

Exercise duration: ~5 minutes

## Practice exercise

# Create AEC 3D Walls, Doors, Windows, and a Roof, Change an Object's Style.

In a 3D view, create four connecting Walls, changing their style after their creation via Properties. Add Windows, a Door, and a Roof.

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1. From the Start page, begin a new drawing using the pcd (Imperial Architectural).dwt template file.
2. Making sure the workspace is set to Ribbon Full, click on the AEC – 3D Architecture ribbon tab.
3. Using the Viewport Controls, set the view to SW Isometric and the visual style to Realistic.
- 4.

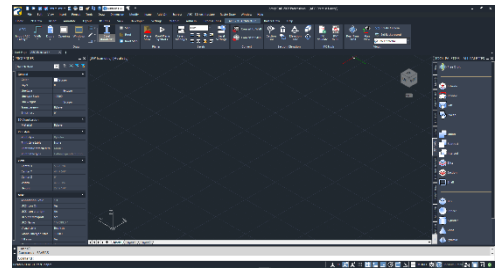


Figure 1. The new file in a 3D view.

5. Your first task is to draw four exterior walls. These will take the shape of a 30' square. Expand the Wall icon in the ribbon and select Exterior Wall.
6. The Import AEC Family dialog will appear. Highlight the Imperial family and click *Import* to load it.
7. Once loaded, the Wall command will resume. Specify the start point as 0,0
8. Make sure Orthomode is turned on, and Esnaps are turned off. Pull your mouse to

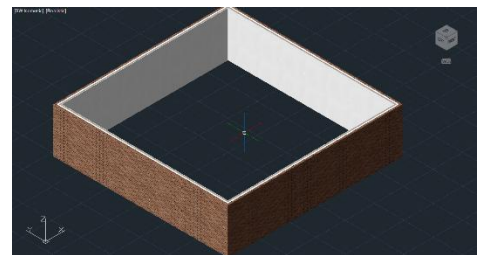


Figure 2. The drawing editor with three Viewports.

the upper left and type in the length of 30'. Follow the same workflow to create the back and right walls. When the three walls are in place, type C and Enter to close the shape and end the command.

9. Using a Crossing Selection, select all four walls. Expand the Style pulldown in the Properties palette and choose *Stud-2.5 Air-2 Sheathing-.5 Brick-3.625* (the third style below Standard).

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10. Your second task is to add a Door and some Windows. Expand the Doors icon in the ribbon, open the Double Door flyout and select Double Door. Select the front wall. Place the door generally near the middle of the wall with the doors swinging inward. **Note:** This step may take a few tries. Practice is good.
  11. Expand the Windows icon in the ribbon. Select Double Hung Window. Select the front wall. Place a window on both sides of the door. Press Enter when both are inserted.
  12. Press the spacebar to restart the command. Place three windows into the left side wall.

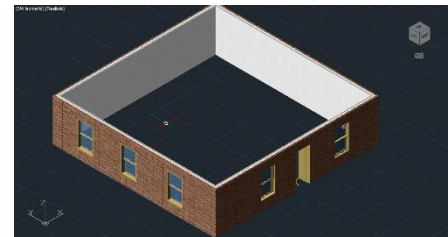


Figure 3. The walls with a door and windows.

13. Your third task is to add a roof. Turn Esnaps back on and make sure Endpoint is one of your running Esnaps. Select the Roof command from the ribbon. This time, you'll be specifying each point with an Endpoint Esnap.
14. Zoom into the front left corner. Each selection point will be the outer corner of the brick. Zoom in and out to select subsequent corners, working your way clockwise.
15. Once the point is selected on the front right corner, the roof will appear, and the command will end.
16. Select the roof (if you get a Selection Cycling dialog, select *Roof*).
17. In the Properties palette, set the Overhang to 12" and the Slope to 30.

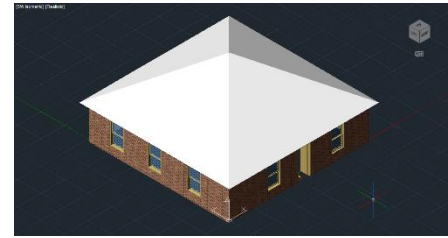


Figure 4. The walls, door, and windows with a roof..

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18. From the Application Menu, expand the Save As icon and select Save As. Navigate to the same folder as your 2D files and name this one **AEC-exercise1**.
  19. Close the file tab.

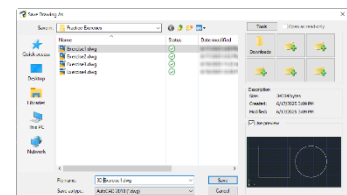


Figure 5. The Saveas dialog.

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