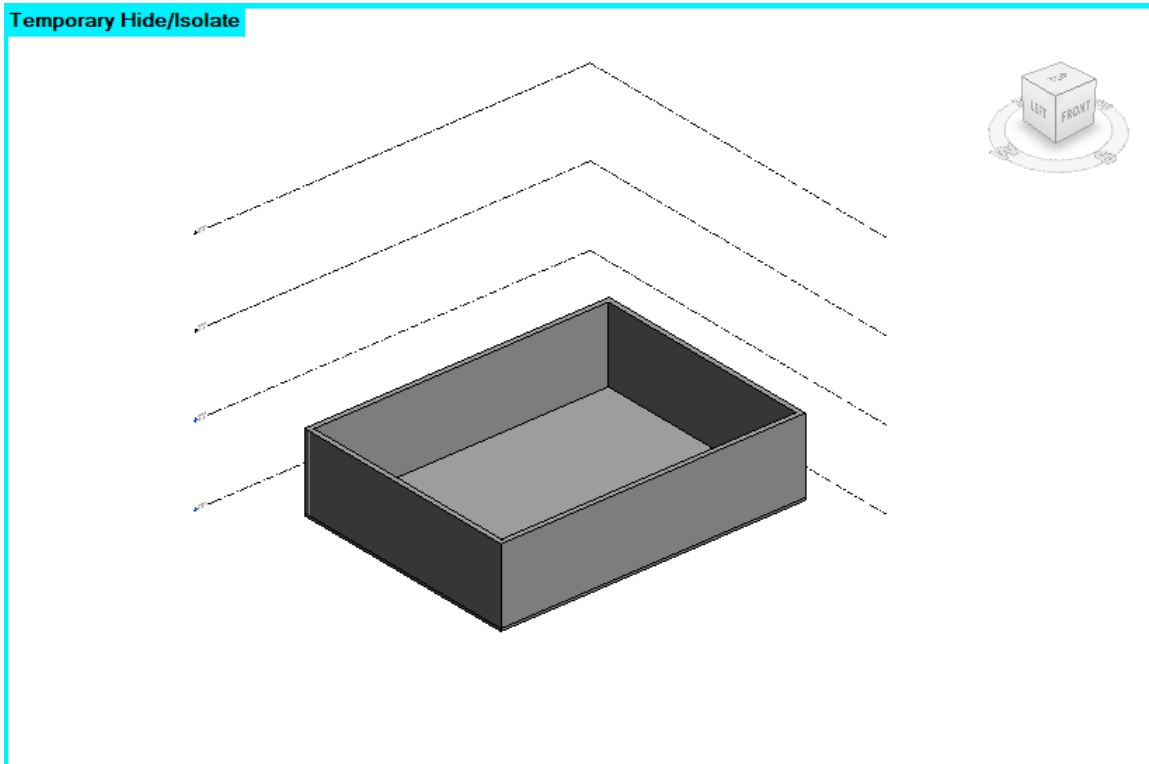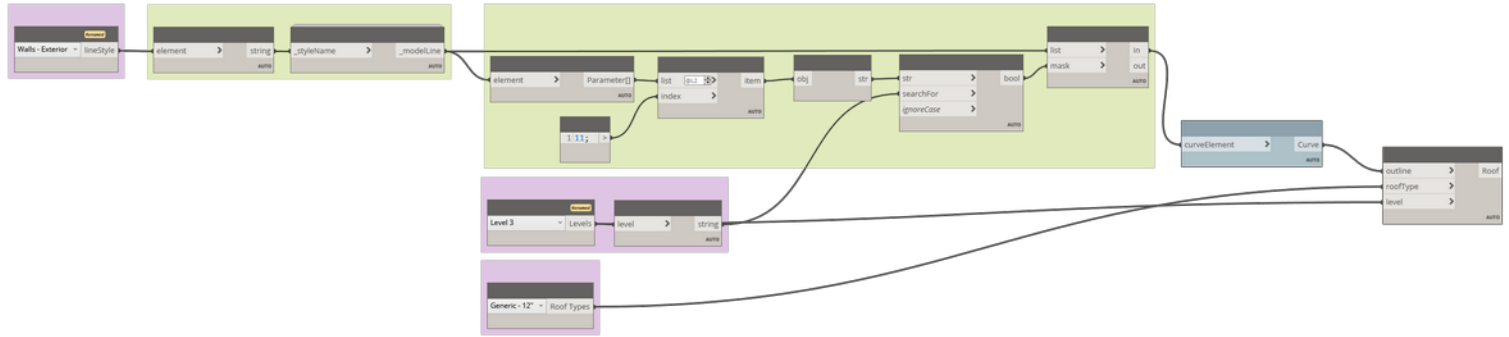
Figure 11. Dynamo - Create roof with exterior outline.
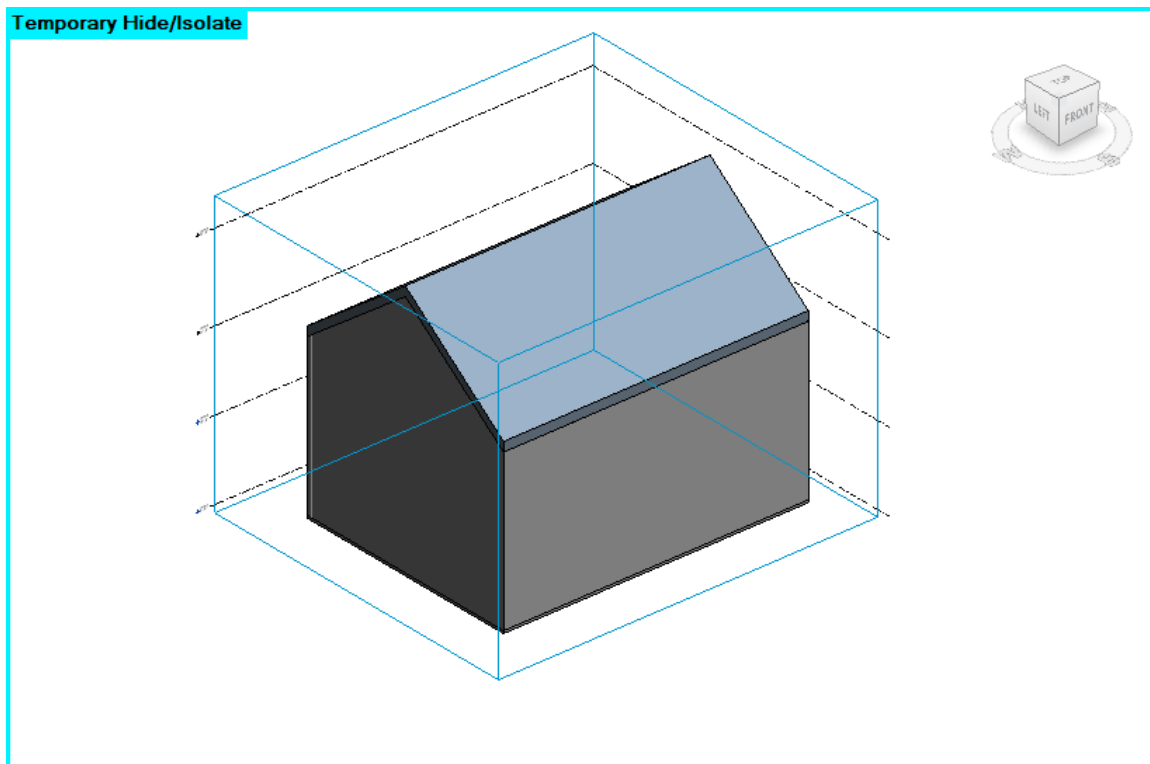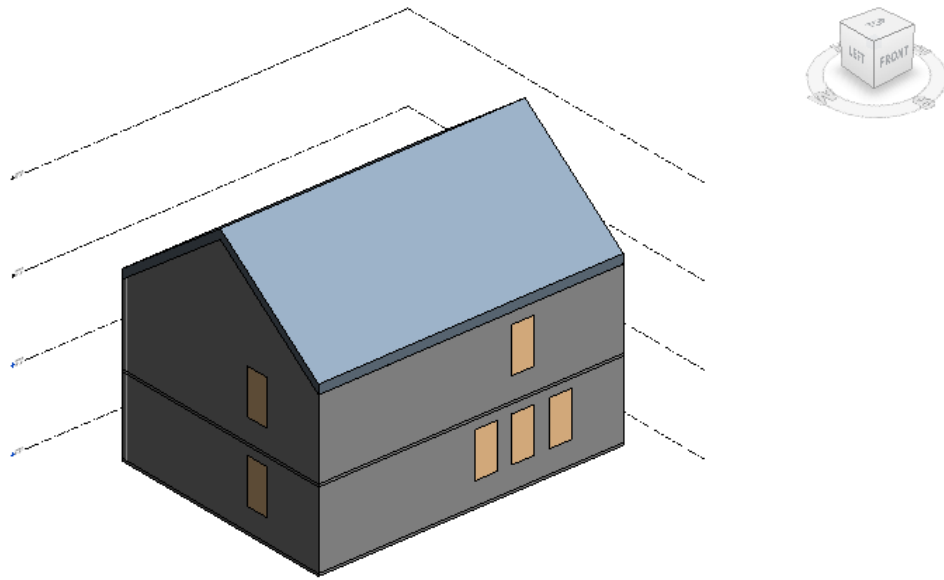

Figure 12. Create exterior boundary w/roof.

Figure 13. Place windows.

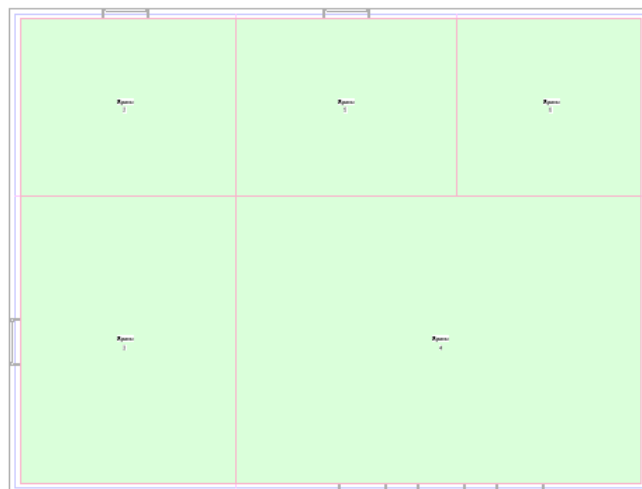Figure 14. Place spaces - first floor.
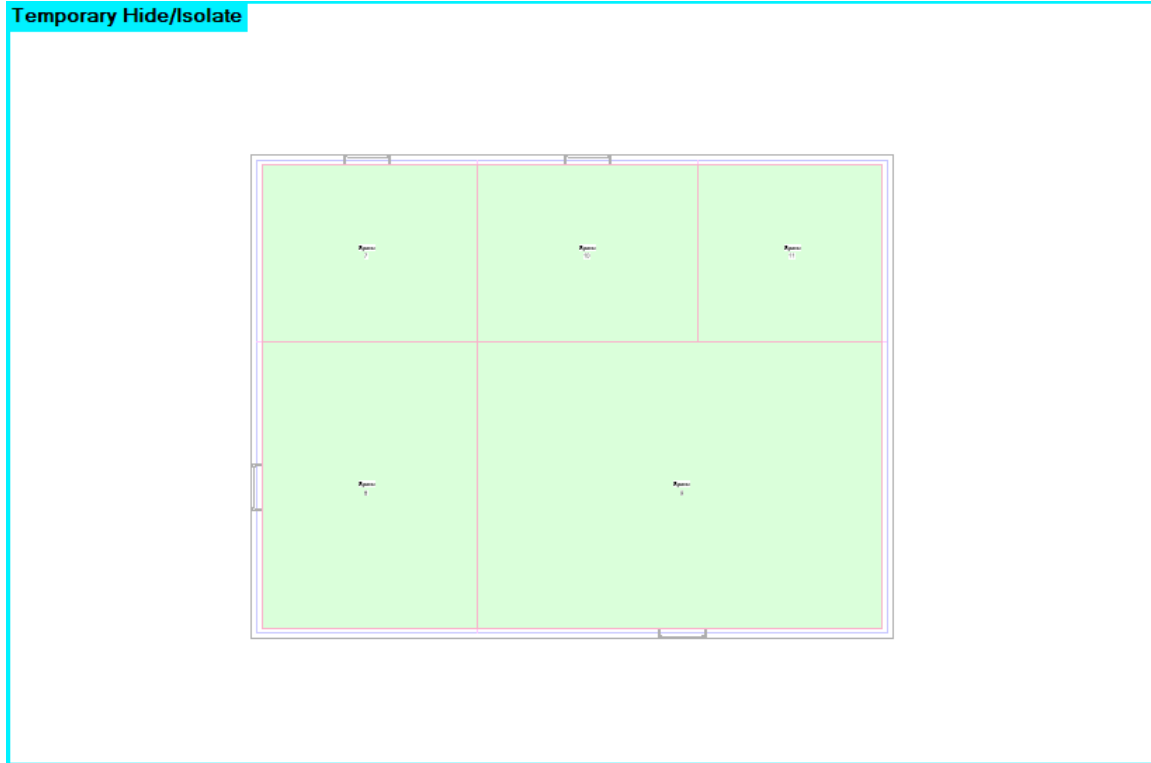
Figure 15. Place spaces - Second floor.

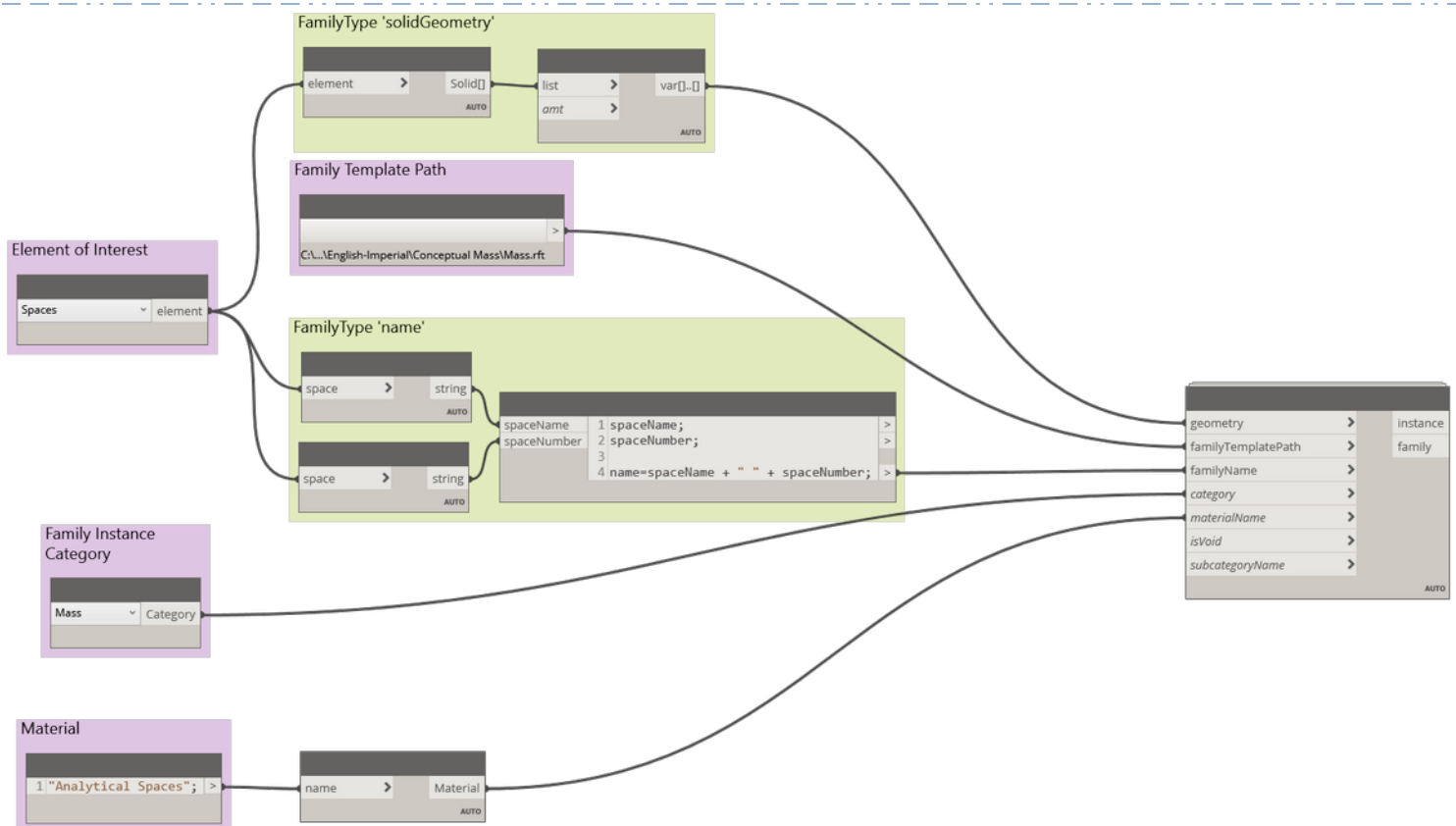Figure 16. Dynamo - Create masses w/spaces.

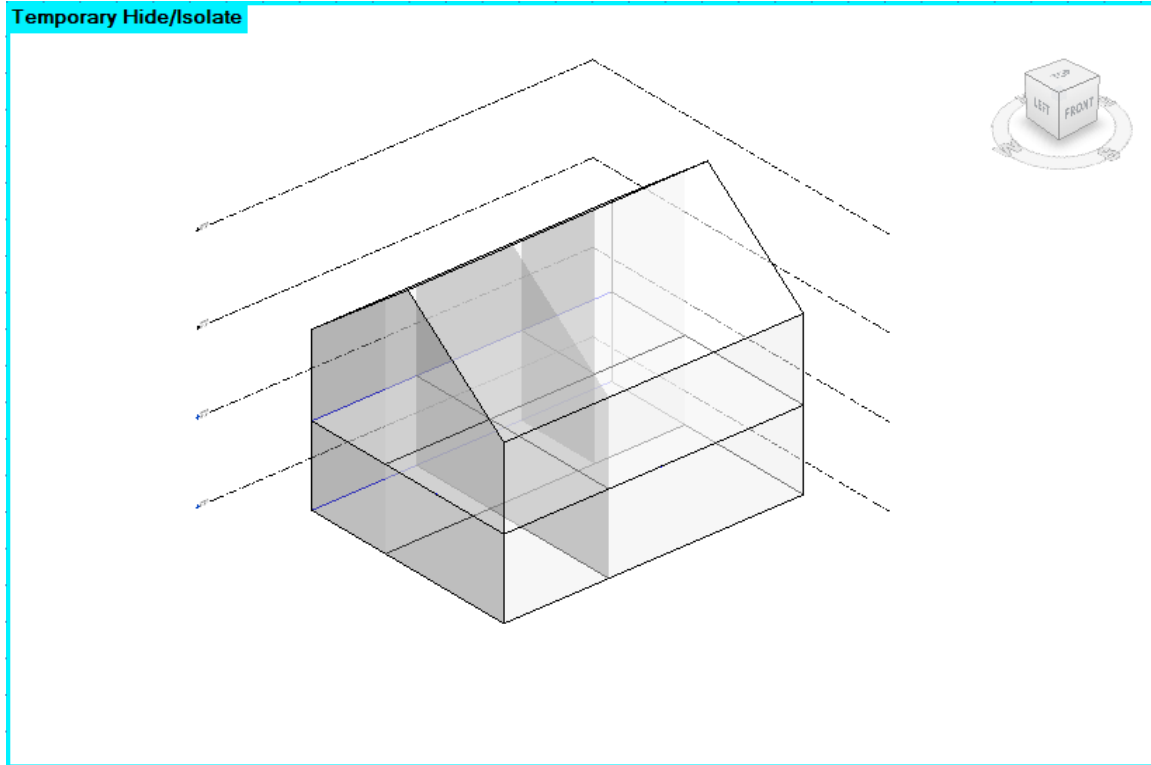Figure 17. Space geometry transformed into masses.
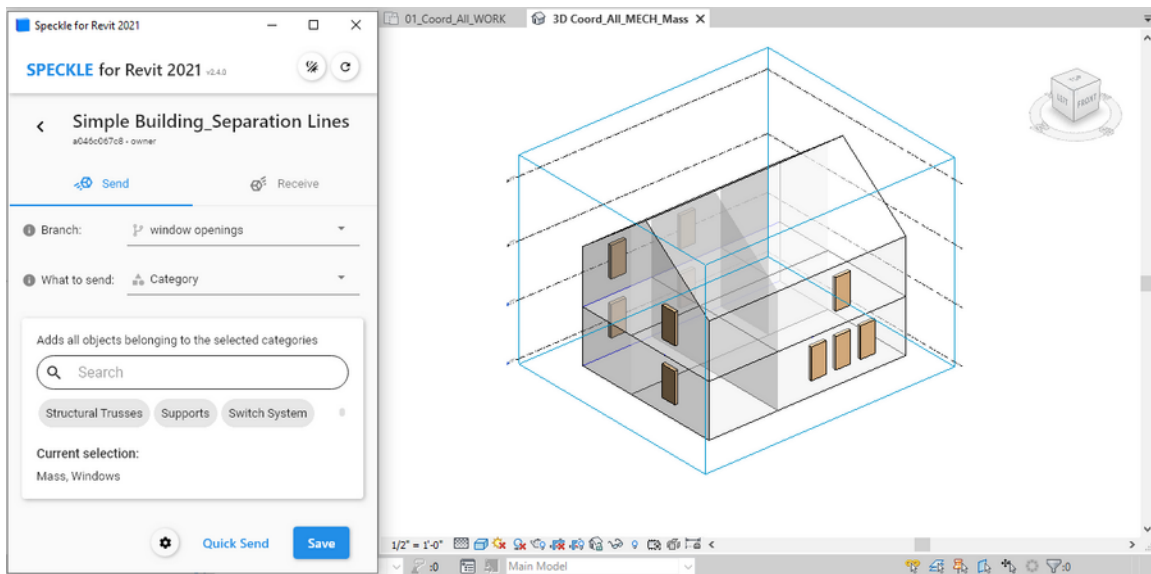

Figure 18. Revit Speckle connector - Send masses and windows.

Figure 19. Speckle - Received masses and windows.