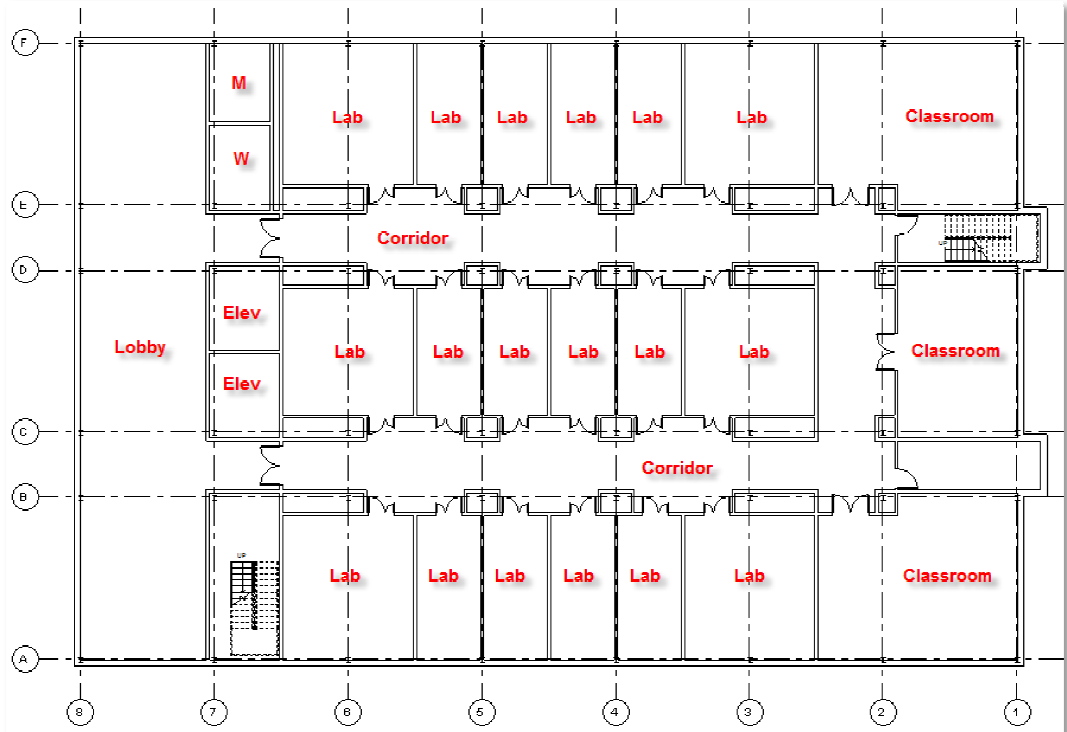


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Phase 1 Stage 3: DEVELOPMENT OF WALLS - MODULAR LAB BUILDING

(WEEK 2A)

Overview: A typical lab floor consists of a lobby/lounge area along the left hand facade with adjacent core spaces including bathrooms, elevator and stair cores. There are three sections of lab spaces separated by a corridor. There are classroom spaces along the south facade with a secondary fire stair.



Wall Types: To begin the building layout we will use 1 exterior and 2 interior partition types.

Exterior Wall: The exterior wall system will be made of pre-cast concrete. For now we will use **EIFS (Exterior Insulated Finish System) on Metal Studs** as a place holder until we have had time to develop our exterior wall details & assembly.

2 Hour Partition: All corridor and shaft walls will be constructed using 2 hour partitions. They are to be built using 2 layers of 5/8" GWB on both sides of a 3 5/8" metal stud frame.

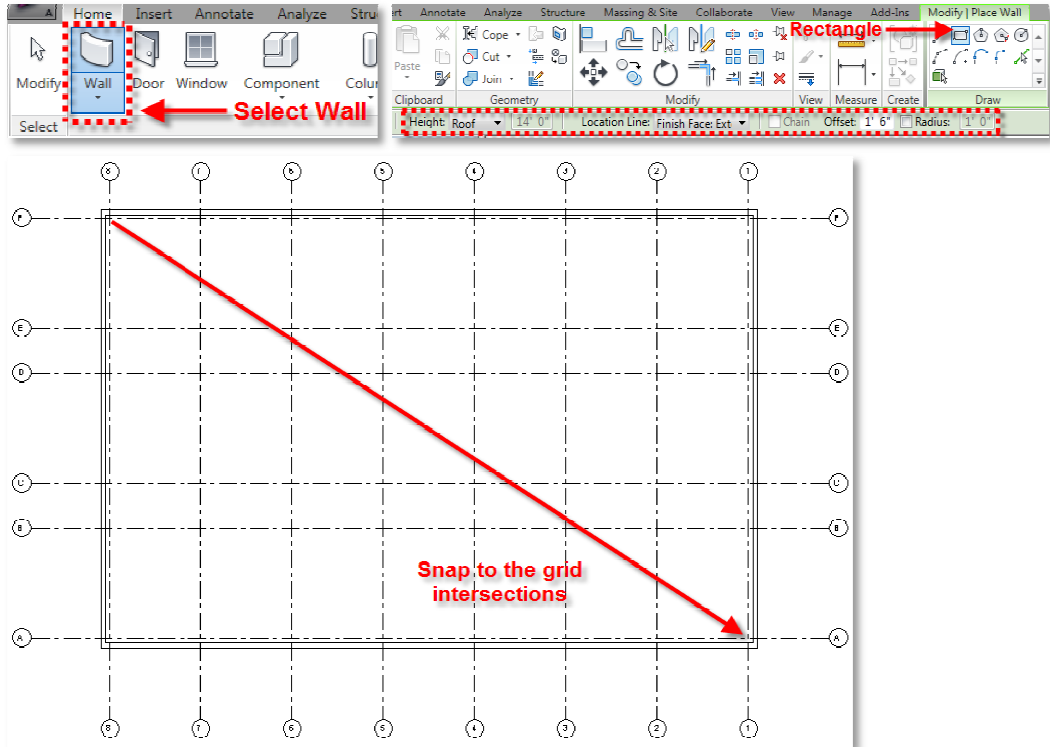
1 Hour Partition: All other walls including those that divide lab from lab will be 1 hour partitions. These use 1 layer of 5/8" GWB on each side of a 3 5/8" metal stud frame.

Justification: Each wall is justified to either its centerline or one of its faces. The justification choice is based on which dimensions are the most critical to maintain.

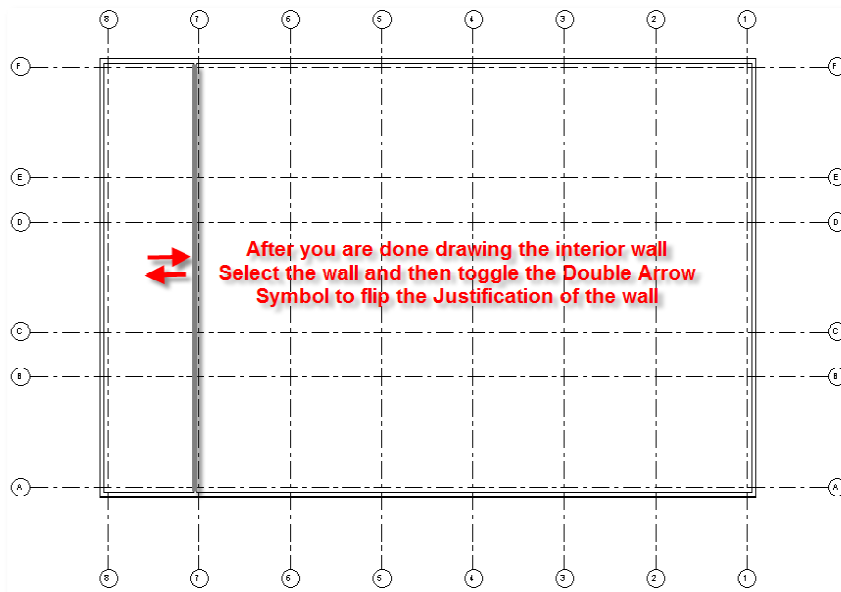
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Follow these steps: We will work on Level 6 as the typical floor and we will propagate it later.

1: Exterior Wall: Home > Wall > Basic Wall Exterior - EIFS on Mtl Stud > Rectangle Tool
 Height = Roof Location = Finish Face Exterior Offset = 1'-6"



2: Interior Wall: Home > Wall > Basic Wall Interior 6 1/8" (2 Hour)
 Height = Roof Location = Finish Face Interior Offset = 1'-3"
 Use the Line Tool and select each end of Grid Line 7 @ exterior wall



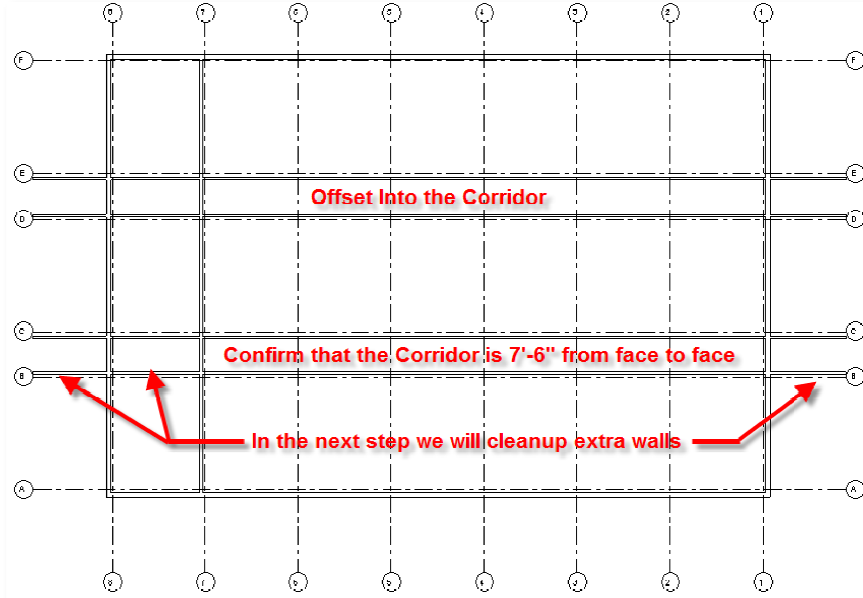
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3: Horizontal
Corridors:

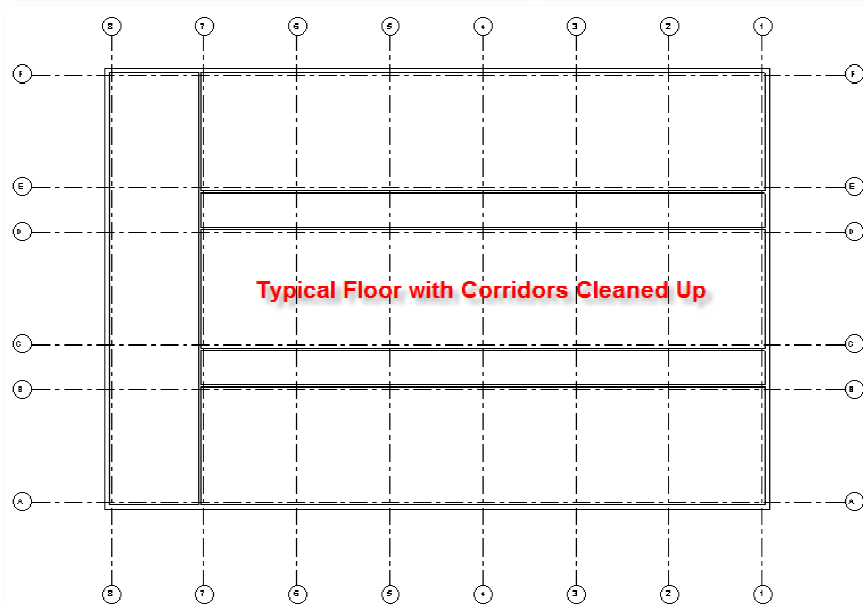
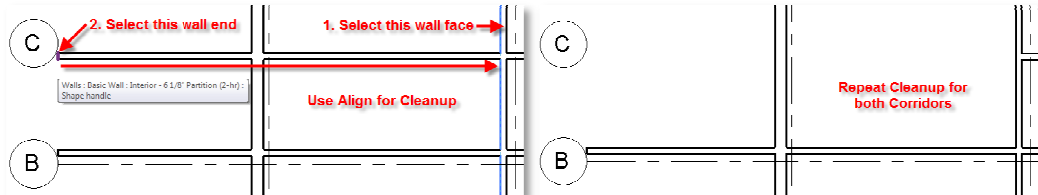
Home > Wall > Basic Wall Interior 6 1/8" (2 Hour) Confirm 7'6"

Height = Roof Location = Finish Face Interior Offset = 1'-3"

Draw using Pick Lines (Offset) Tool. Select Grid Lines E, D, C & B.



Cleanup: Use the Align tool to trim the walls that extends beyond the building envelope.



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4: Vertical

Corridor:

Home > Wall > Basic Wall Interior 6 1/8" (2 Hour)

Height = Roof Location = Finish Face Interior Offset = 1'-3"

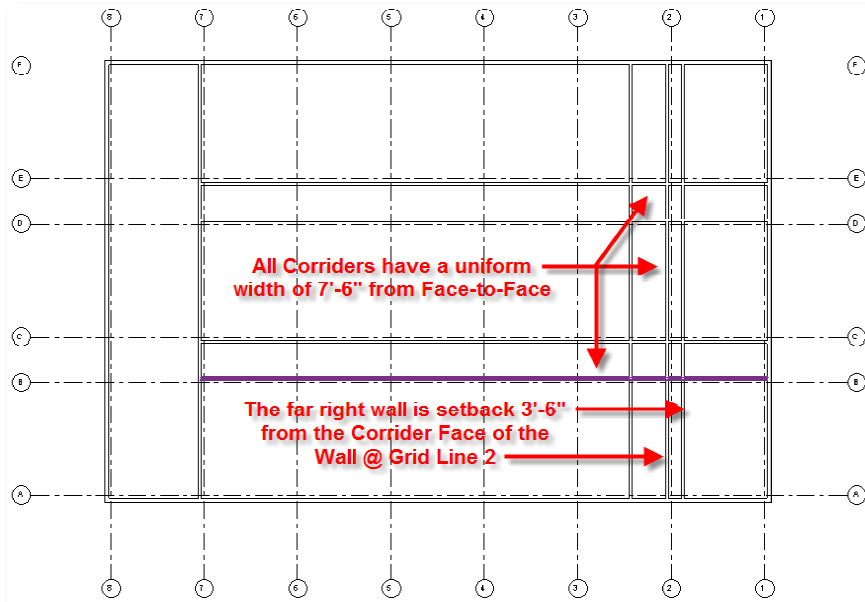
Select Pick Lines (offset) and then select Grid Lines 2 in the direction of Grid 3

Height = Roof Location = Finish Face Interior Offset = 7'-6"

Select Pick Lines (offset) and then select the new wall in the direction of Grid 3

Height = Roof Location = Finish Face Exterior Offset = 3'-6"

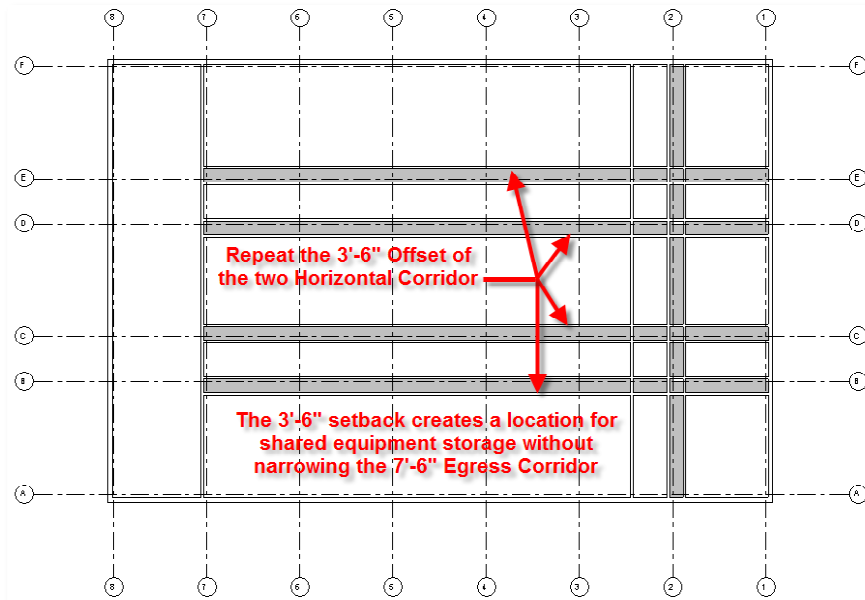
Select Pick Lines (offset) and then select the wall near Grid 2 towards Grid 1



Repeat:

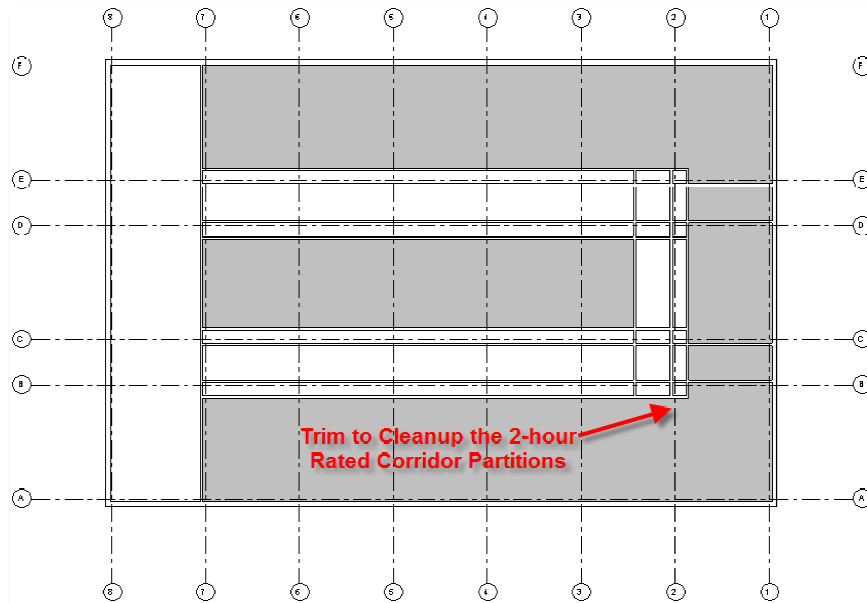
Height = Roof Location = Finish Face Exterior Offset = 3'-6"

Select Pick Lines (offset) and then select the walls of the two horizontal corridors

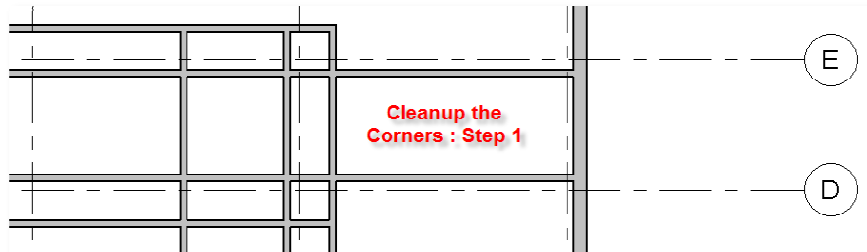


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Trim Walls: Use the Trim Tool to begin to clean up the outer walls at the corner.

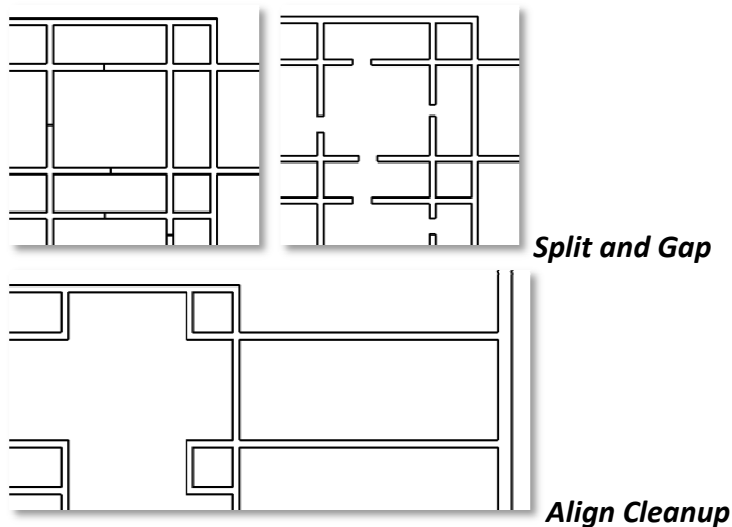


Step 1: Close up view of the corner



Split Element: Zoom into the two intersection of the two corridors. Use the "Split Element" Tool to break each of the corridor walls. Drag each wall until you see a gap.

Align: Use the Align tool to clean up the intersection

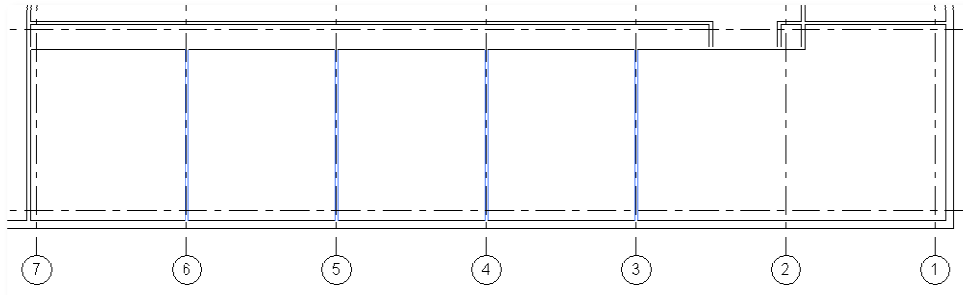


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5: Lab Walls

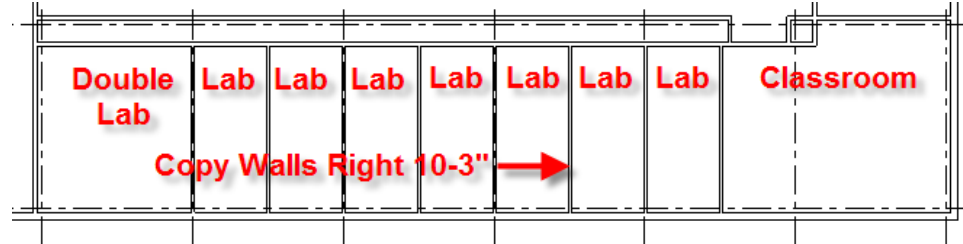
Lower Section:

Home > Wall > Basic Wall Interior 4 7/8" (1 Hour) > Line Tool
Height = Roof Location = Finish Face Interior Offset = 1'-3"
 Begin with the lower section of labs. Snap to grid lines 3, 4, 5 & 6



Copy Walls:

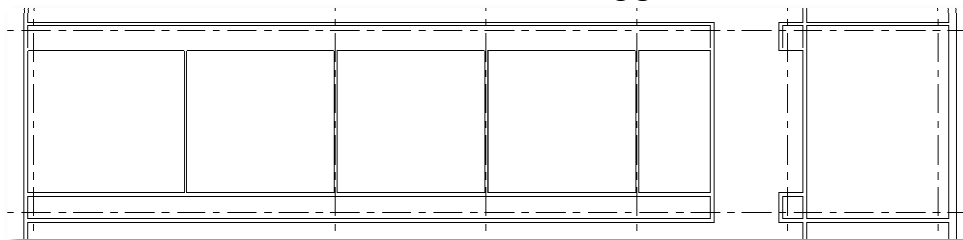
Highlight walls on grids **3, 4, 5 & 6** and then **Copy** the walls **10'-3"** to the right. The completed section should have 1 double lab, 7 single labs and 1 classroom



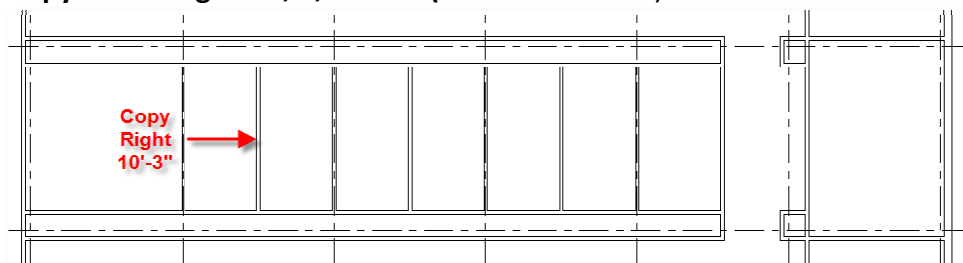
6: Lab Walls

Middle Section:

Home > Wall > Basic Wall Interior 4 7/8" (1 Hour)
Height = Roof Location = Finish Face Interior Offset = 1'-3"
 Create the walls for the middle set of labs along **grids 3, 4, 5 & 6**



Copy walls on grids 3, 4, 5 & 6 (10'-3" to the left)



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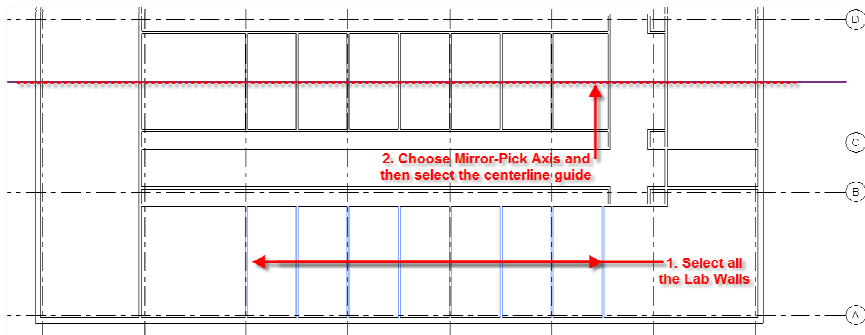
7: Lab Walls

Top Section:

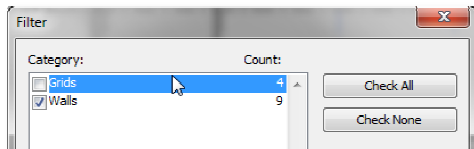
Home > Model Lines > Pick Lines (Set the offset to 12'-5")
 Select grid line C to create an axis for the mirror command



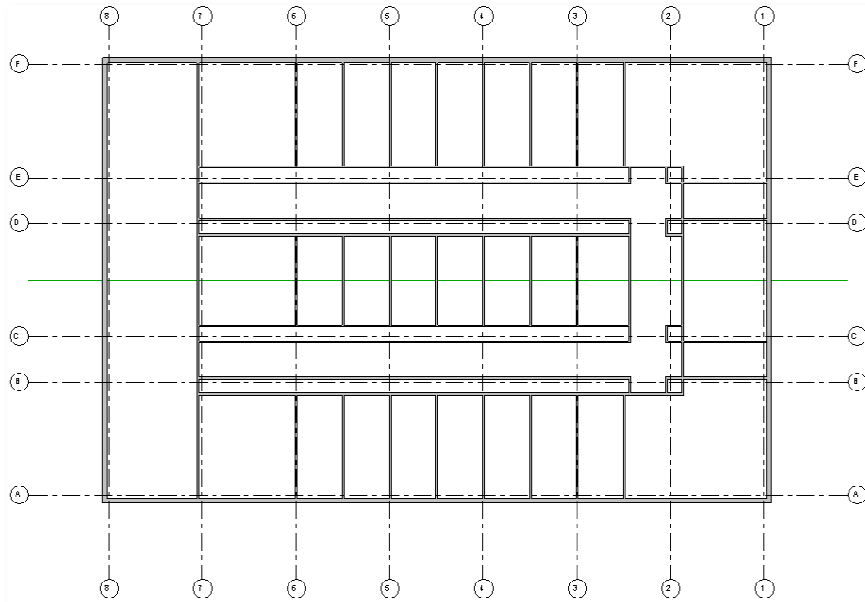
Next highlight the walls dividing labs on the lower section



You will have also selected the grid lines. Select filter and uncheck the grid



Select Mirror and then select the building centerline as the mirror axis



Typical Floor: