

Revit Workshop



ARCH@UCSD

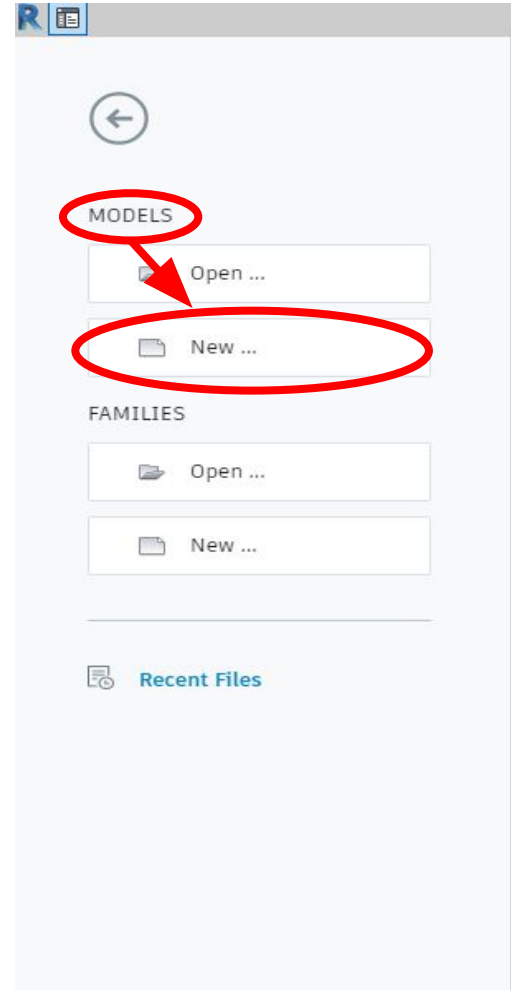


Revit Basics

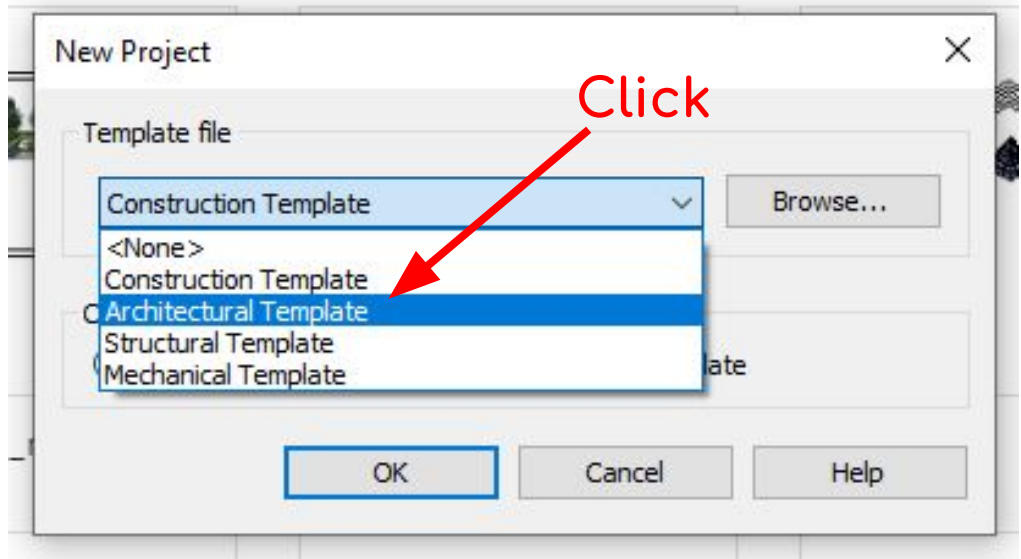


Create New Project

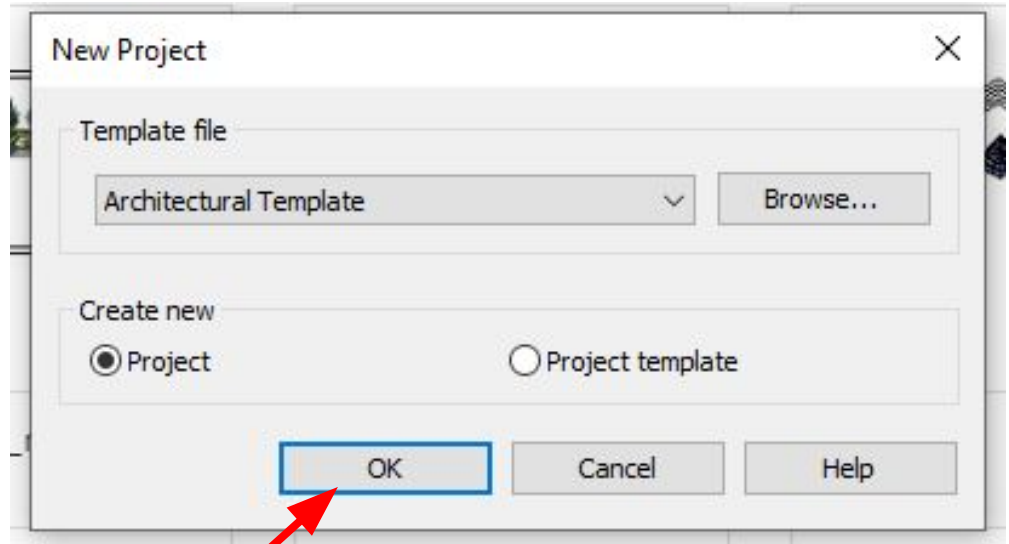
Open a *New Template*
Under “*Models*”



Choose
“Architectural”
Template

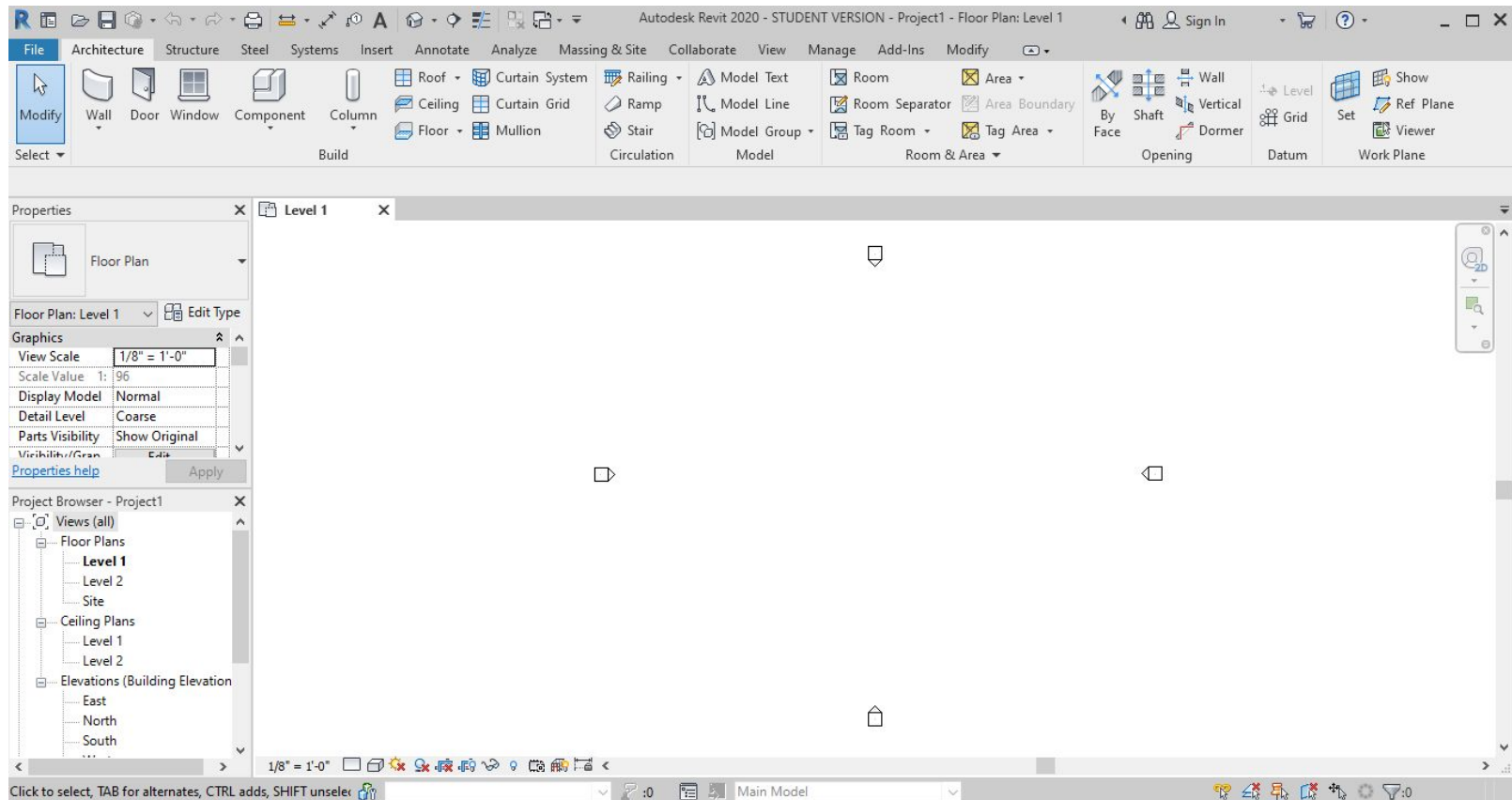


Leave the
default options
and click "*ok*"



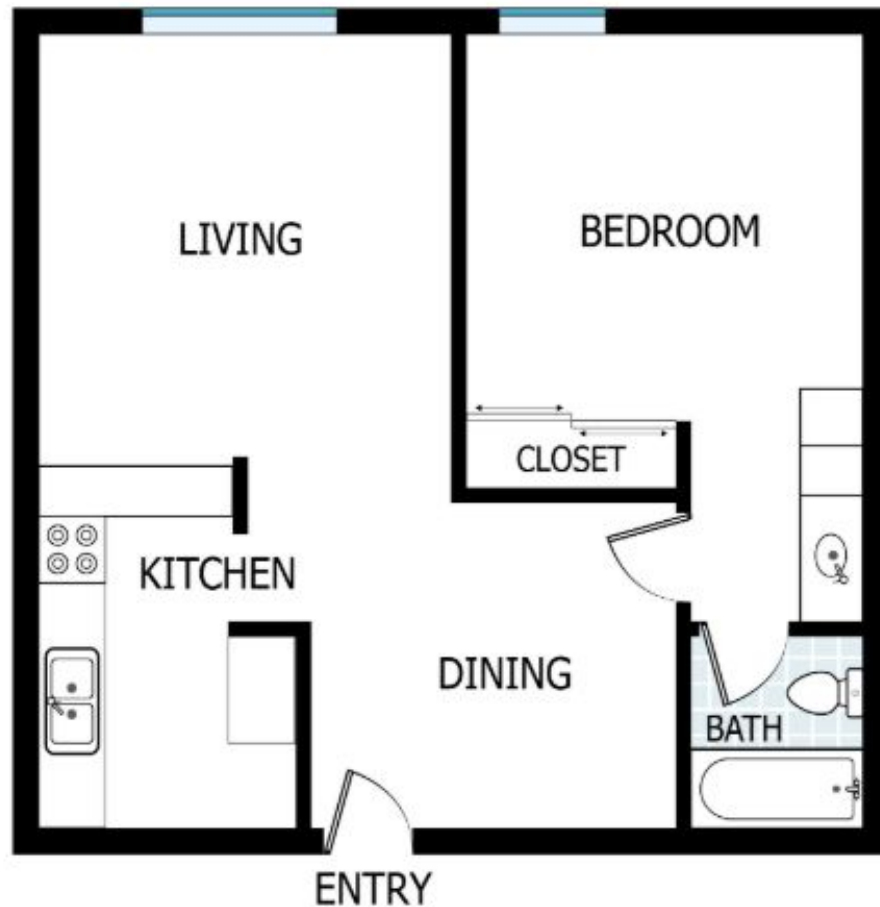
Click

New *Blank* Project

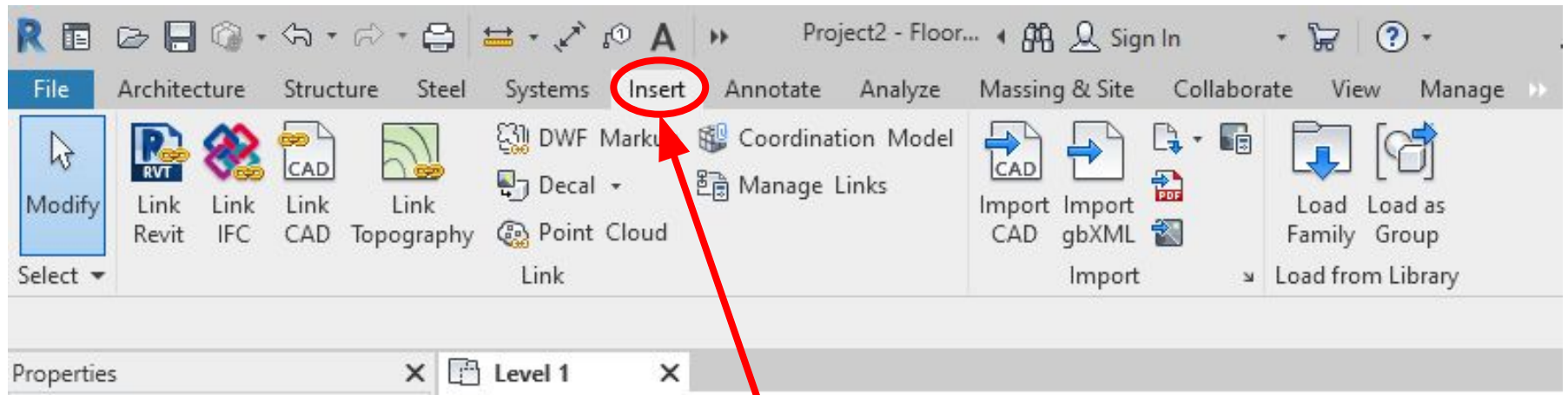


Insert Floor Plan Image

Screenshot
the Floor Plan

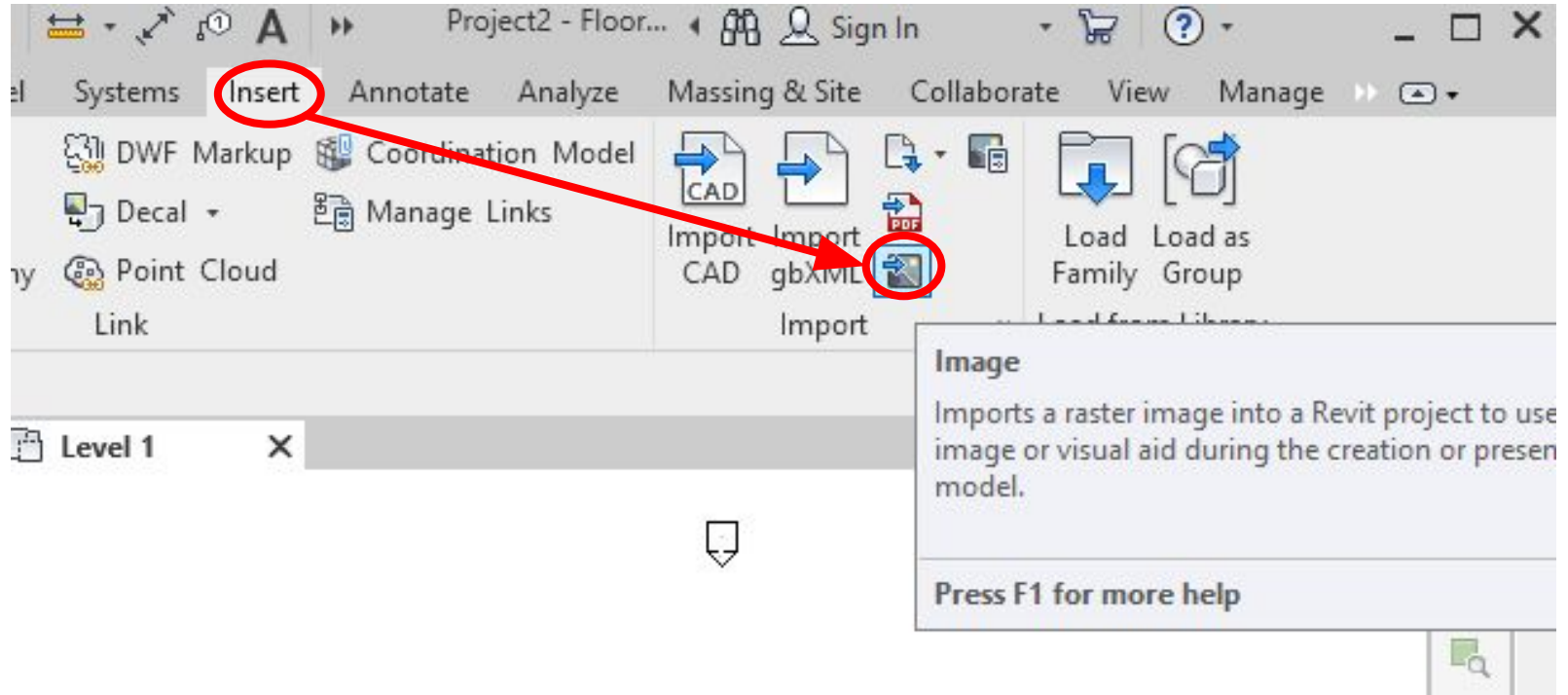


Go To *“Insert”* Tab

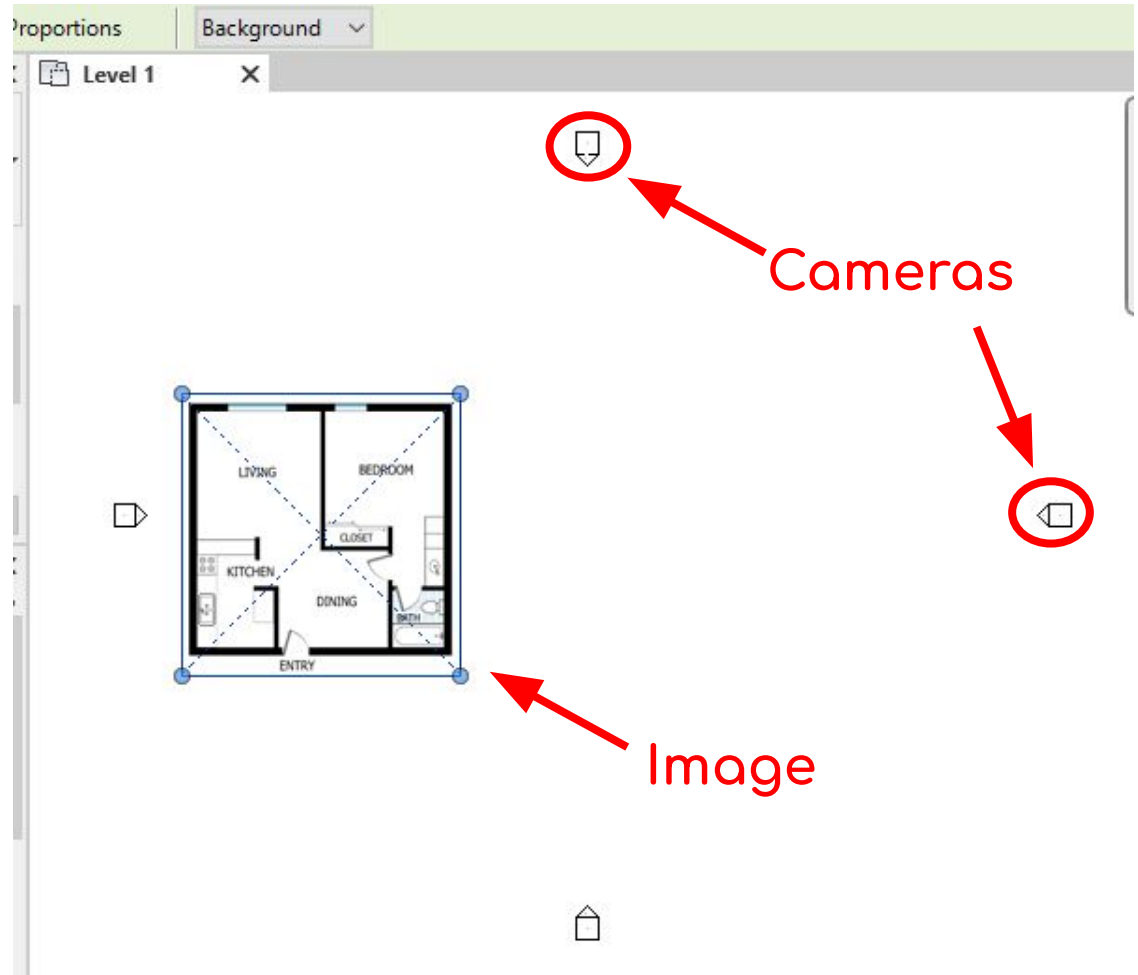


Click

Insert *Image*



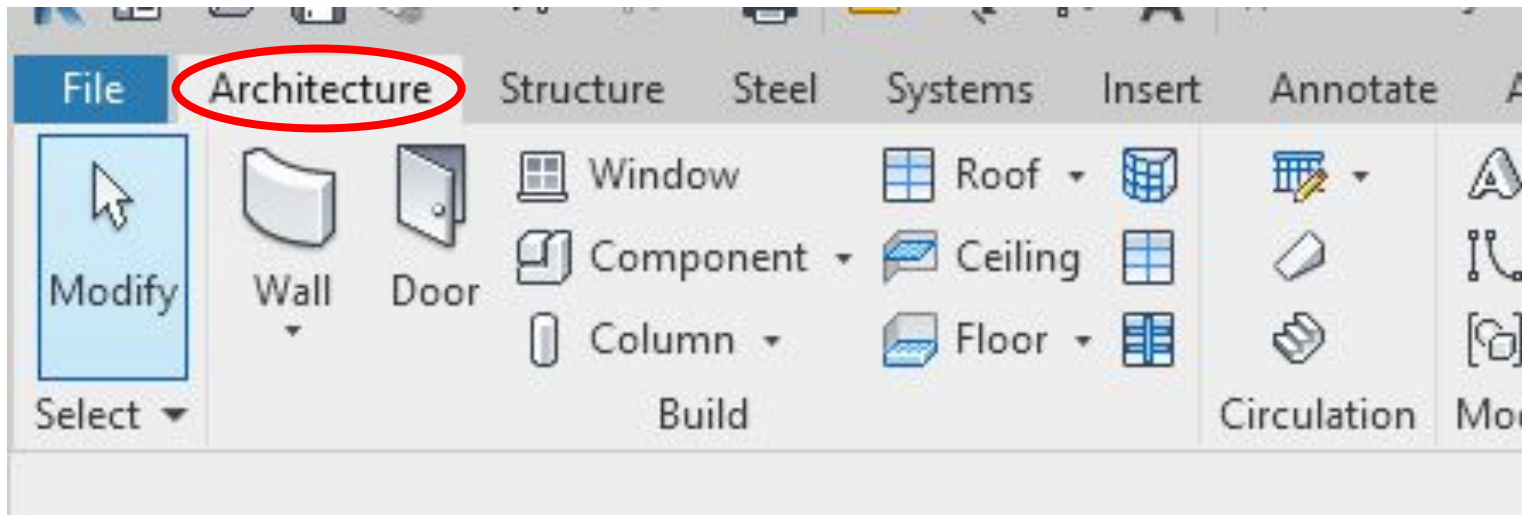
Place *Image*
to one side
of the
cameras
(off-center)

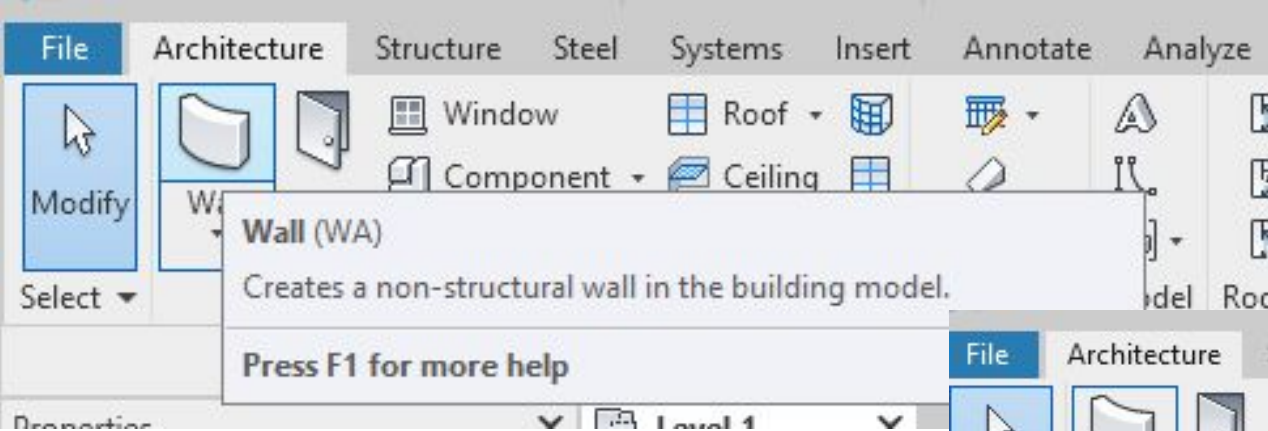


Draw Exterior & Interior Walls

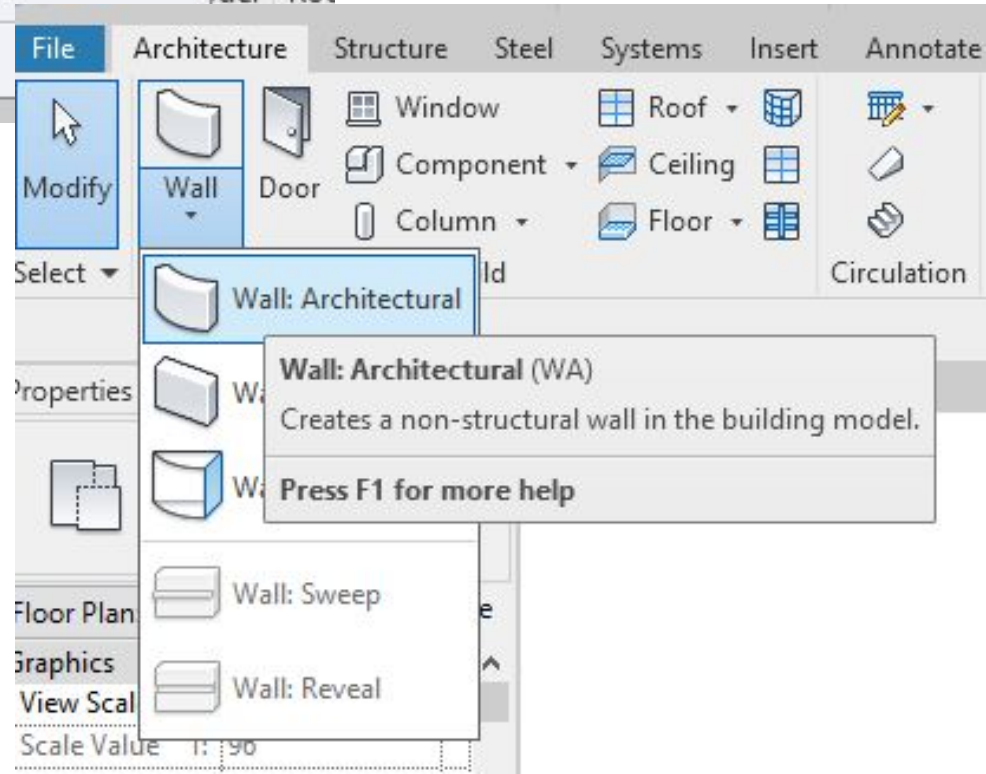
(Doesn't Need to Be Exact)

Go to *“Architecture”* Tab

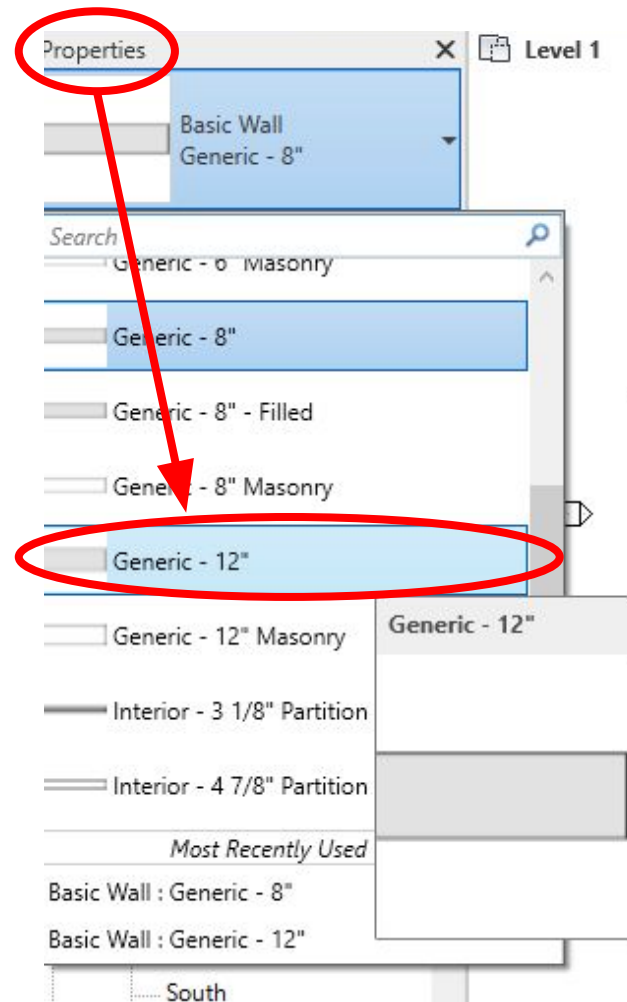




Choose *“Wall”* or
Drop-Down Menu *“Wall:
Architectural”* which is
default & what you
should choose



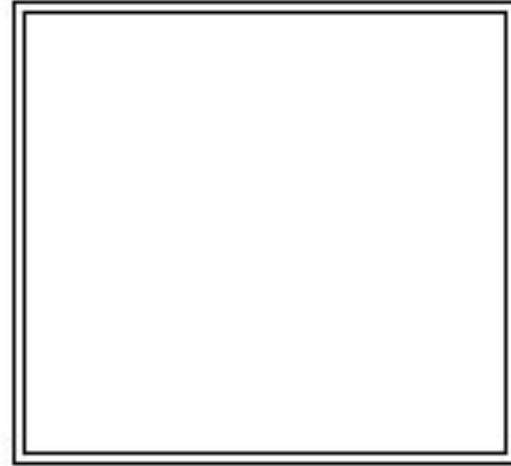
Go to *“Properties”* &
Change Wall Type
to *Generic - 12”* for
exterior wall



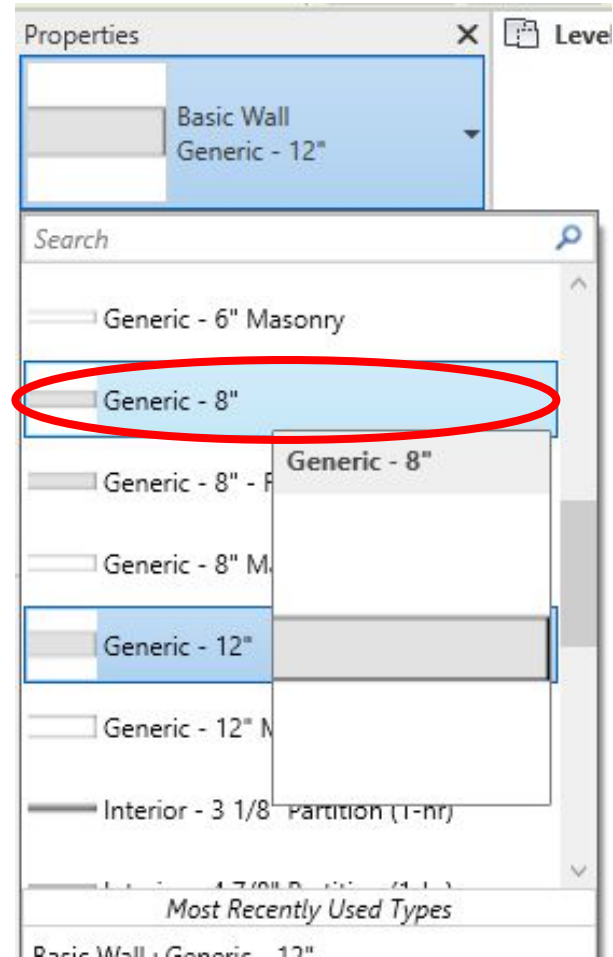


Under
Architecture tab,
Go to "*Draw*" &
choose
"*Rectangle*"

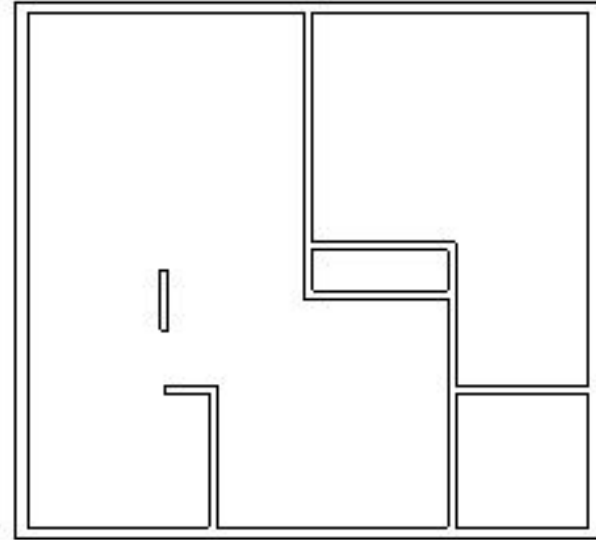
Draw a *rectangle* about the size
of the image (*exterior*)



Go to *“Properties”*
again & change to
Generic - 8” for
interior walls

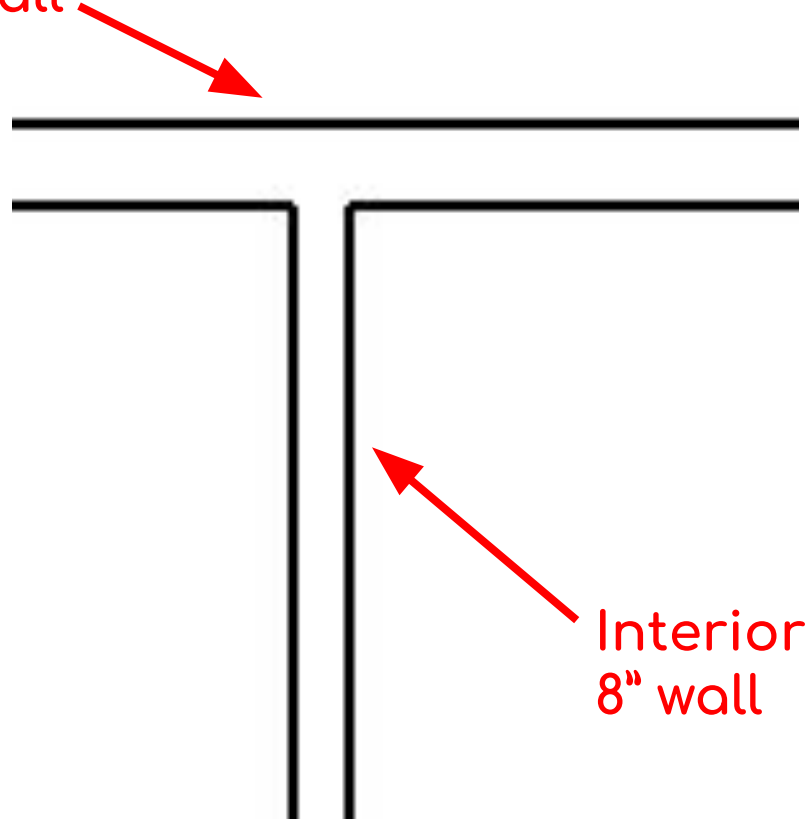


Use *Generic - 8"* Walls to draw *Interior Walls* using default *"line"* under *"Draw"* drop-down menu



Difference
Between *12" wall*
and *8" wall*

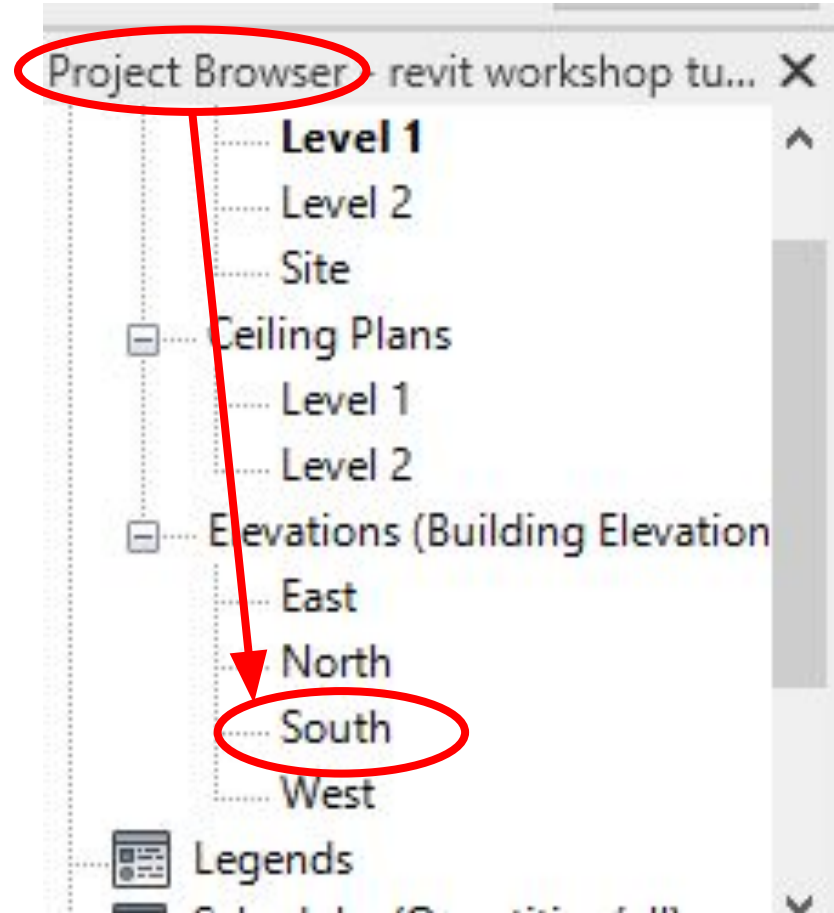
Exterior
12" wall



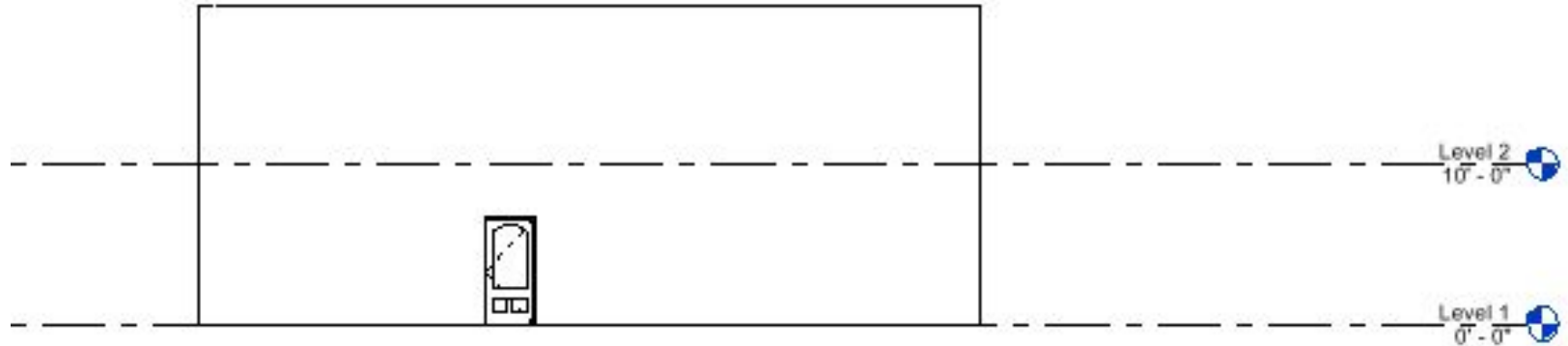
Interior
8" wall

Adjust Wall Height

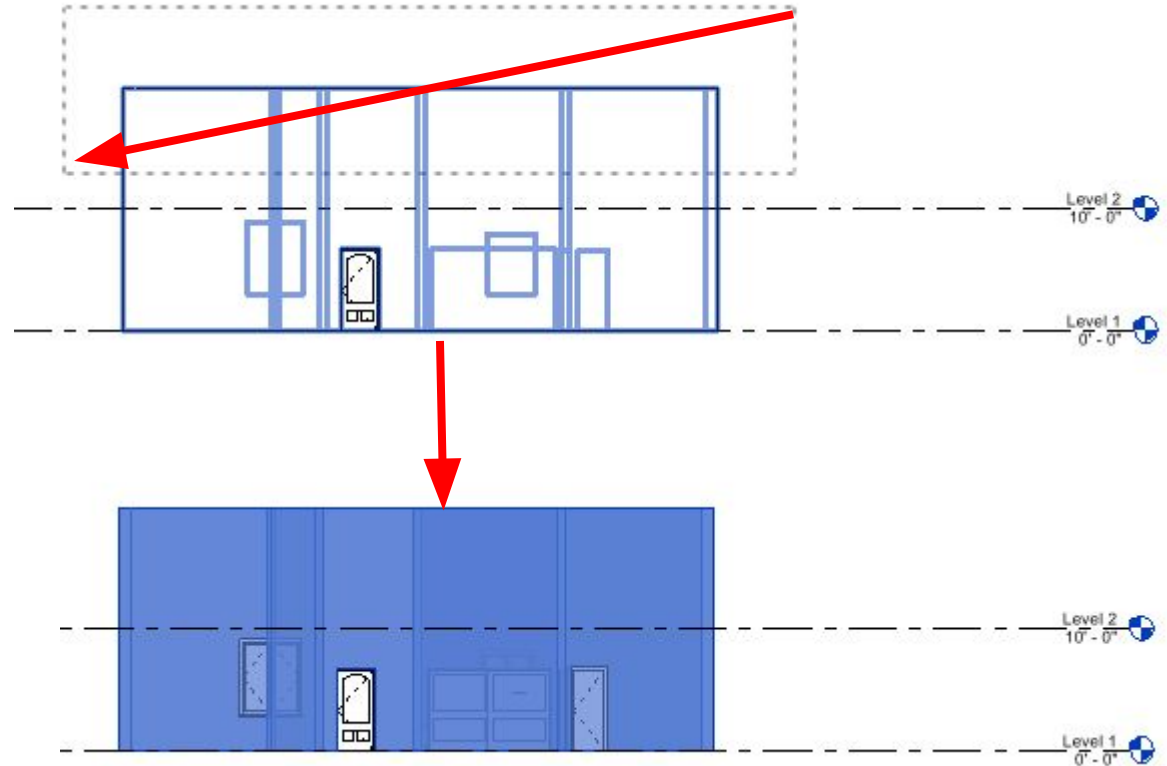
Go to *“Project
Browser”* & Click
(under elevations)
“South”



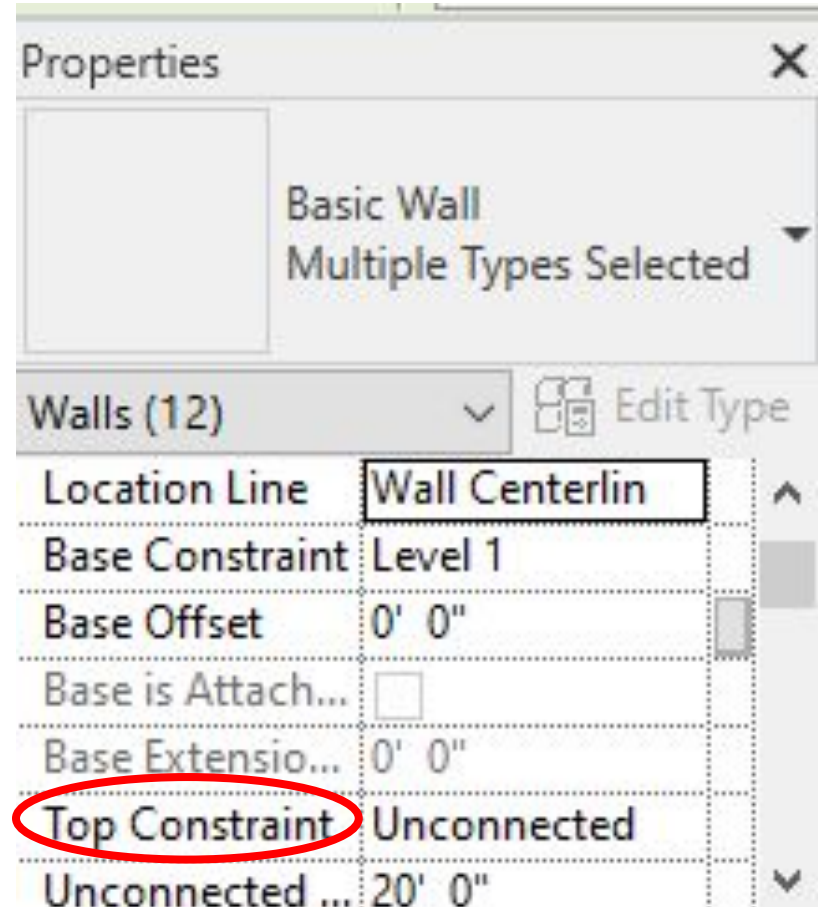
South Elevation View



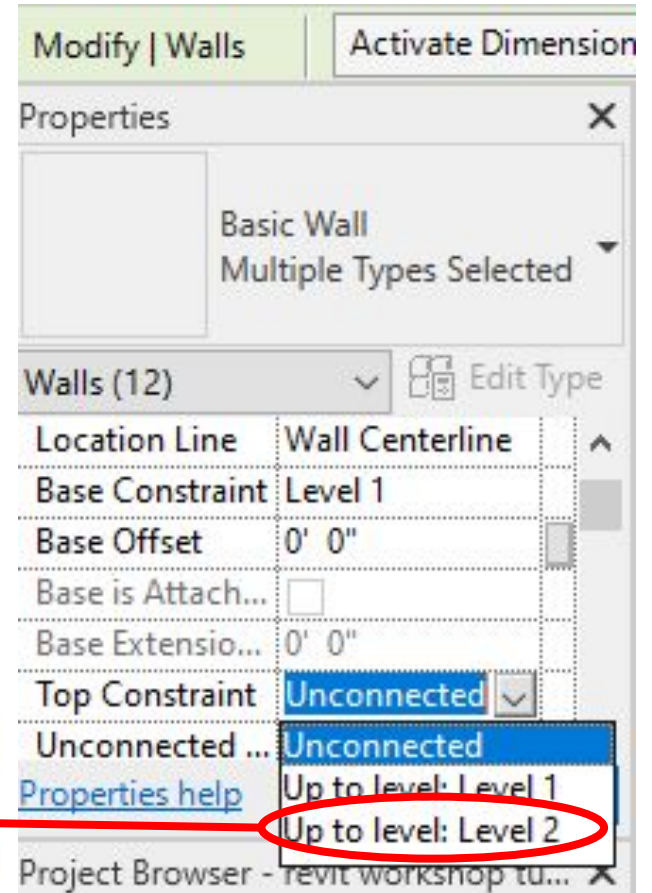
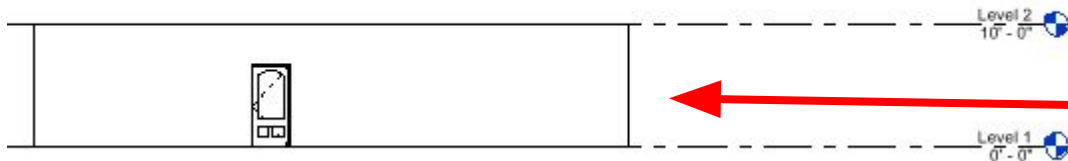
Select *all walls* by
cross
selecting



Under “*Properties*”,
find “*Top
Constraint*”



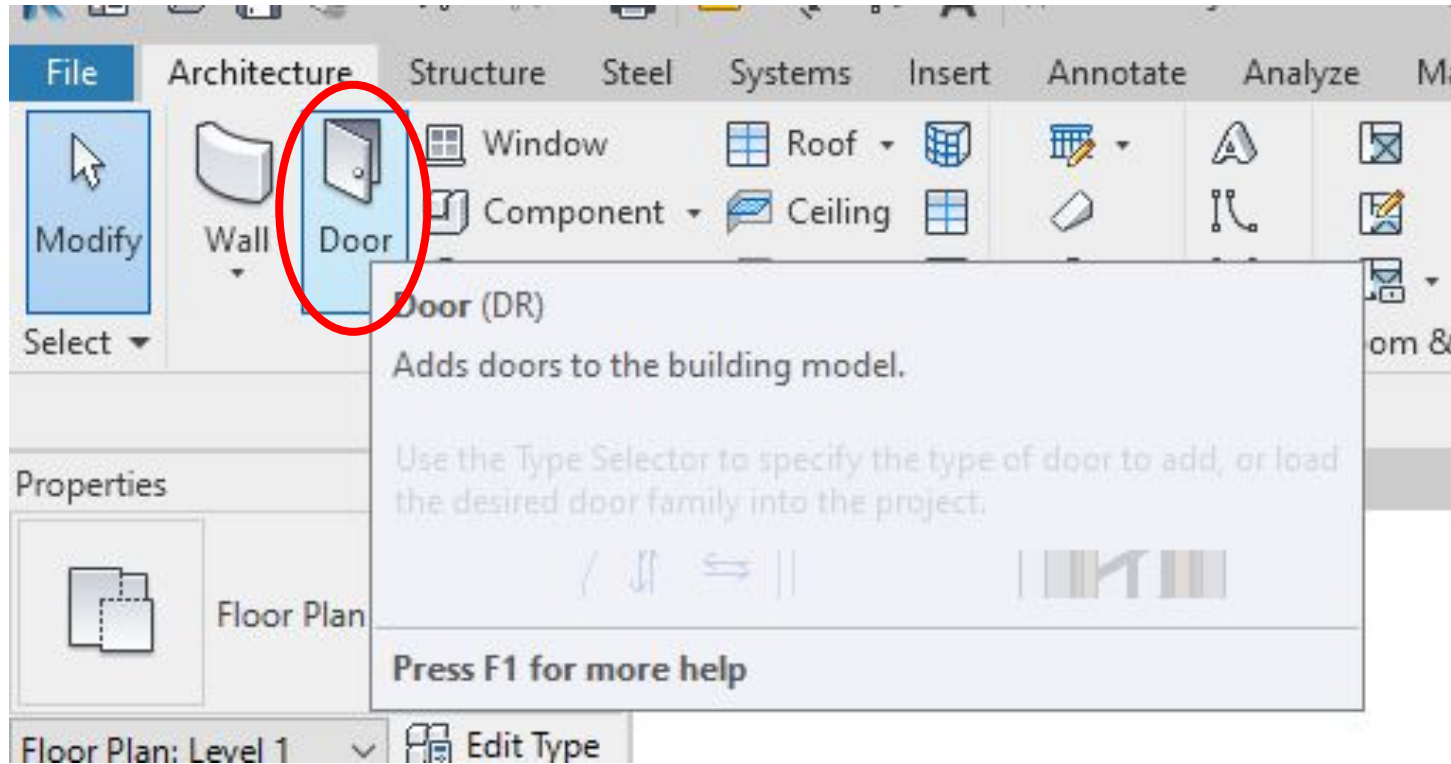
Choose *“Up to level:
Level 2”* & the result is
displayed below



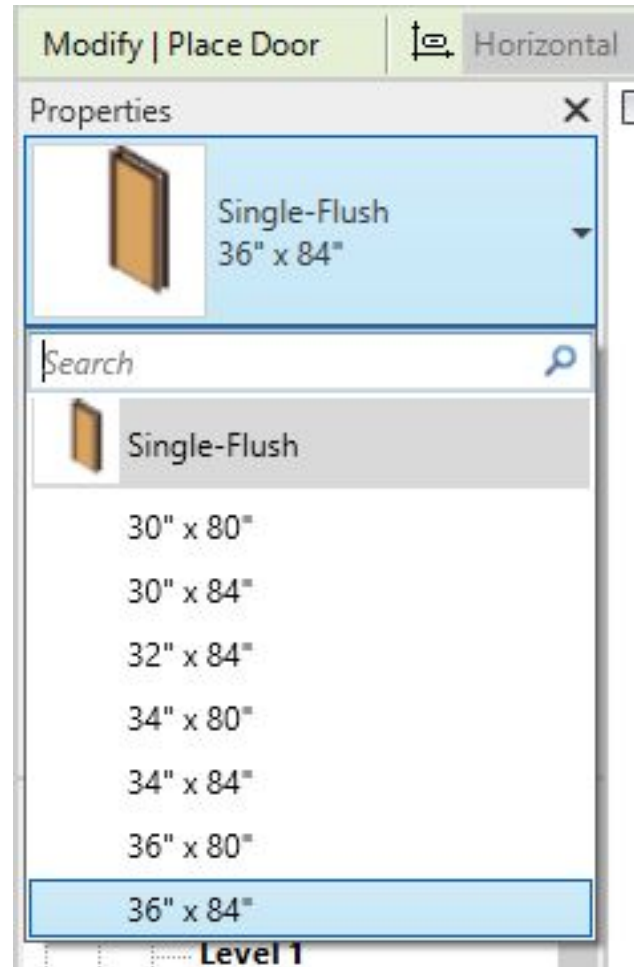
Add Exterior & Interior Doors

(You don't have to choose the same door style)

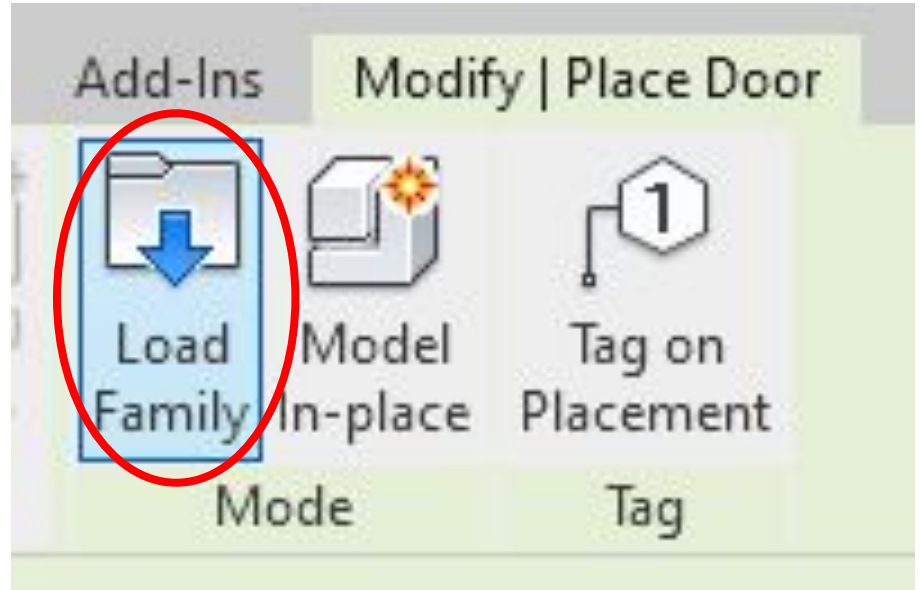
Under *Architecture* tab, choose *Door*



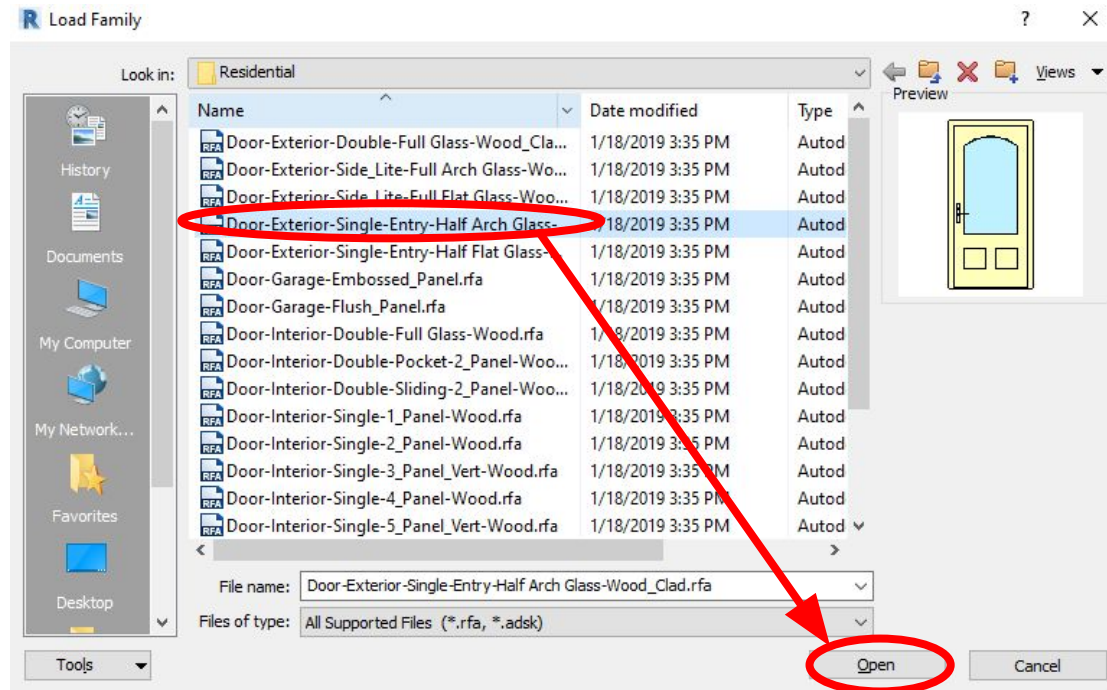
In *“Properties”*, there
is no *“Exterior Door”*
style door



Click on “*Load Family*” to load in more door styles



Choose *“Exterior Single Entry Half-Arch...”* &
Click *“Open”* or *“Double-Click”*



Specify *“Exterior Door”* Type(s) Window

Specify Types

Family:

Door-Exterior-Single-Entry+ ^

<

>

Types:

Type	Width	Height	Stiles
	(all) v	(all) v	(all) v
30" x 80"	2' 6"	6' 8"	0' 4 3/4"
32" x 80"	2' 8"	6' 8"	0' 4 3/4"
34" x 80"	2' 10"	6' 8"	0' 4 3/4"
36" x 80"	3' 0"	6' 8"	0' 4 3/4"
30" x 84"	2' 6"	7' 0"	0' 4 3/4"
32" x 84"	2' 8"	7' 0"	0' 4 3/4"
34" x 84"	2' 10"	7' 0"	0' 4 3/4"

Select one or more types on the right for each family listed on the left

OK

Cancel

Help

To Select All Types: Click on first one, then scroll to last one & *hold "shift"* & left-click the last type

Specify Types

Family: Door-Exterior-Single-Entry+

Types:

Type	Width (all)	Height (all)	Stiles (all)
30" x 80"	2' 6"	6' 8"	0' 4 3/4"
32" x 80"	2' 8"	6' 8"	0' 4 3/4"
34" x 80"	2' 10"	6' 8"	0' 4 3/4"
36" x 80"	3' 0"	6' 8"	0' 4 3/4"
30" x 84"	2' 6"	7' 0"	0' 4 3/4"
32" x 84"	2' 8"	7' 0"	0' 4 3/4"
34" x 84"	2' 10"	7' 0"	0' 4 3/4"

Select one or more types on the right for each family listed on the left

OK Cancel Help

Specify Types

Family: Door-Exterior-Single-Entry+

Types:

Type	Width (all)	Height (all)	Stiles (all)
34" x 84"	2' 10"	7' 0"	0' 4 3/4"
36" x 84"	3' 0"	7' 0"	0' 4 3/4"
30" x 96"	2' 6"	8' 0"	0' 4 3/4"
32" x 96"	2' 8"	8' 0"	0' 4 3/4"
34" x 96"	2' 10"	8' 0"	0' 4 3/4"
36" x 96"	3' 0"	8' 0"	0' 4 3/4"

Select one or more types on the right for each family listed on the left

OK Cancel Help

Click “Ok” to Confirm Your Selections

Specify Types

Family: Door-Exterior-Single-Entry+ ^

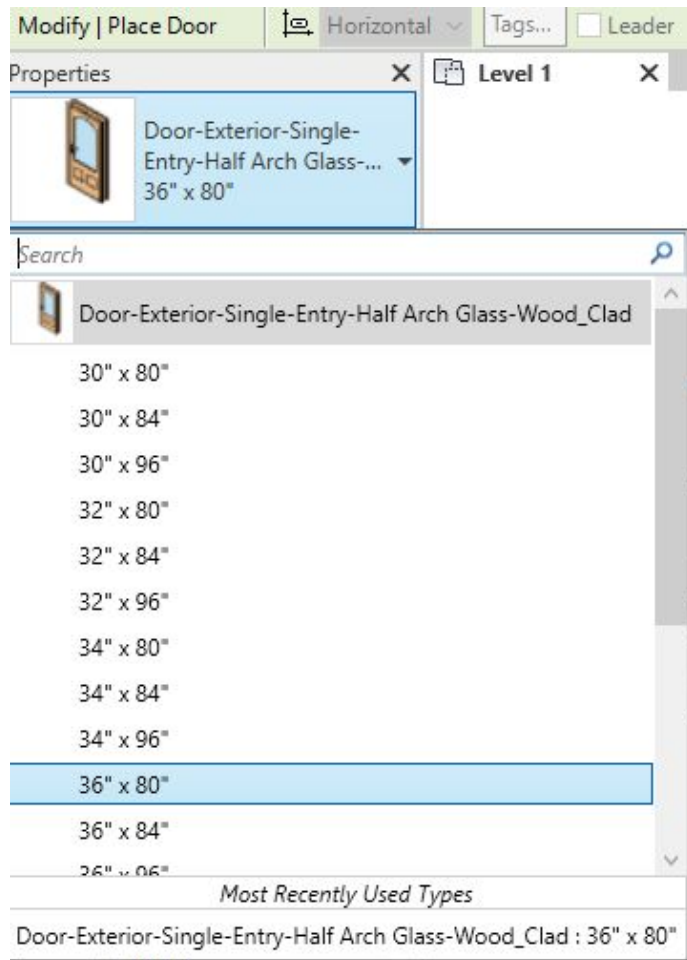
Types:

Type	Width (all) ▾	Height (all) ▾	Stiles (all) ▾
34" x 84"	2' 10"	7' 0"	0' 4 3/4"
36" x 84"	3' 0"	7' 0"	0' 4 3/4"
30" x 96"	2' 6"	8' 0"	0' 4 3/4"
32" x 96"	2' 8"	8' 0"	0' 4 3/4"
34" x 96"	2' 10"	8' 0"	0' 4 3/4"
36" x 96"	3' 0"	8' 0"	0' 4 3/4"

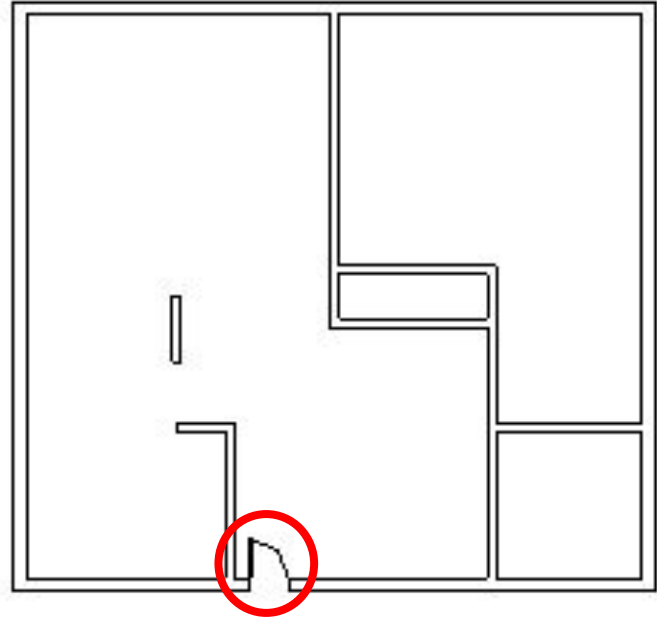
Select one or more types on the right for each family listed on the left

OK Cancel Help

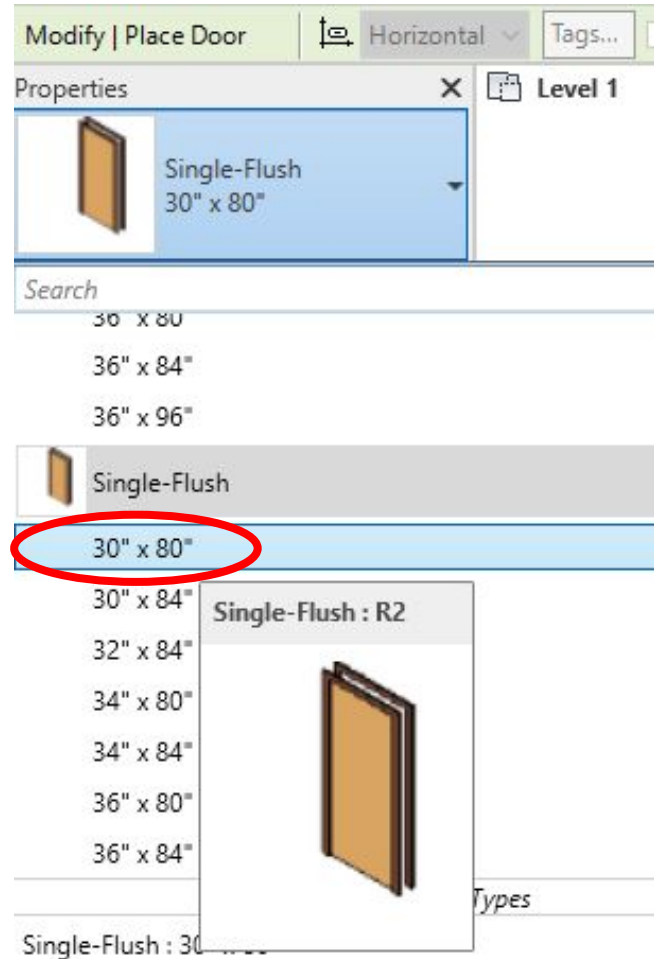
This is what your *properties* should look like after the selections were loaded in



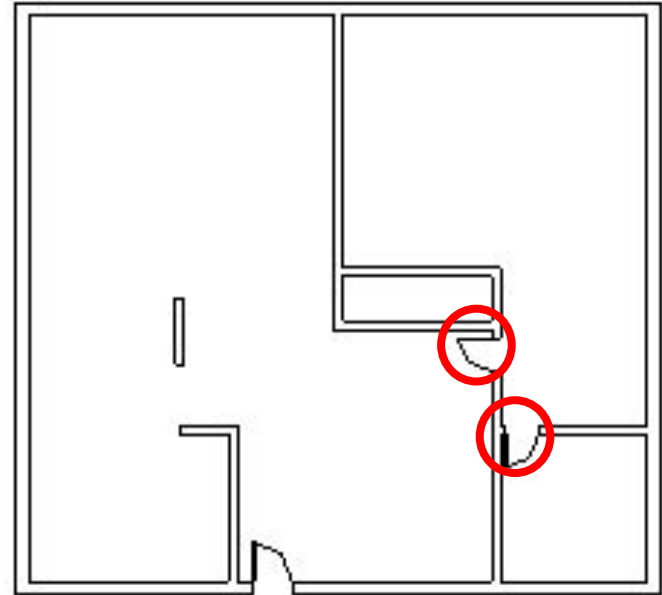
Place the *36" x 80" Exterior Door*



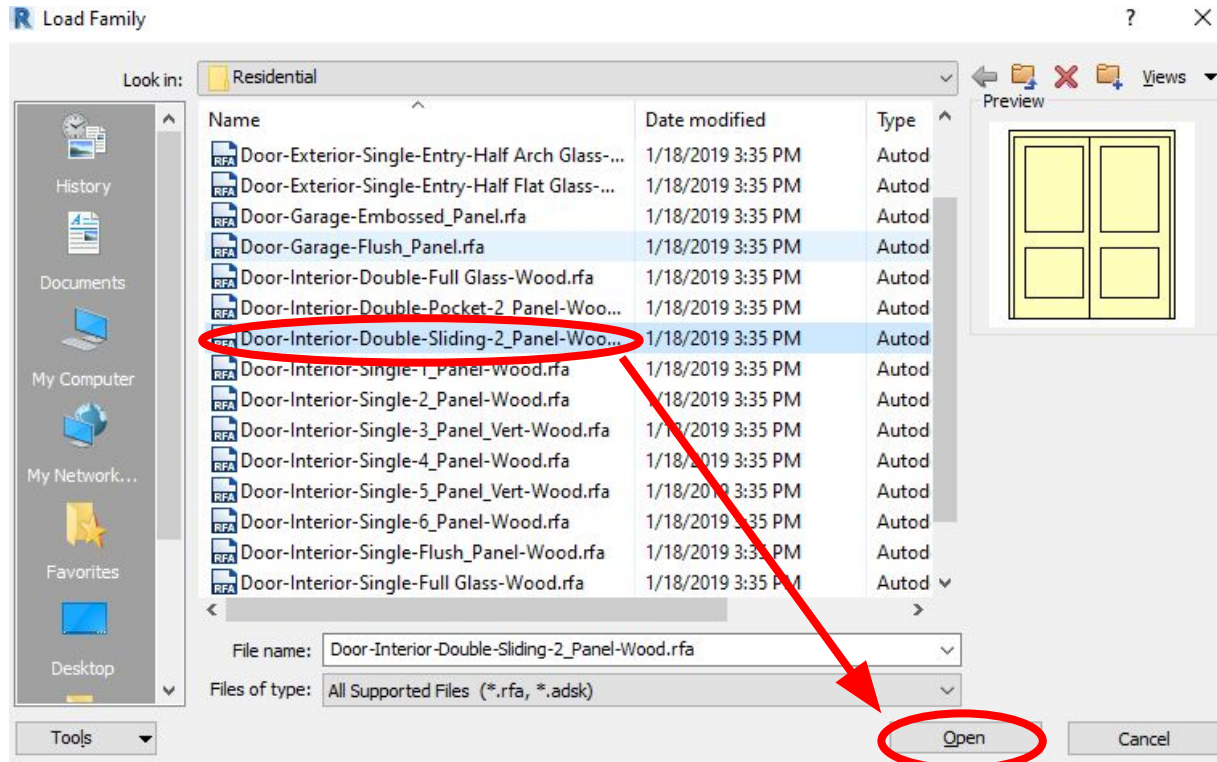
Go to "Door" again,
and place *30" x 80"*
Single-Flush Door (Go
According to the
Floor Plan)



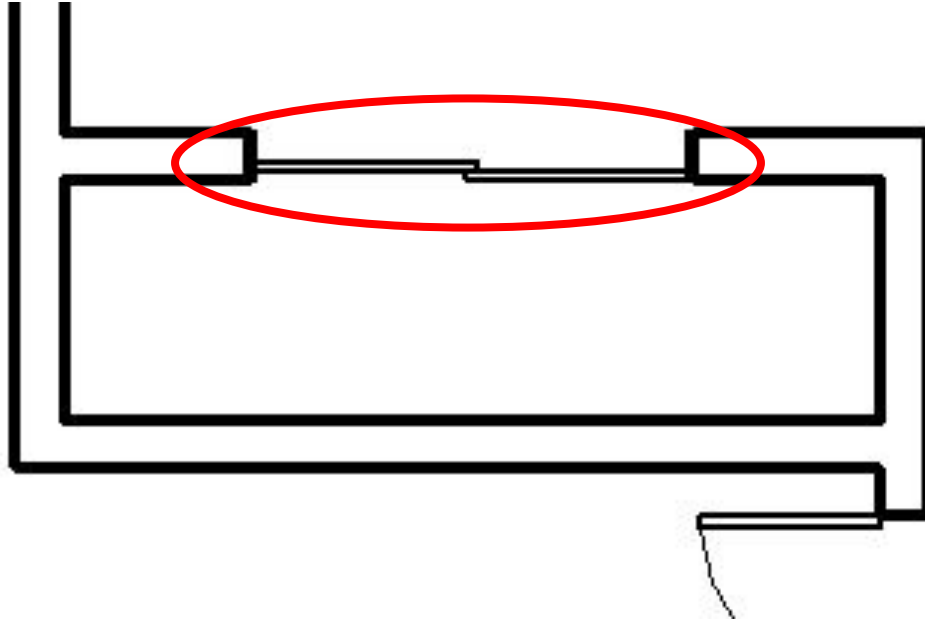
Place *Single-Flush Doors*



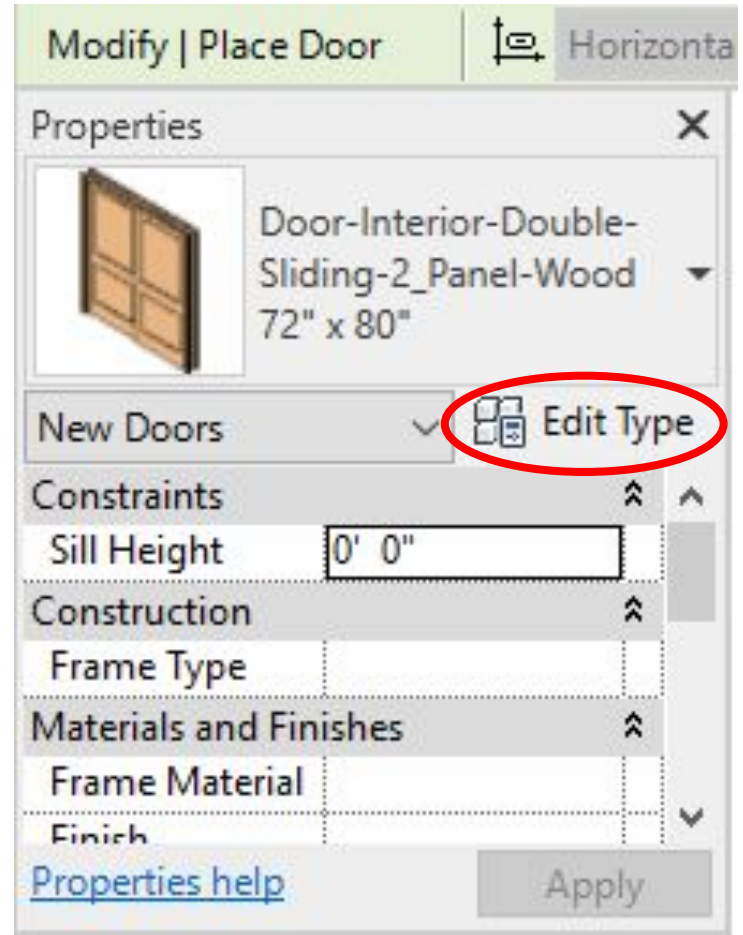
Load *“Interior Double-Sliding 2 Panel...”*



Place *72" x 80" Double-Sliding Door*
(Too Narrow)



Click ***Edit Type*** to
Create a Custom
Width for this Door
Style



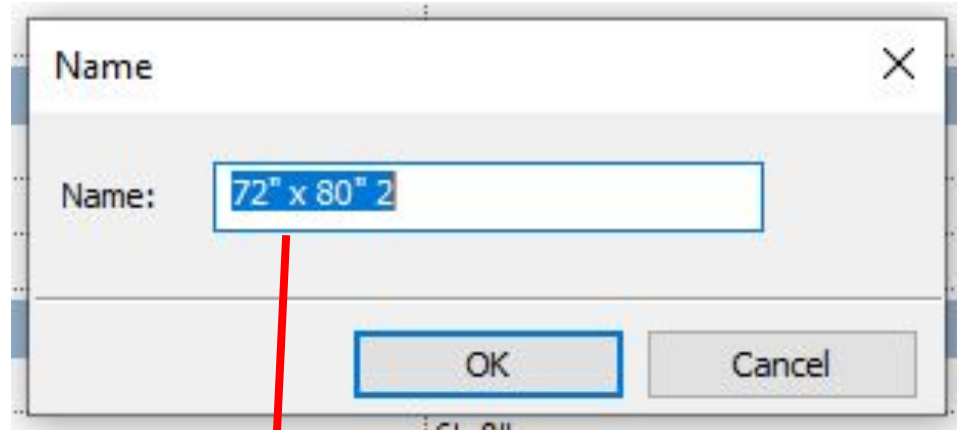
Click ***Duplicate*** to make a copy of the door

Type Properties ✕

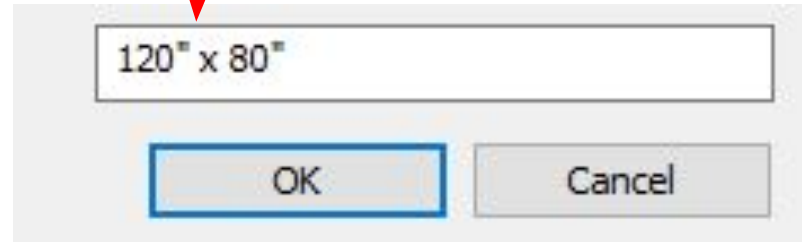
Family:	Door-Interior-Double-Sliding-2_Panel-Wood ▼	Load...
Type:	72" x 80" ▼	Duplicate...
		Rename...

Type Parameters

Rename the
Newly
Duplicated
Door



A screenshot of a software dialog box titled "Name" with a close button (X) in the top right corner. Inside the dialog, there is a label "Name:" followed by a text input field containing the text "72" x 80" 2". The text in the field is highlighted with a blue selection box. Below the text field are two buttons: "OK" and "Cancel". The "OK" button is highlighted with a blue border.



A screenshot of a software dialog box, likely the same one as the one above but with the text changed. The text input field now contains "120" x 80"". Below the text field are two buttons: "OK" and "Cancel". The "OK" button is highlighted with a blue border.

Modify the *“Width”* & *“Height”* to Match New Name

Family: Door-Interior-Double-Sliding-2_Panel-Wood Load...

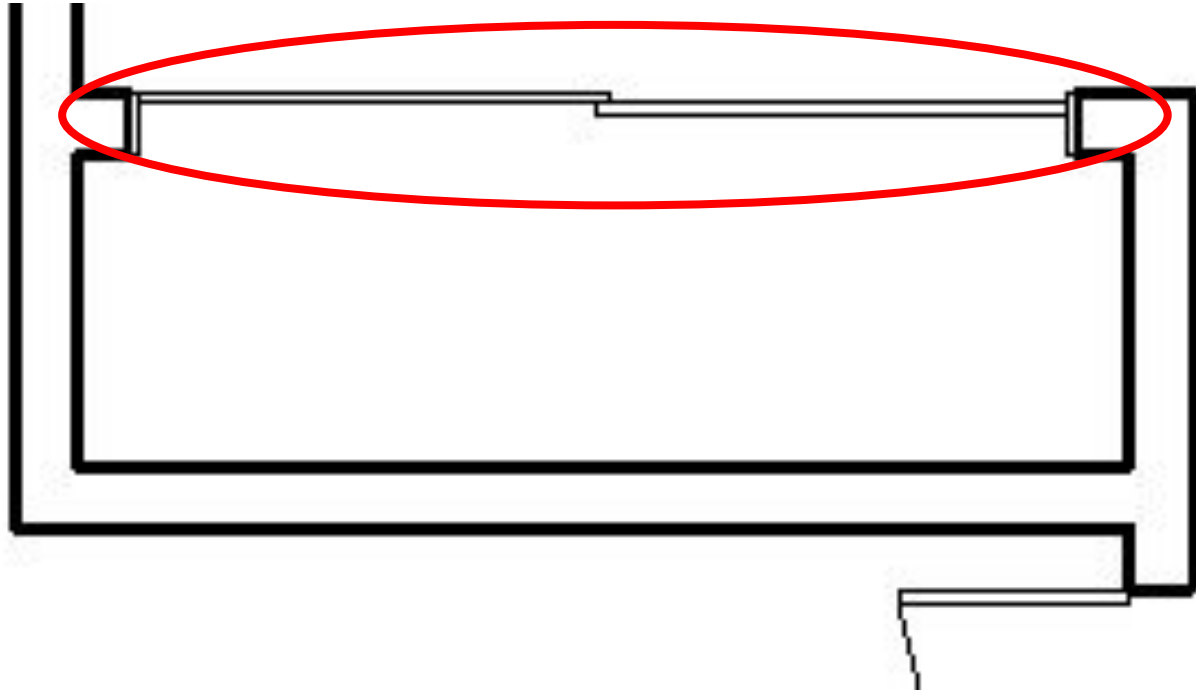
Type: 120" x 80" Duplicate...

Rename...

Type Parameters

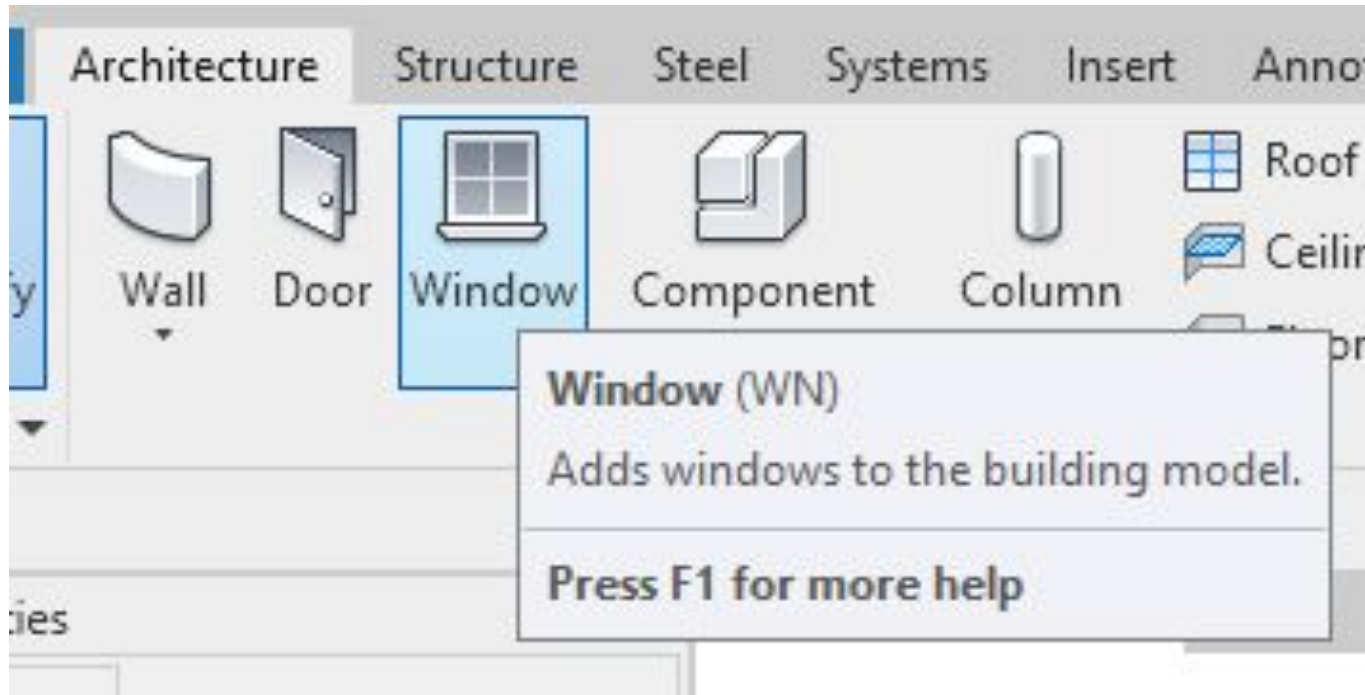
Parameter	Value
Construction	
Function	Interior
Wall Closure	By host
Construction Type	
Materials and Finishes	
Panel Material	Cherry
Frame Material	Cherry
Trim Material	Cherry
Dimensions	
Width	10' 0"
Height	6' 8"
Rough Width	10' 2"
Rough Height	6' 9"

Place *Newly Modified Door*

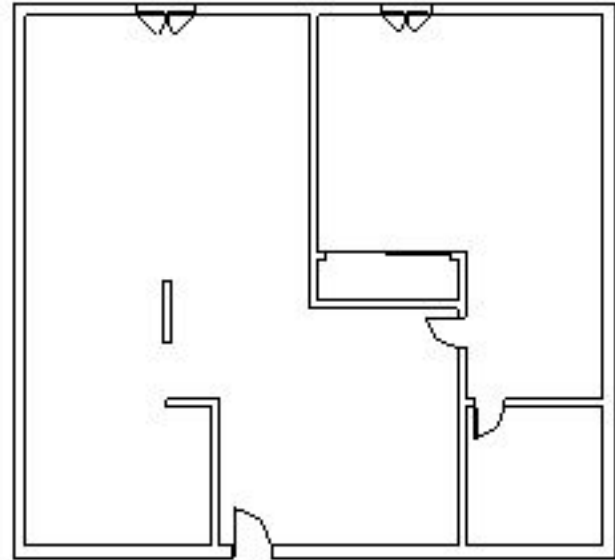


Place Windows

Select *“Window”* under *“Architecture”* tab



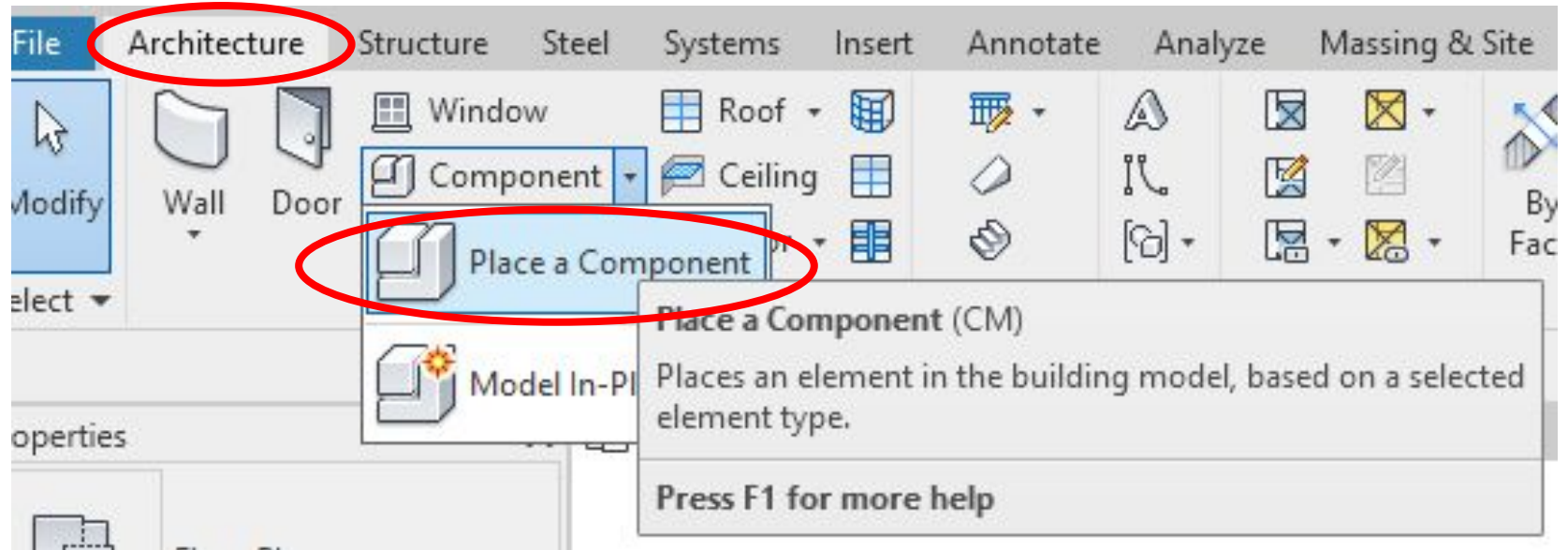
Place any *window* of your choice from the *properties* panel



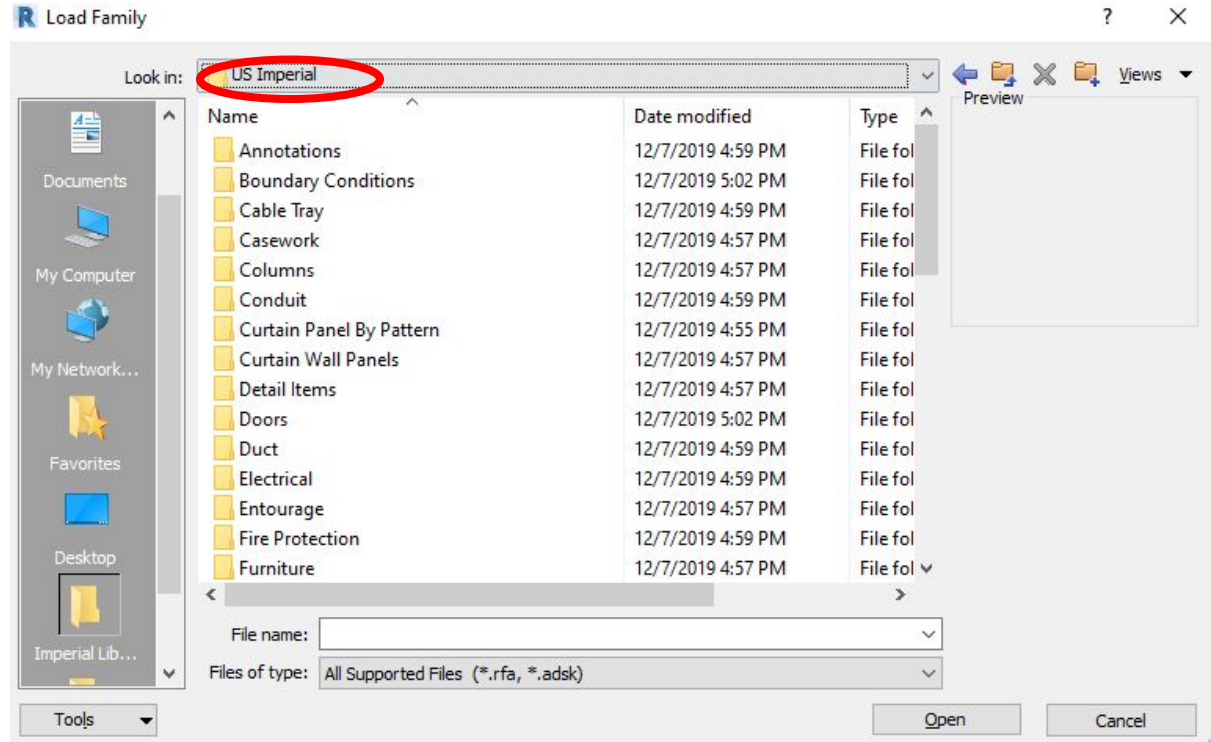
Placing Furniture

(I am only going to show one example)

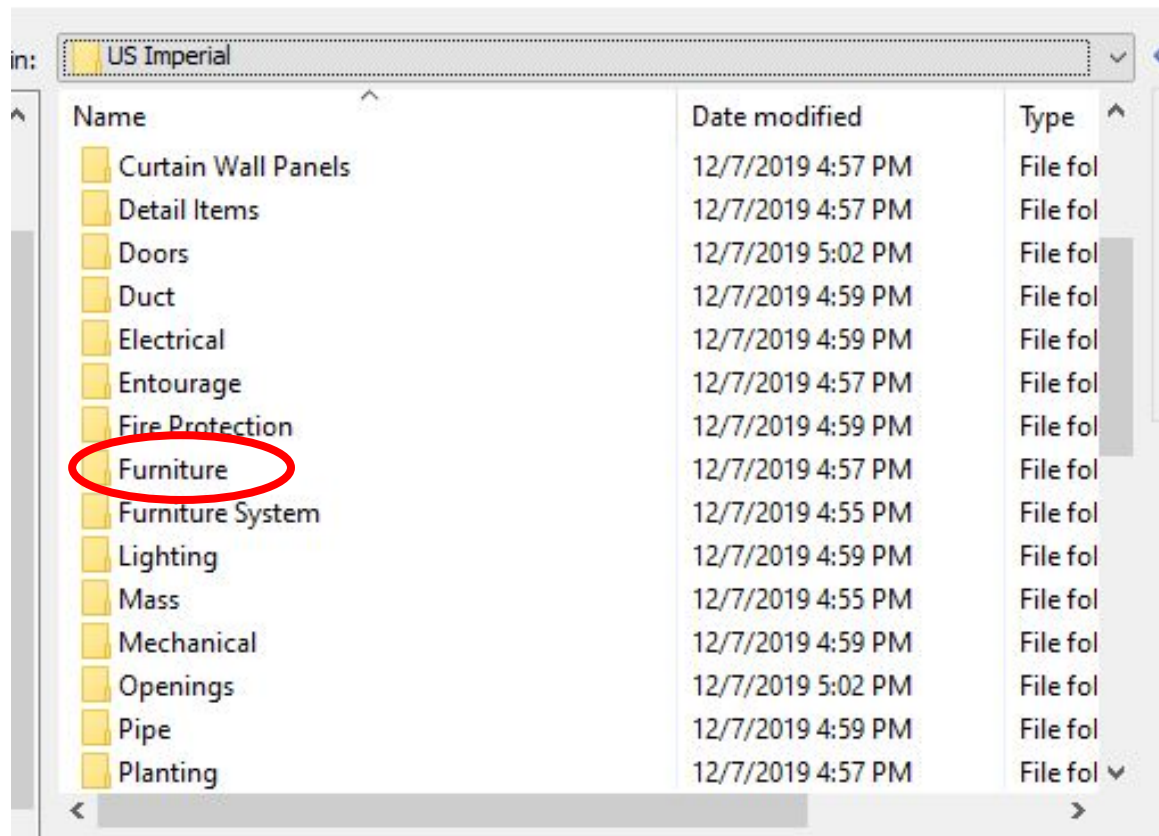
Click *“Component”* & *“Place a Component”*




No *“Beds”* in
Component
so *Load*
Family & go
to *“US*
Imperial”
folder

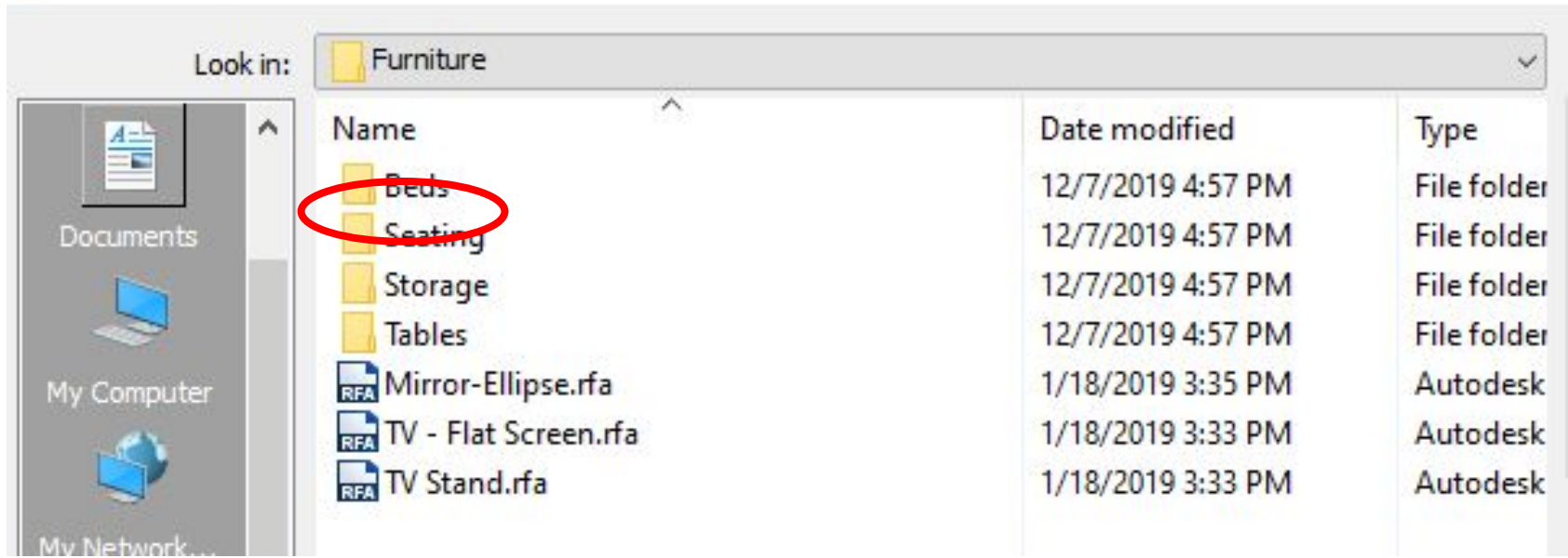


Navigate to
"Furniture"
Folder

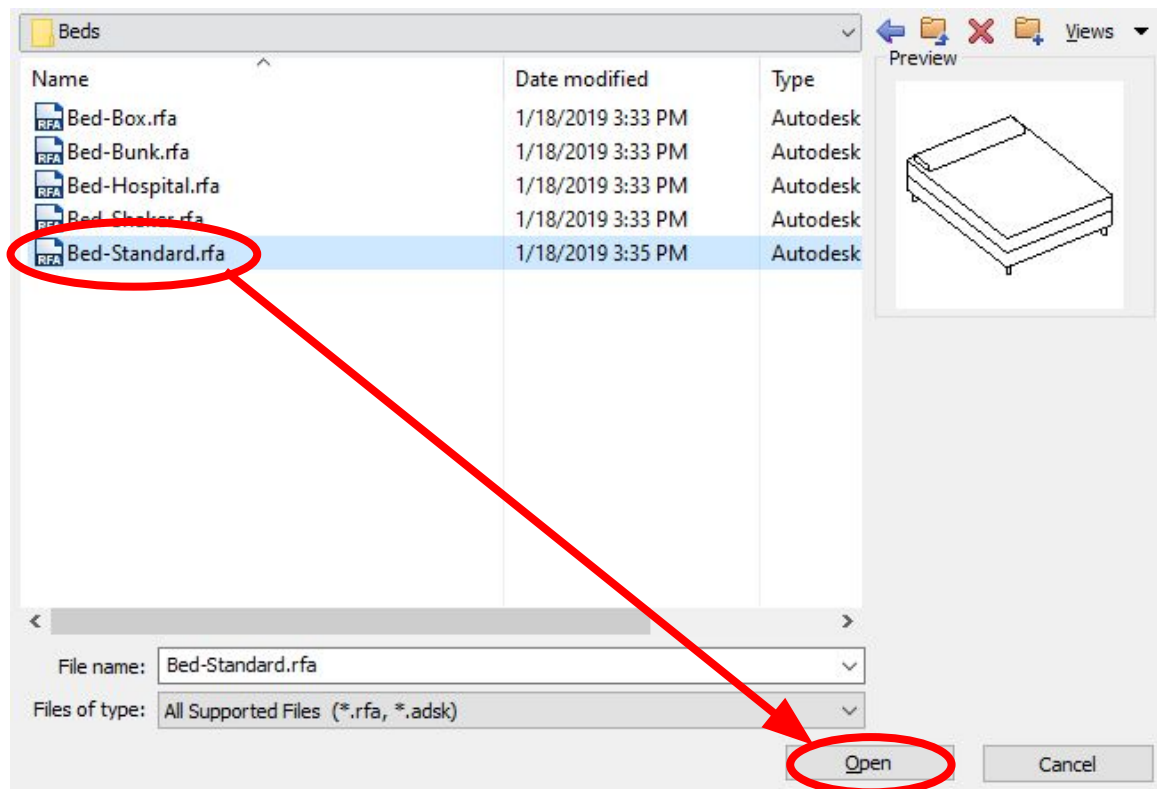


Navigate to *"Beds" Folder*

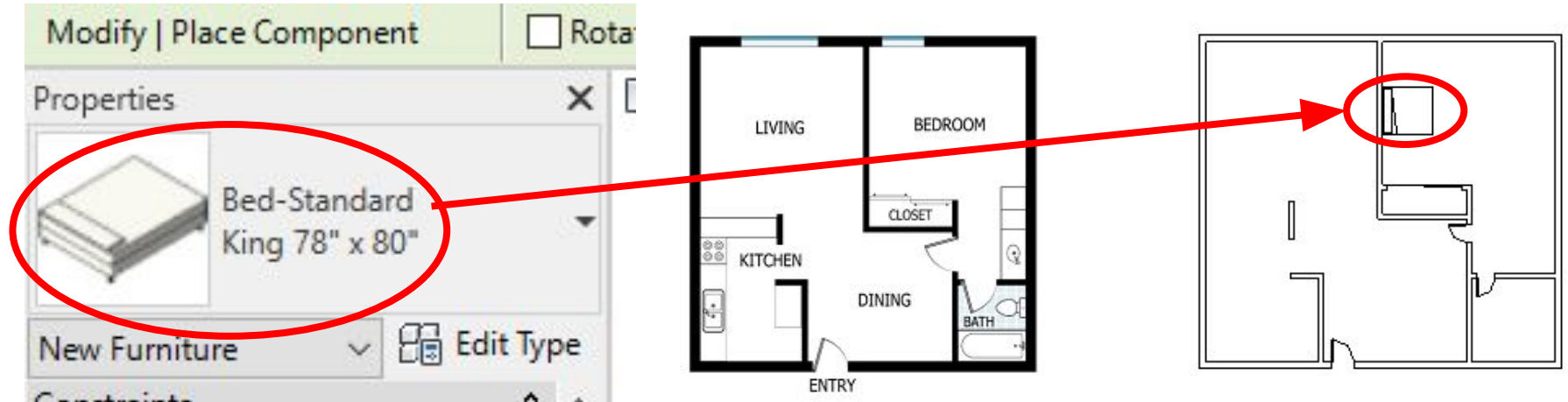
 Load Family



Choose *“Bed-Standard.rfa”* & Click *“Open”*

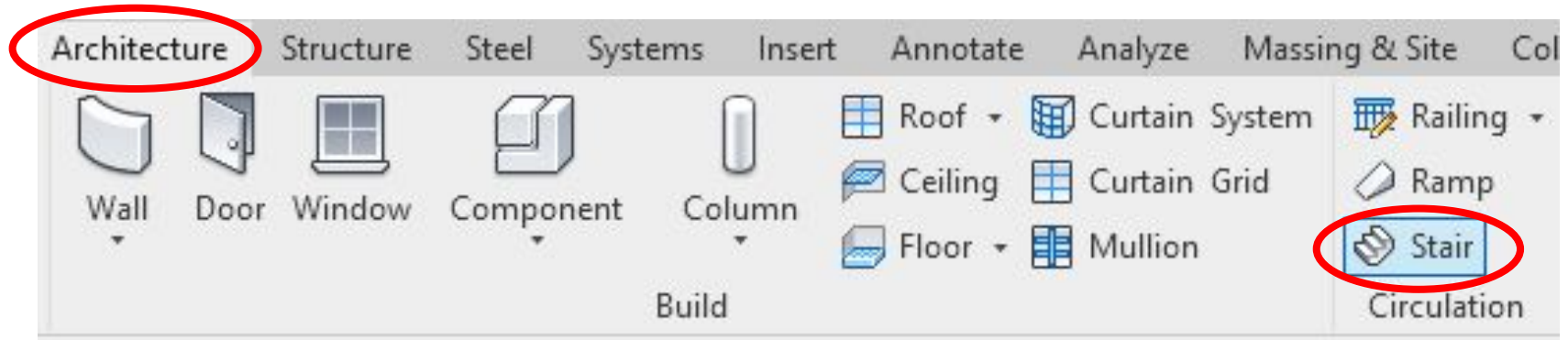


Choose King Bed and *Place* onto Floor Plan

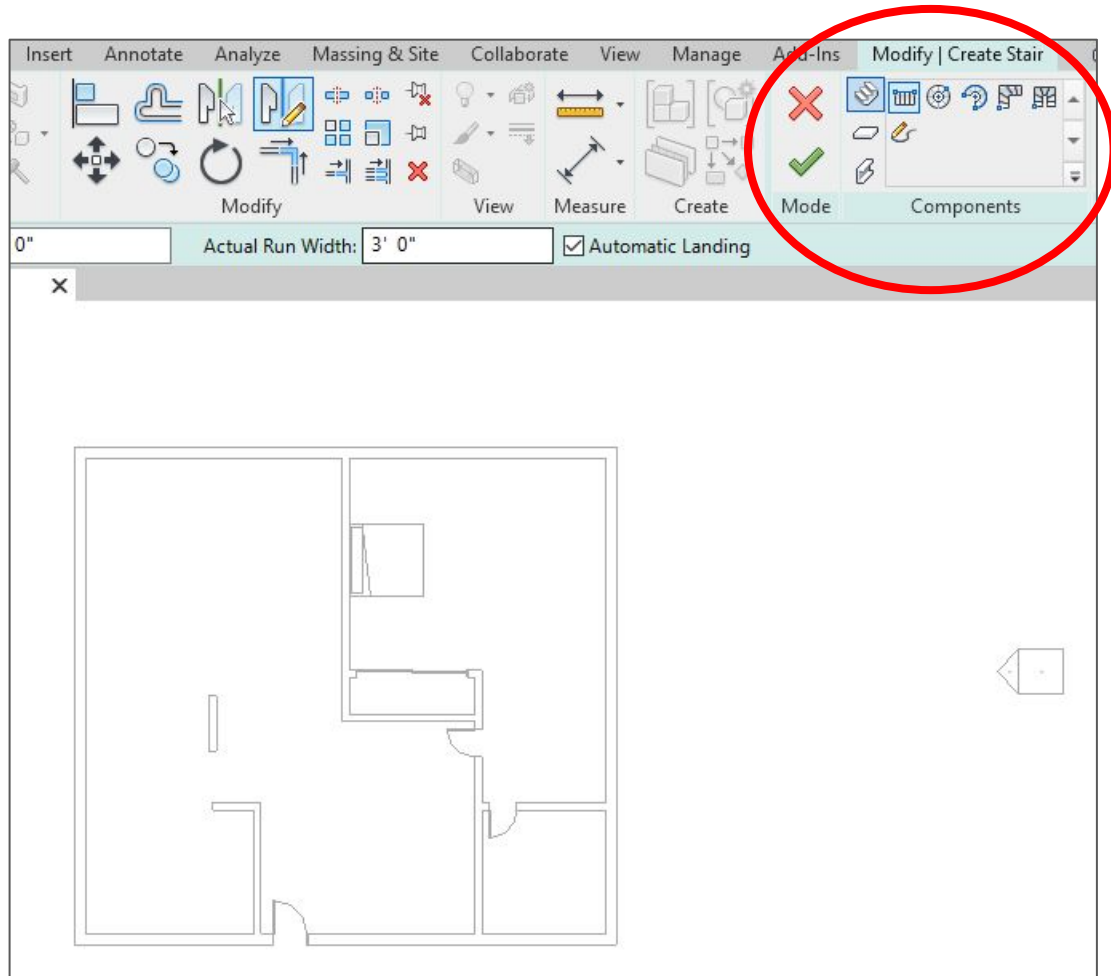


Create Stairs

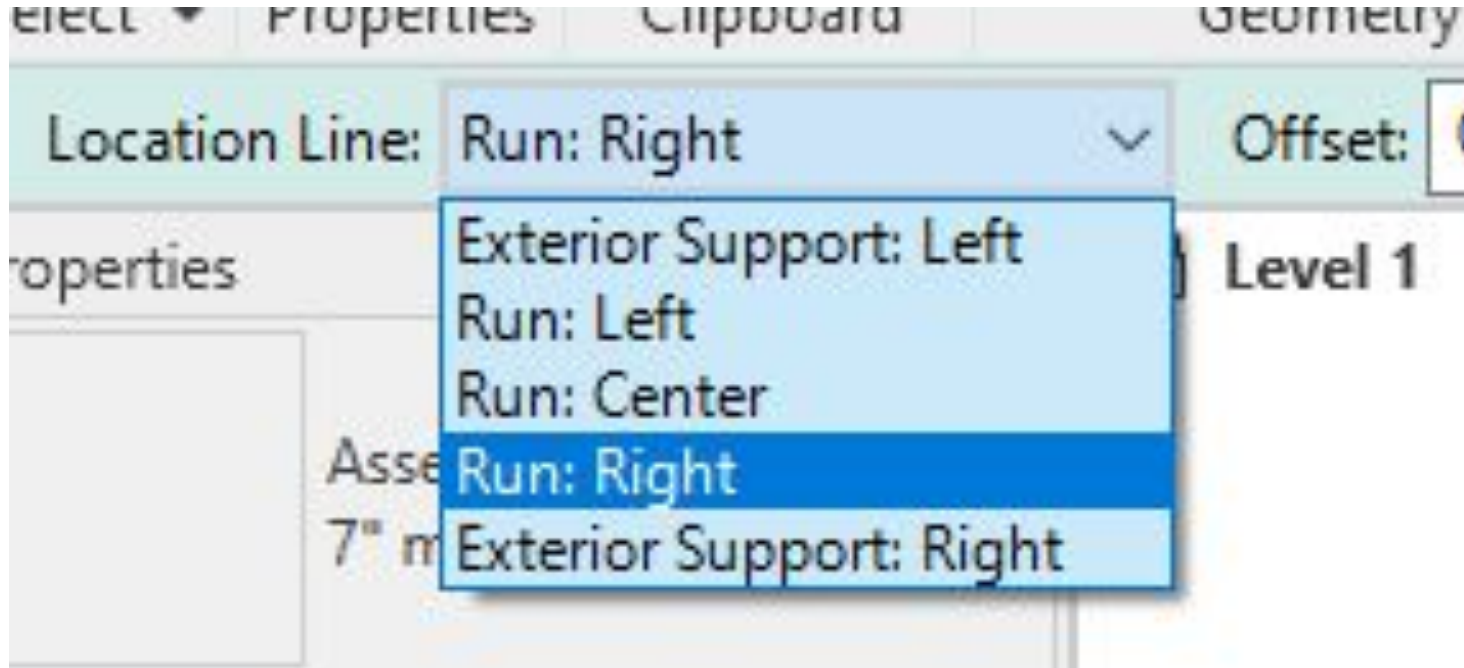
Choose the “*Stair*” Option Under *Circulation*



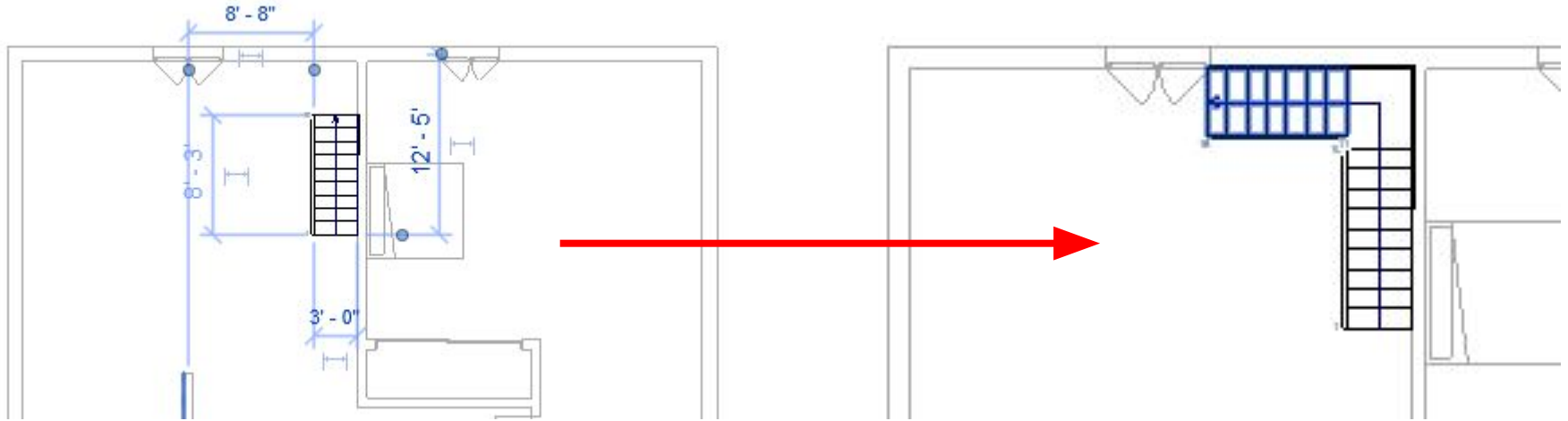
To Create
L-Shape Stair:
*“Modify /
Create Stair”*
Mode & Leave
the default
“Straight Stair”



Change *“Location Line”* to *“Run Right”*
(for this specific case)



Draw *two vertical stairs* (both times starting from the walls) to form the L-Shape Stairs

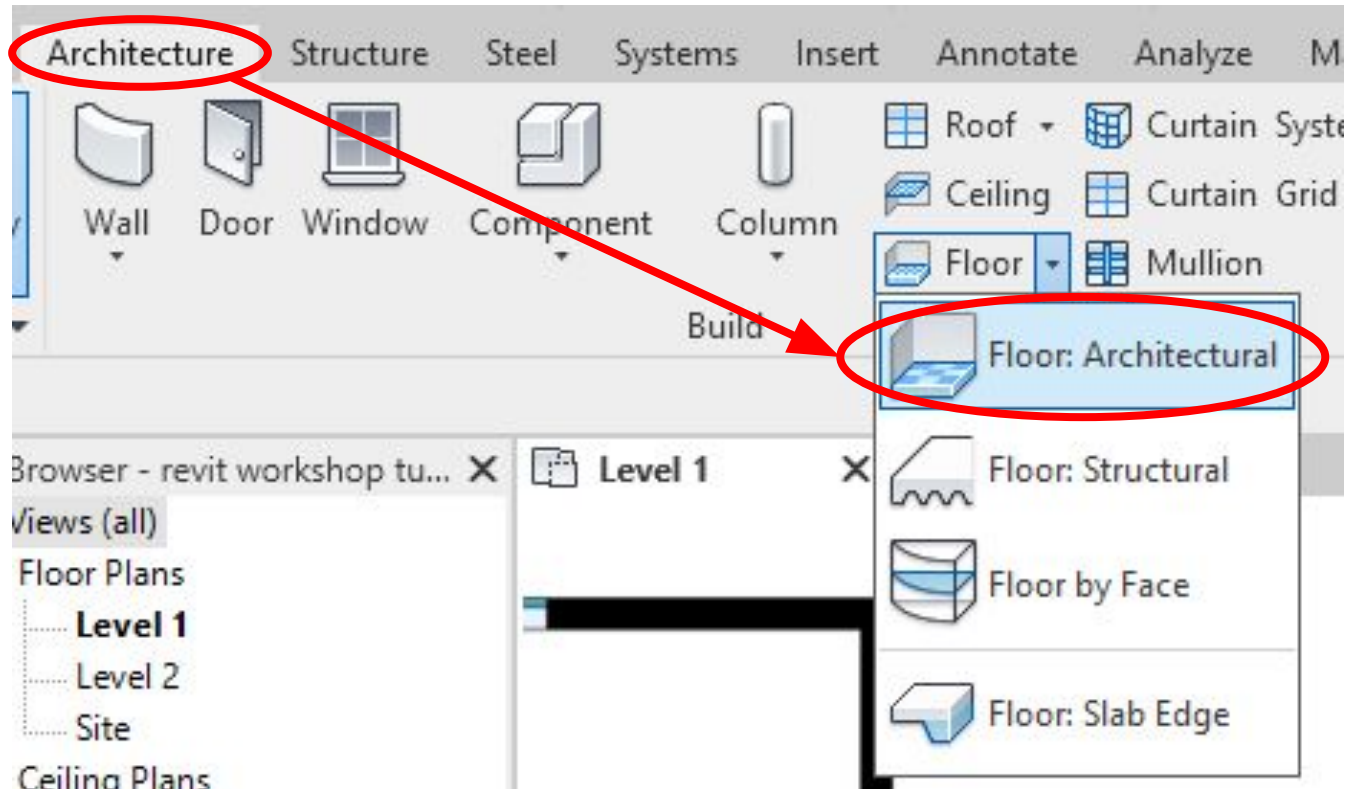


Click the “*checkmark*” to confirm
your creation

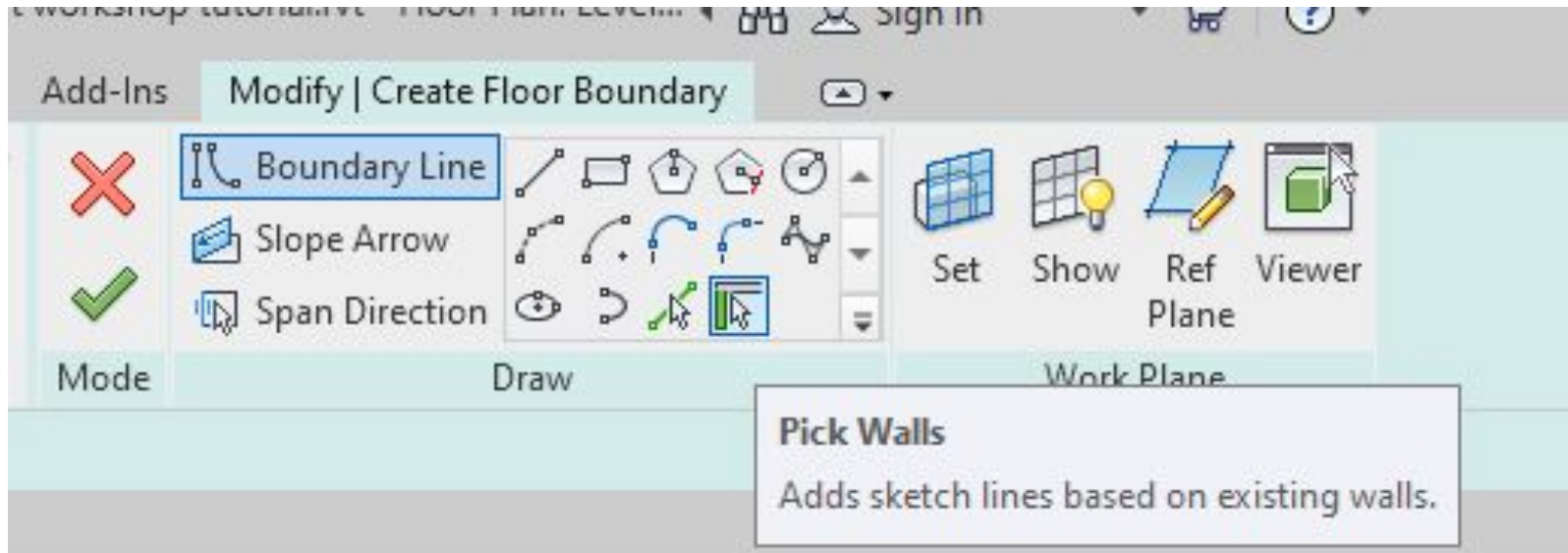


Create Floors

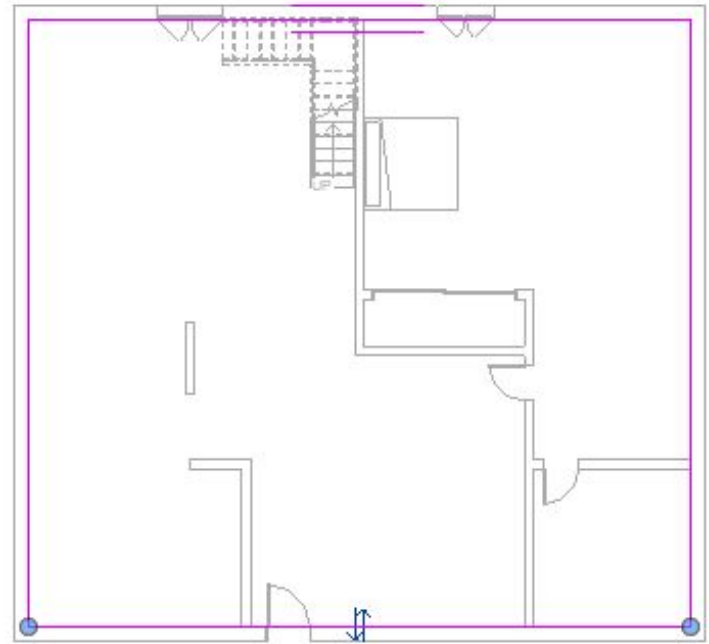
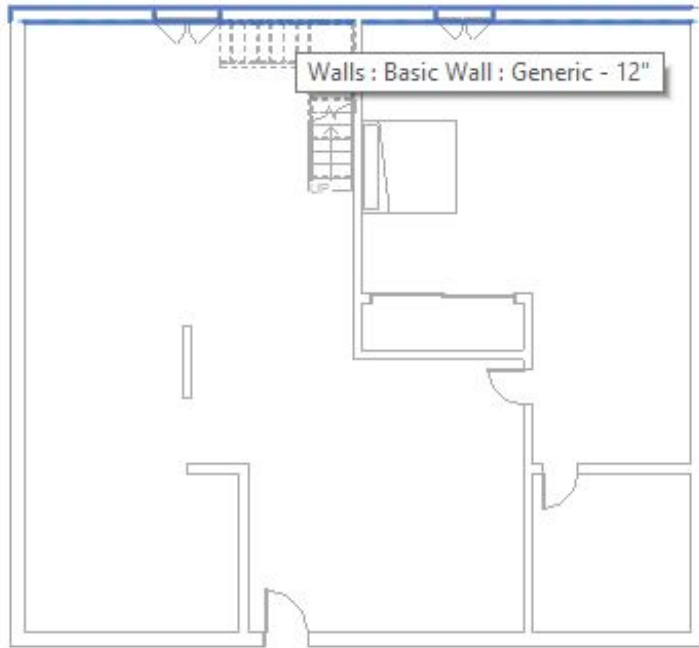
Choose *“Floor Architectural”*



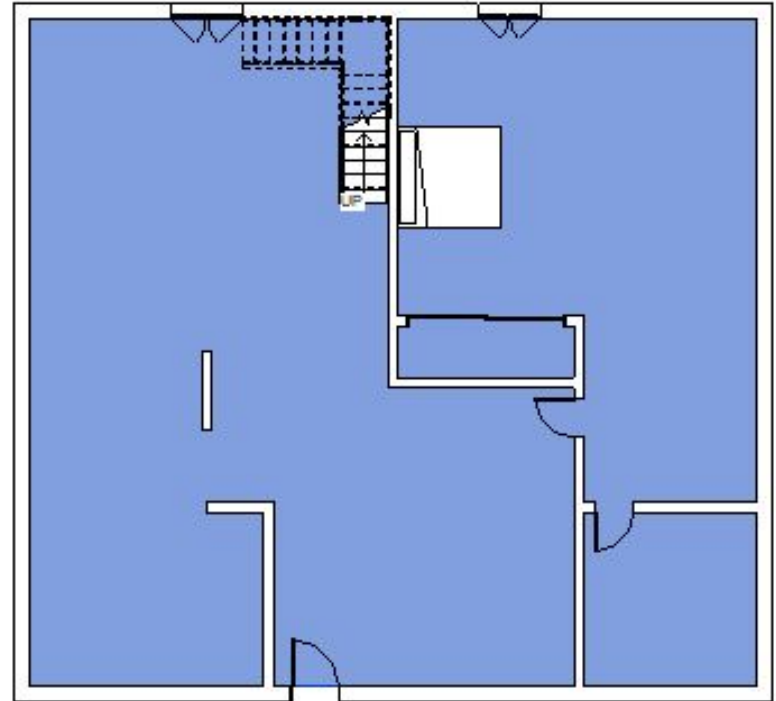
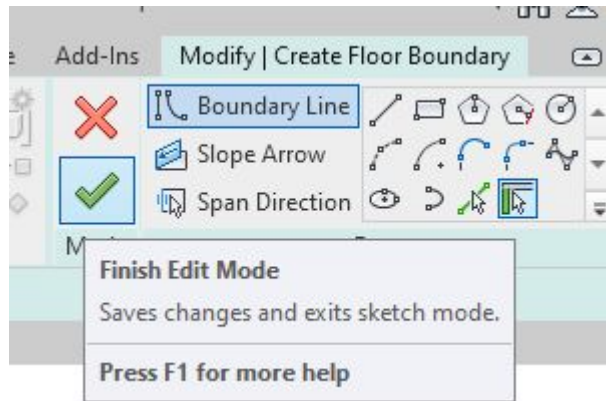
Choose the ***Pick Walls*** option to draw your floor



Hover over wall to select it & when selected it should be *pink*

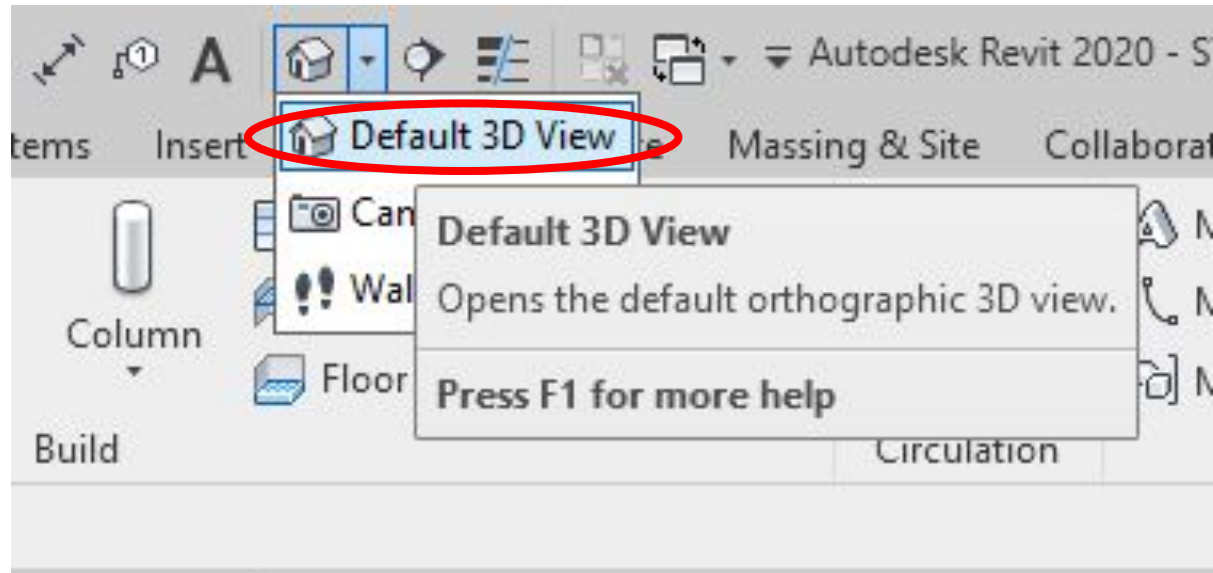


Confirm your creation & see the successful *result!*

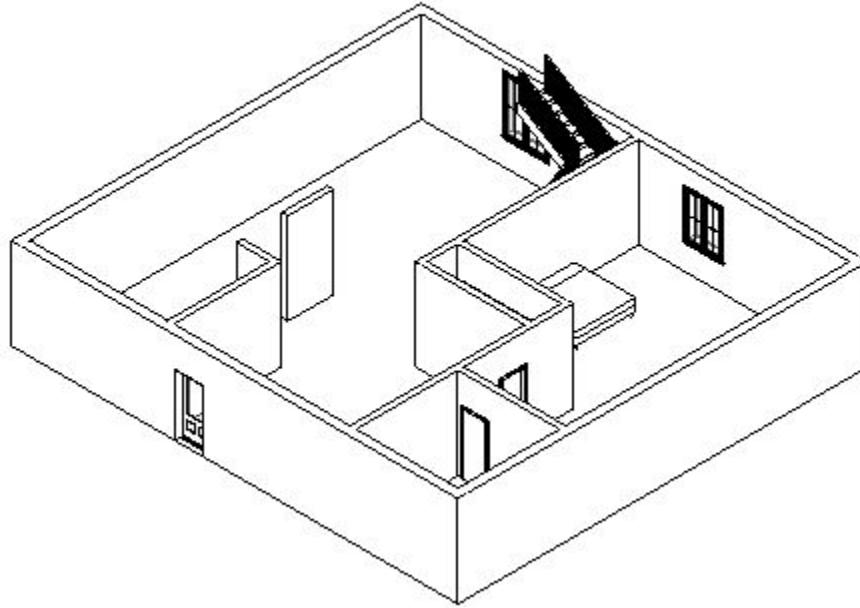


3D-Result!

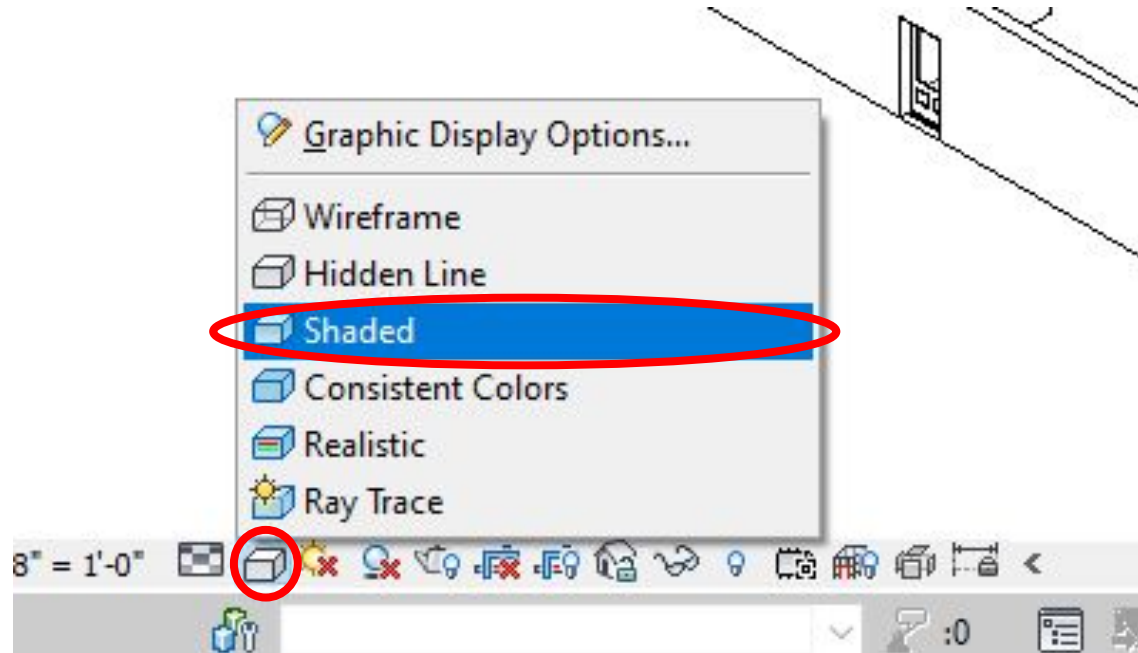
Go to *3D View*



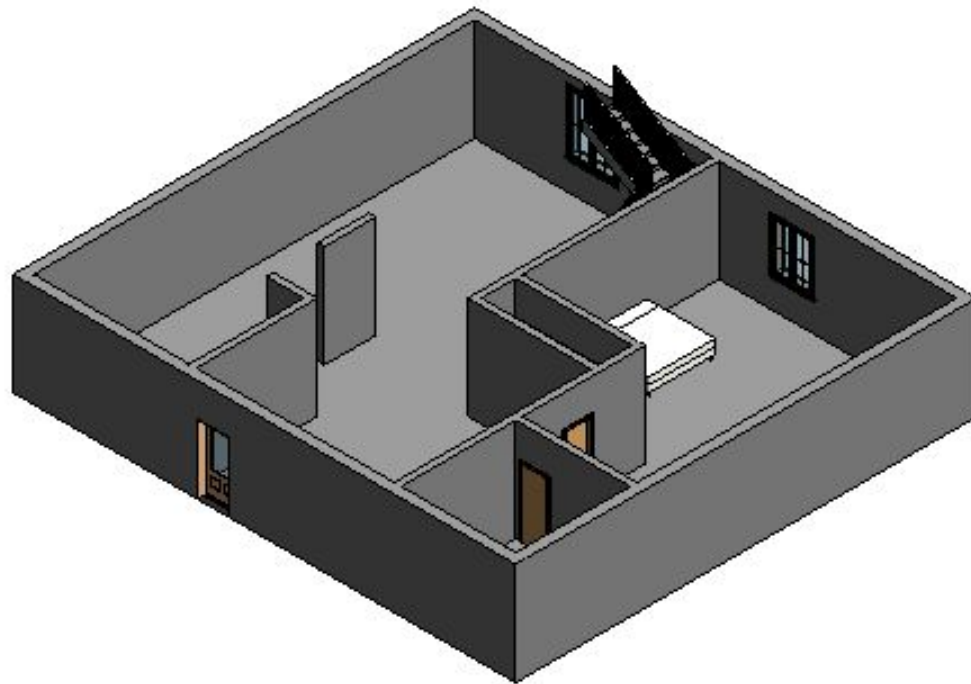
Default 3D View (*hidden lines*)



If you like to see more detail: change the
visual style!



New Visual Style: *Shaded*



More Resources

- <https://www.revitcity.com/index.php> (download cool furniture here!)
- Go to YouTube to learn more about Revit!