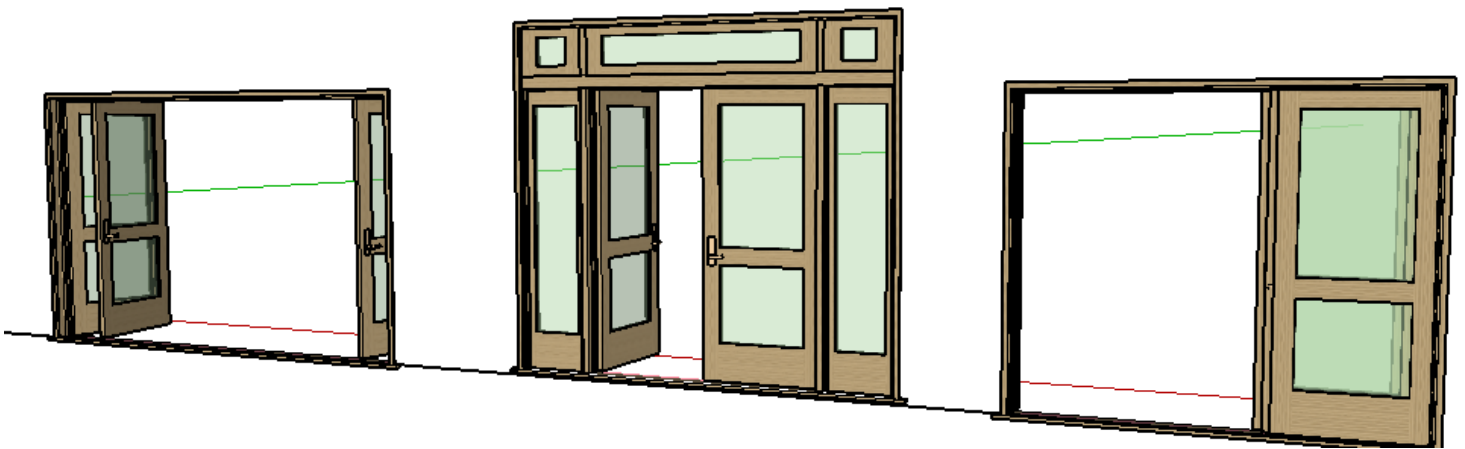


Instant Door Window *Overview*

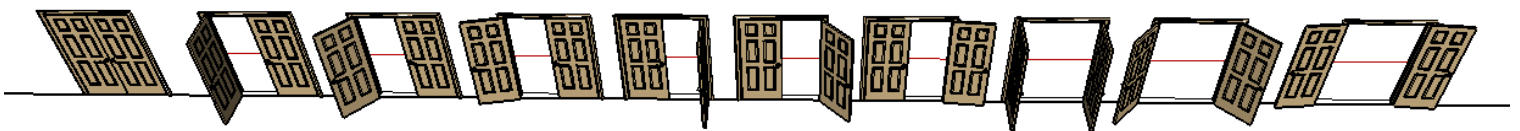
Features

Create Doors, Windows, Skylights, Louvers including multiple mulled units, bay, garden, bow, arch, more.
Options for cutting single wall or double wall face using second inside component.
Many built in options for sill, lintel, and casing/surround shapes or use custom user defined profile shapes.
Several muntin patters.
Materials can be added during creating the Door or Window component or added/changed after the creation.
Textures are oriented to the Door or Window parts.
Component browser dedicated to doors and windows only
Reuse a single door leaf component in multiple separate assembly component configurations.
Hardware options.
Door assemblies have one or more open positions.
Multiple instances of a single door assembly can have separate open/closed positions.
Choose from many preset styles or create custom user style library
Supports all SketchUp units: Metric, Feet/Inches, etc.
Menu options supported with both thumbnail and enlarged images.
An internet connection is required in order to execute this script.

The Output. *The script models doors, windows, and assemblies of windows, doors, or both. The assemblies are usually components themselves.*

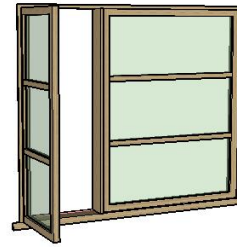
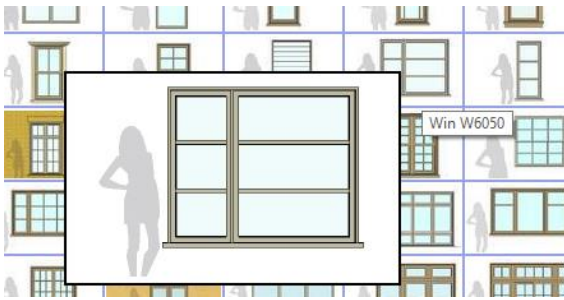


Behavior *Doors (except in 2D mode) have open and closed positions. Swinging doors have multiple fixed open positions. These are set by multiple clicks of the Sketchup Interact tool:*

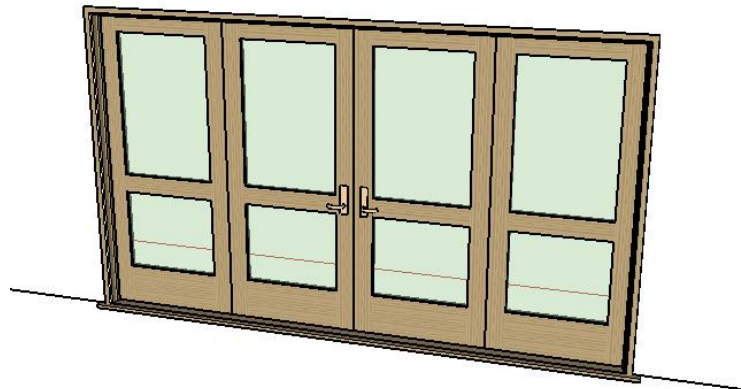
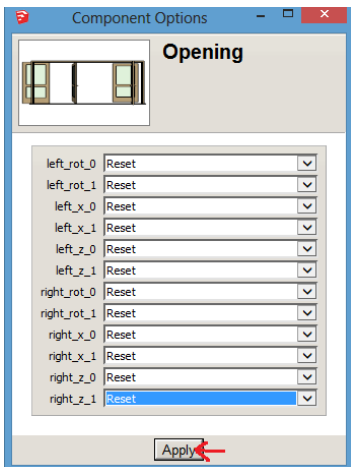
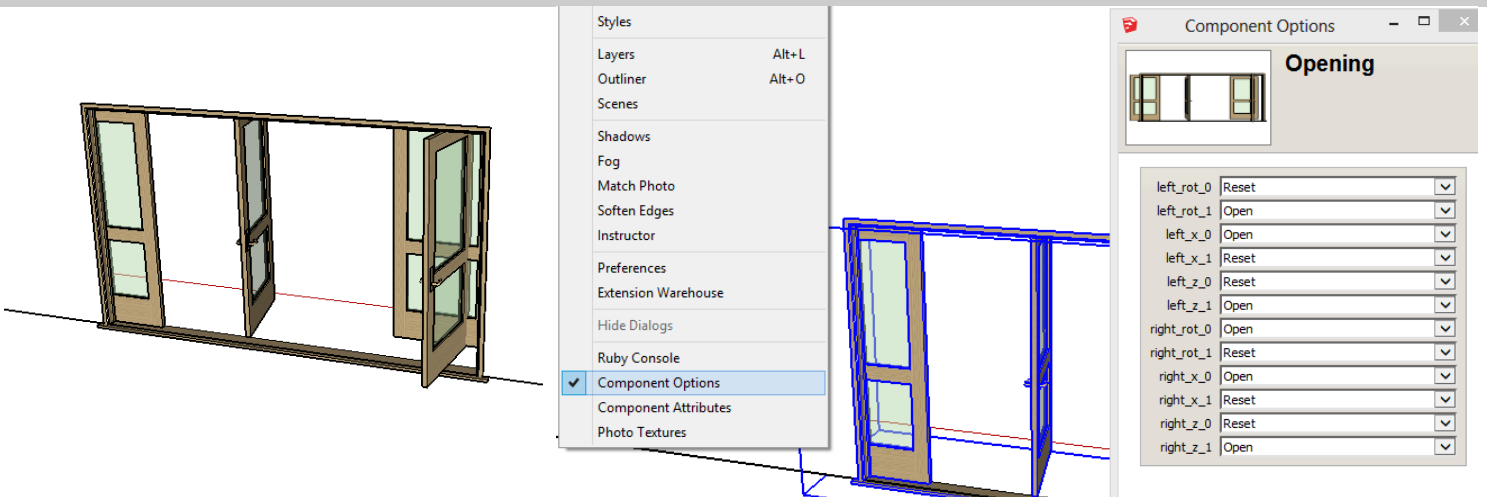


1 *The door pairs shown above are all copies of a single assembly component yet have different open/closed settings at the same time. Multiple instances of a door component within a model can be set to different open positions.*

2 *Windows do not have open options. If open behavior is desired for a window, operable sliding and casement can be made from similar door types . Try Preset Style Win W6050 for an example:*

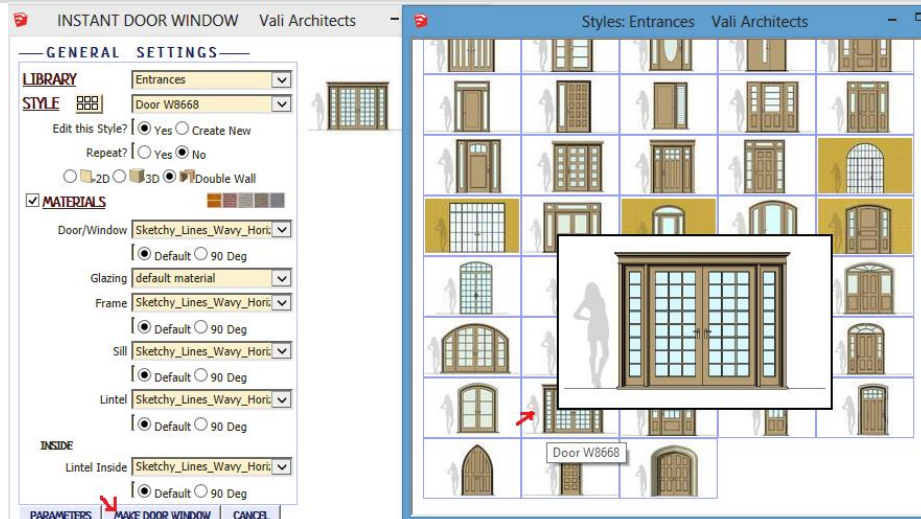


!When using the Sketchup Interact tool, it is important to wait until the behavior is finished before clicking again. If you click too fast the doors can get disorganized. If you accidentally do this, select the assembly component and open the Sketchup Component Options menu. Change all the 'Open' settings to 'Reset' and click 'Apply'.

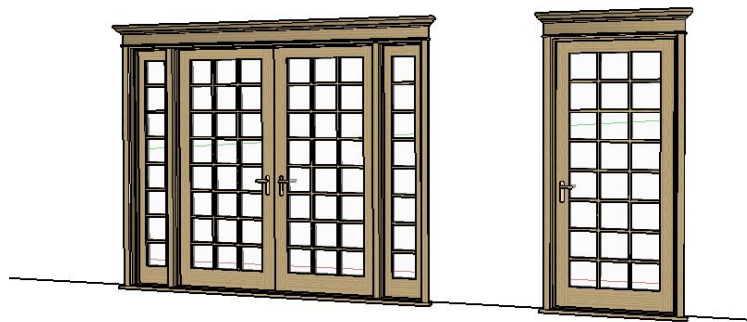
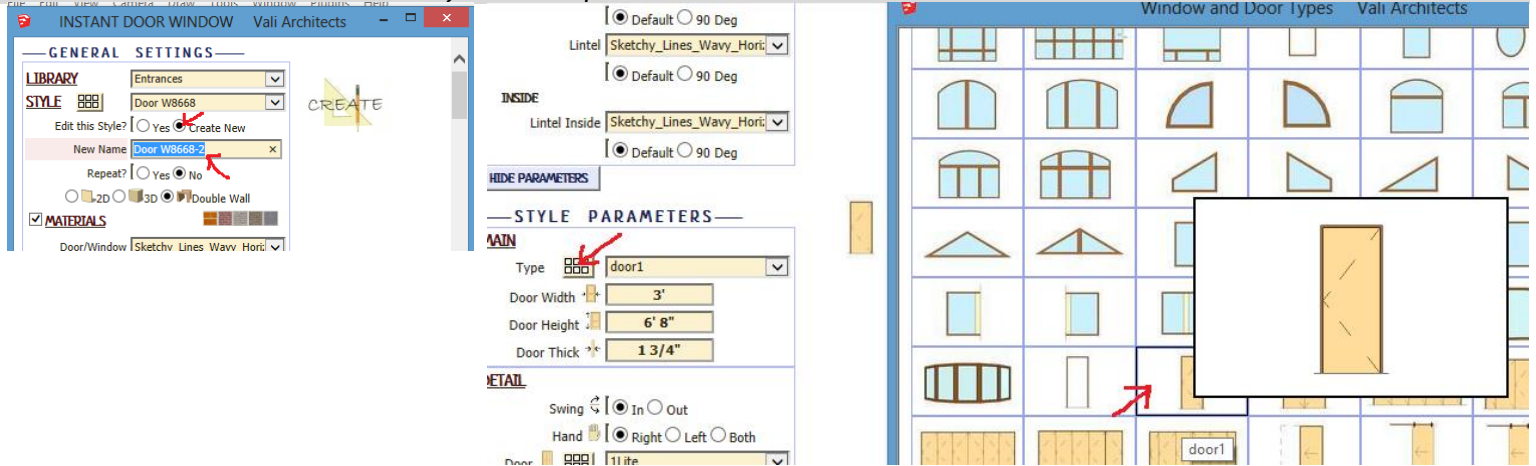


Families Similar custom user styles can be made by starting with a single style and changing a few parameters such as type or size. These can then be saved in the User style library.

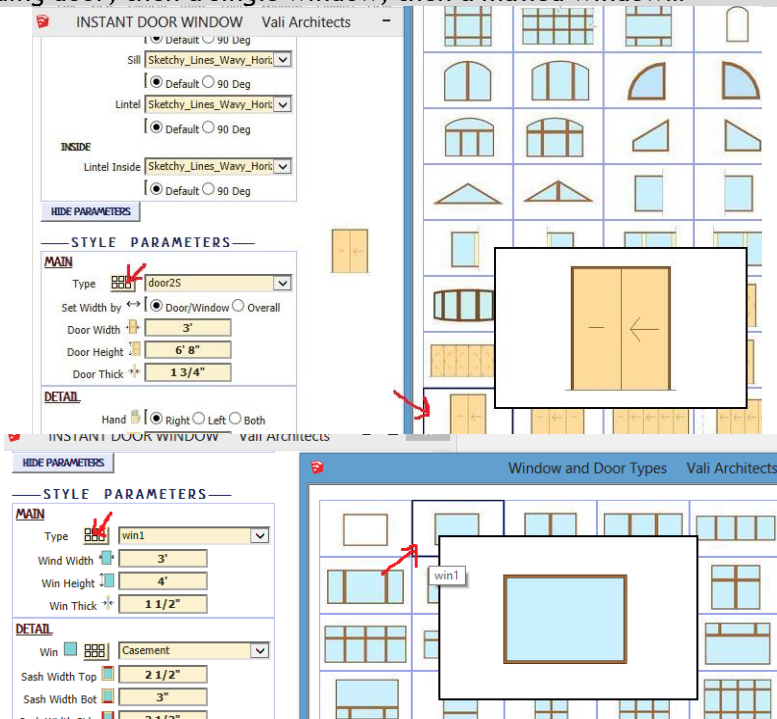
1. I'll demonstrate by making preset style Door W8668 with materials.

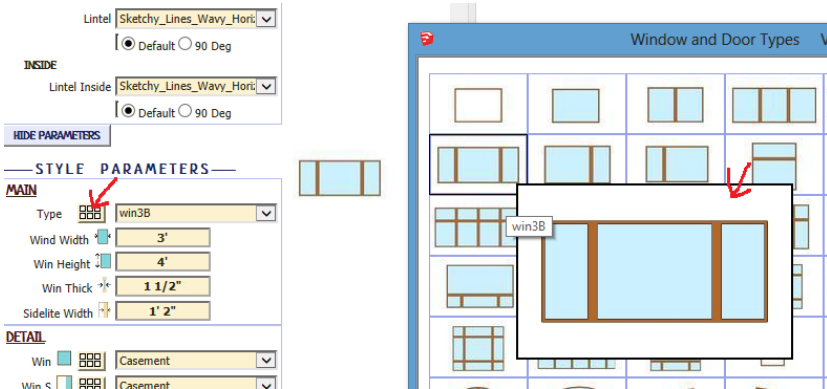


2 Next I'll edit that style to make just a single door and give it a new name, and place the door component. Hit the space bar or click the select arrow tool to finish the operation.

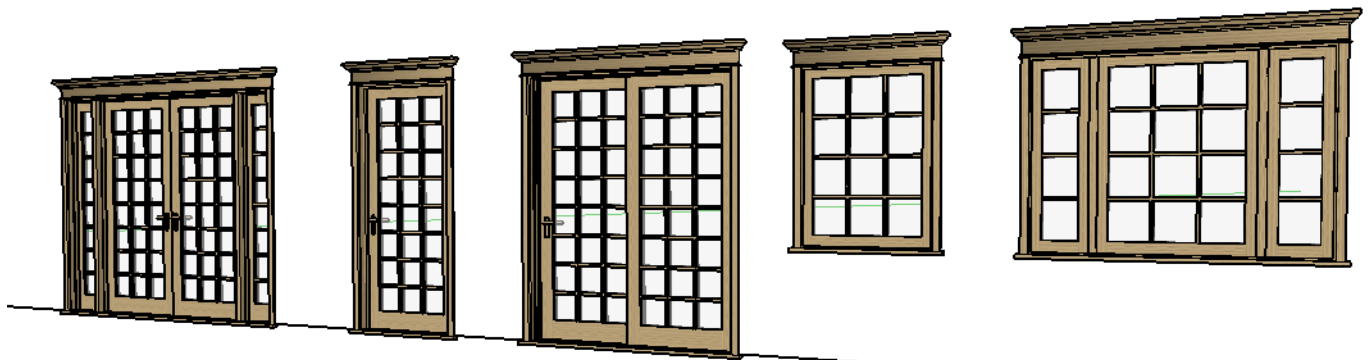


3 Repeating step 2 with a sliding door, then a single window...

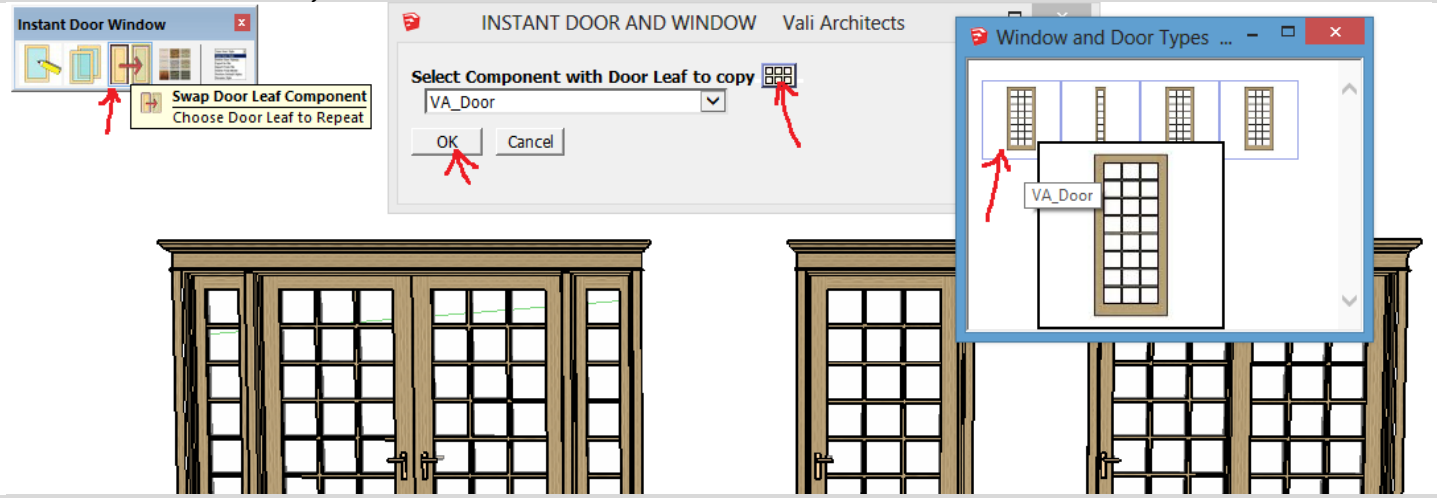




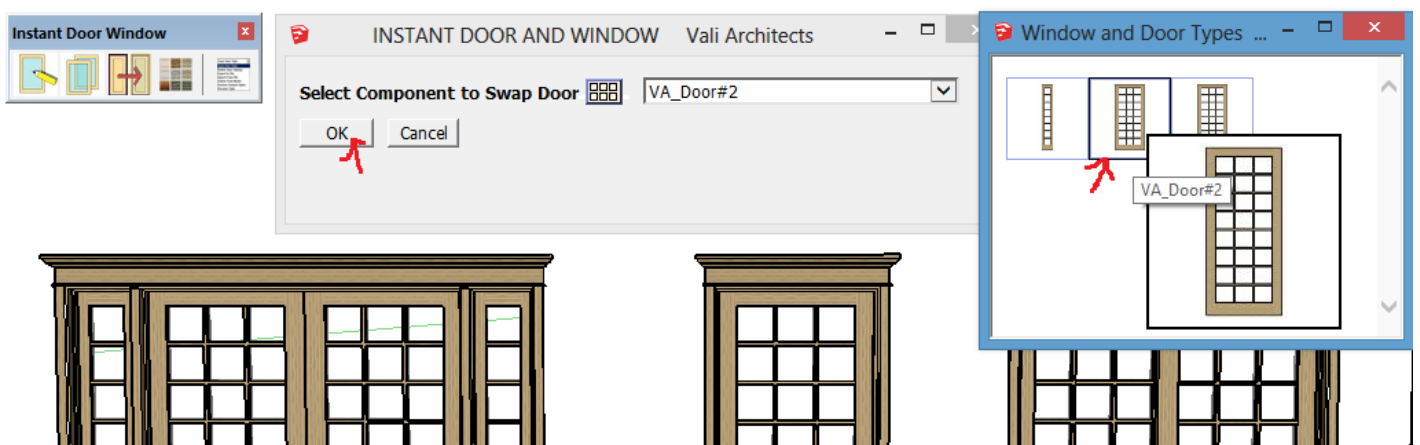
4 I now have a family of similar assemblies.



5 Because several of the door leaves are the same size, I would prefer to have them use the same subcomponent. So I open the Swap Door Leaf Component tool, click the icon to open the image menu and note that there are 3 doors of the same size shown. I select one of them and click OK.

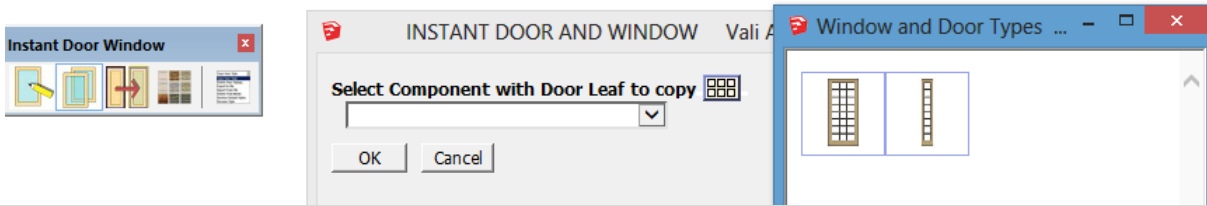


6 A second menu pops up for the door I want to replace with the one chosen in the previous step. I open the image menu again by clicking the icon and note that there are 2 doors of the same size I can replace. I select one of them and click OK.



7 Repeating the last steps I now have only one door leaf component of each size as shown. Note:

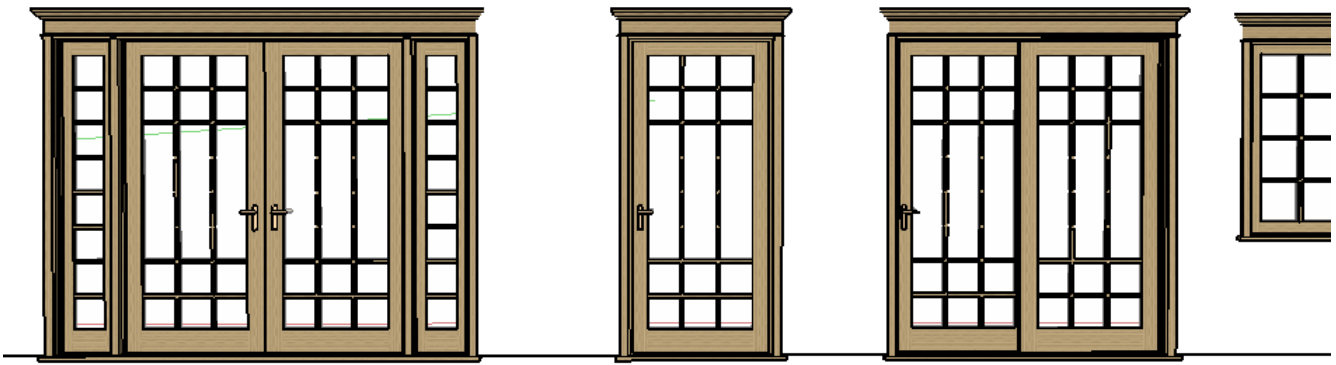
The script does not check component dimensions so you must make sure what you are replacing is the same size.



8 Now that they are the same, I only need to edit one door leaf to revise them all. In this case I double click one of them and erase some muntins.



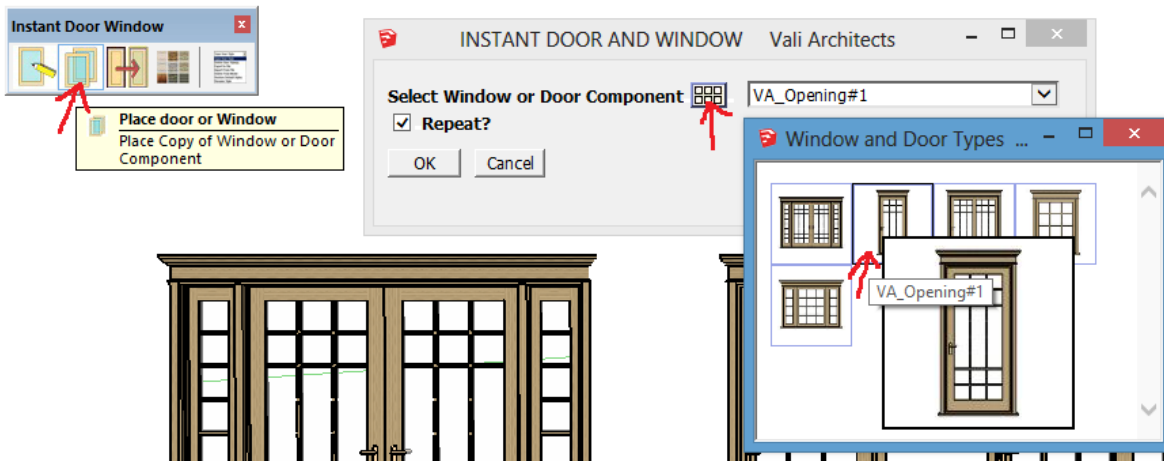
9 Here is the result:



Copy Similar to Sketchup's component browser

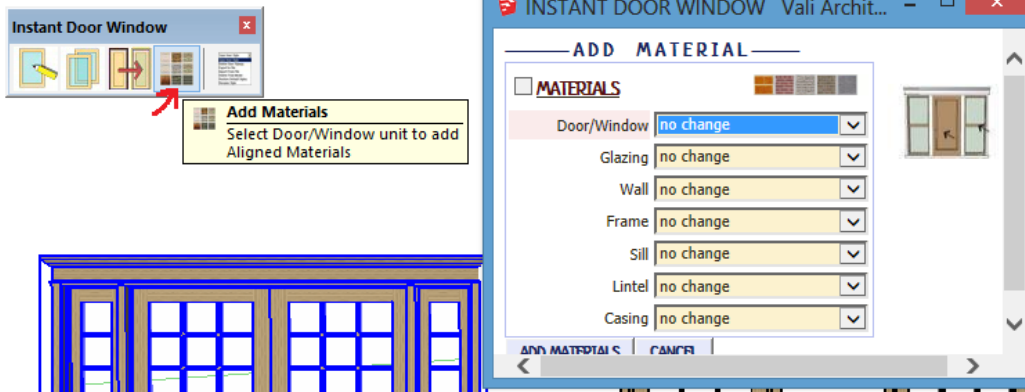
To avoid a large selection list, only door and window assembly components are displayed. If the component was made as a Double Wall, the script will look for the backside component and try to place it as well. Note: Like Sketchup's component browser, it may take some time to create the images the first time this tool is used.

Choose Repeat for multiple insertions of the component. Hit the spacebar or click the select arrow tool to finish the operation.

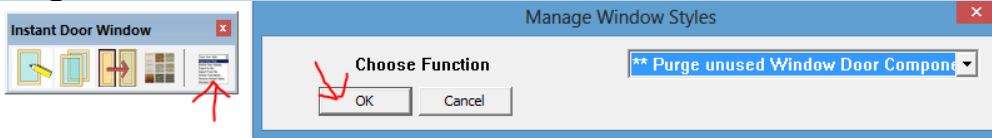


Add or Change Materials

Materials can be added during door/window creation or to components already created by the Add Materials tool.

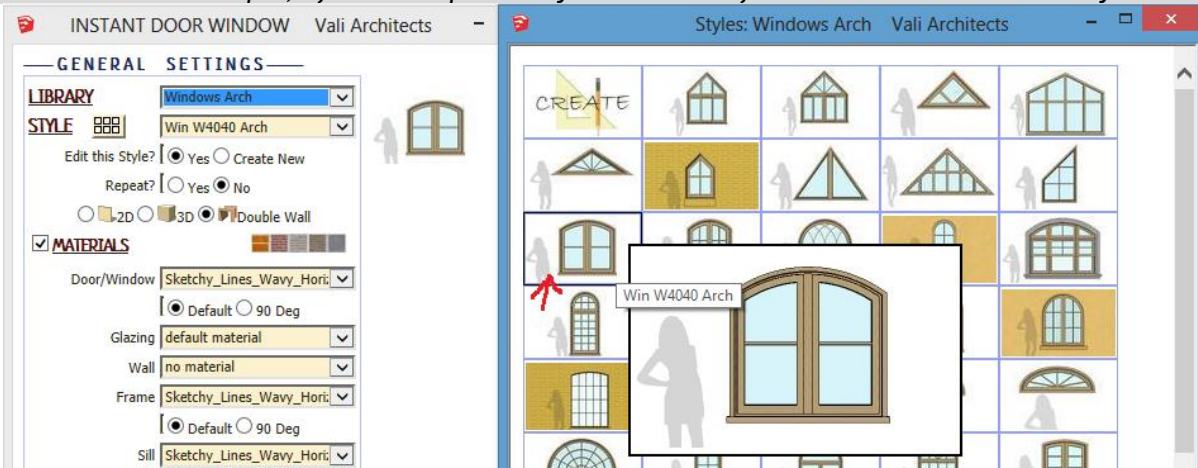


Purge Click these 2 buttons often to keep your model clean of door window components that you don't need.



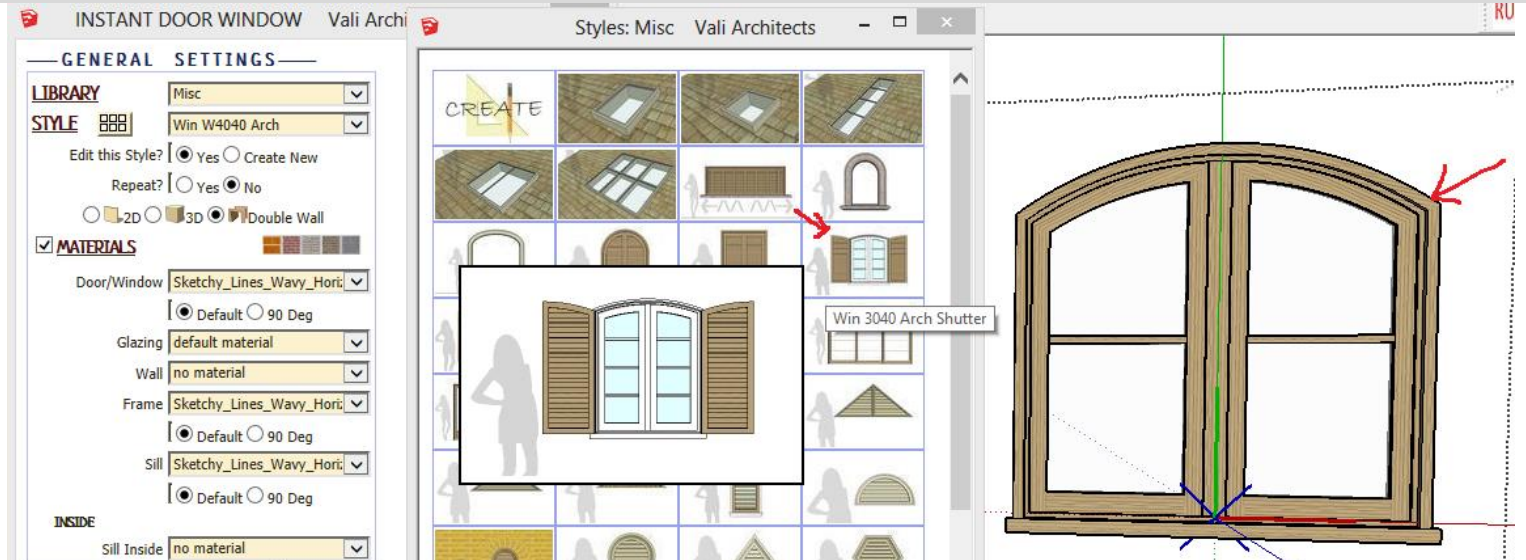
Shutters

Shutters are different from other door and window components.. They do not cut openings but are added to door and window assemblies. In this example, I first make preset style Win W4040 from the Windows Arch library.

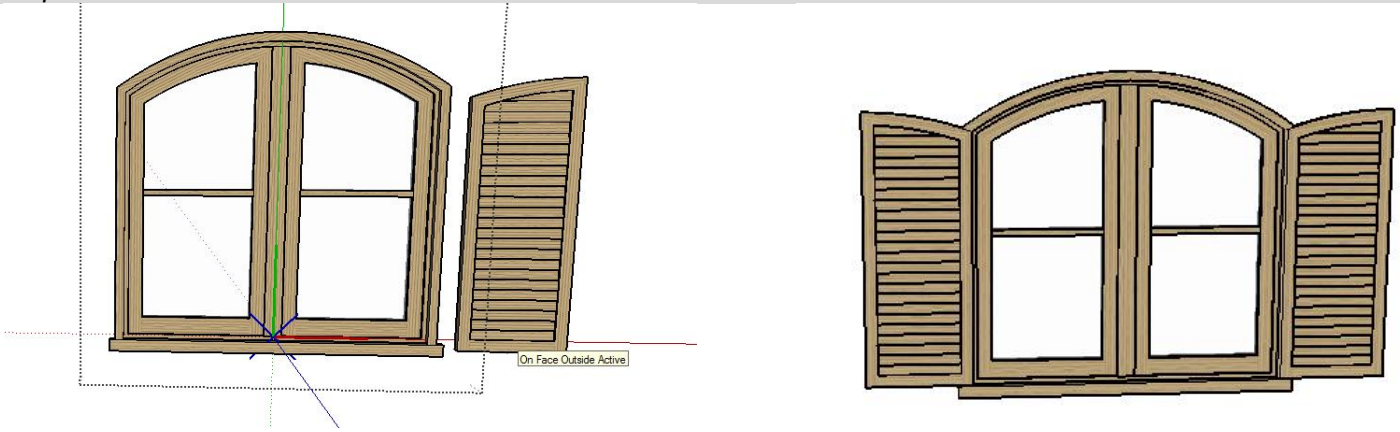


After making the window,

1. Double click the component to open it for editing.
2. Open the Create Door Window tool again and select a shutter type or a preset shutter style such as Win 3040 Arch Shutter from the Misc library.
3. Click Make Door Window

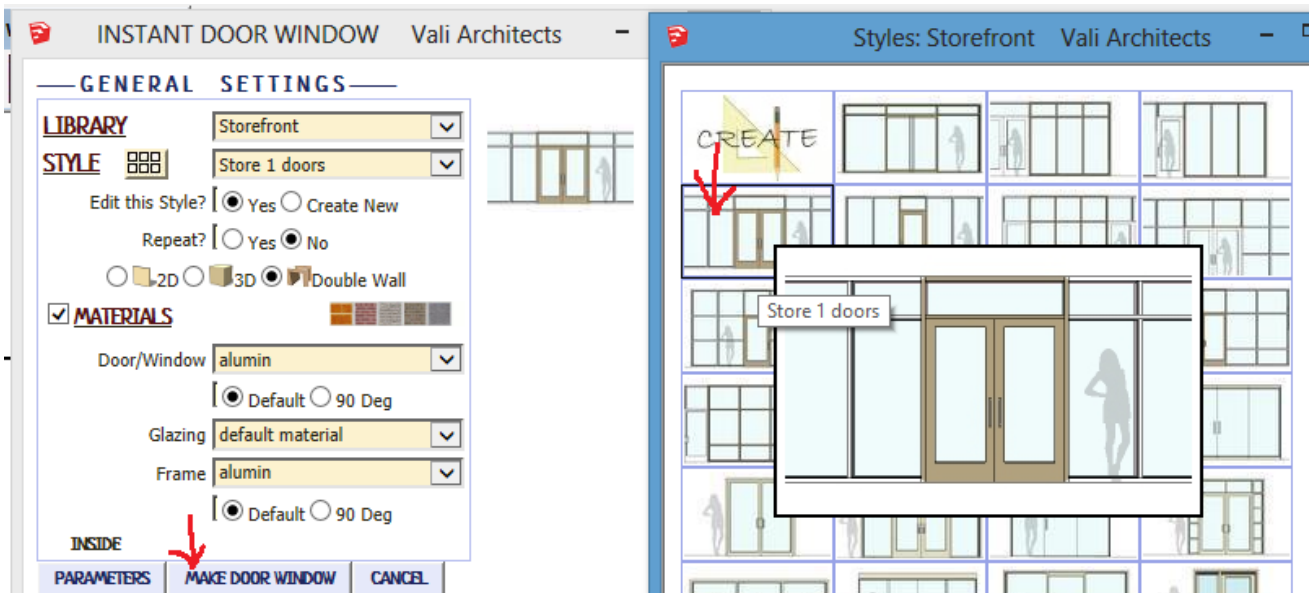


Position the shutter within the assembly. Then copy it to the other side and use Sketchup's Flip Along tool using "component's red" l to mirror it.

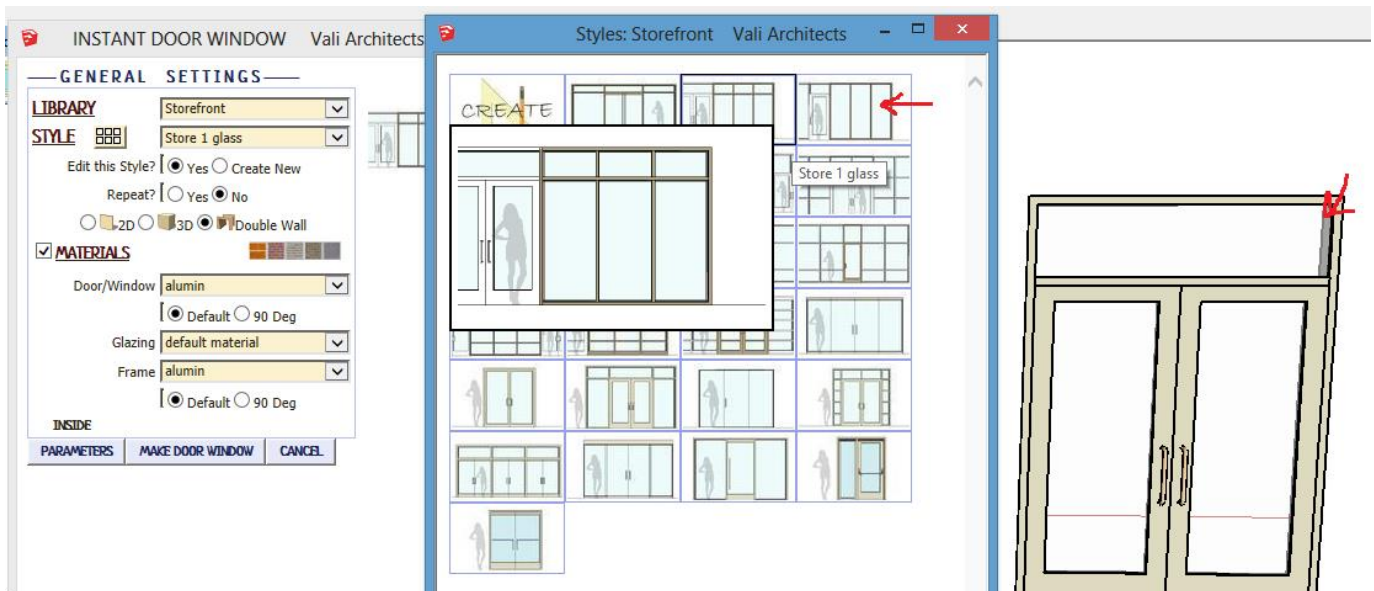


Storefront Instant Door and Window is not intended as a storefront modeler, door and window assemblies can be combined make storefronts.

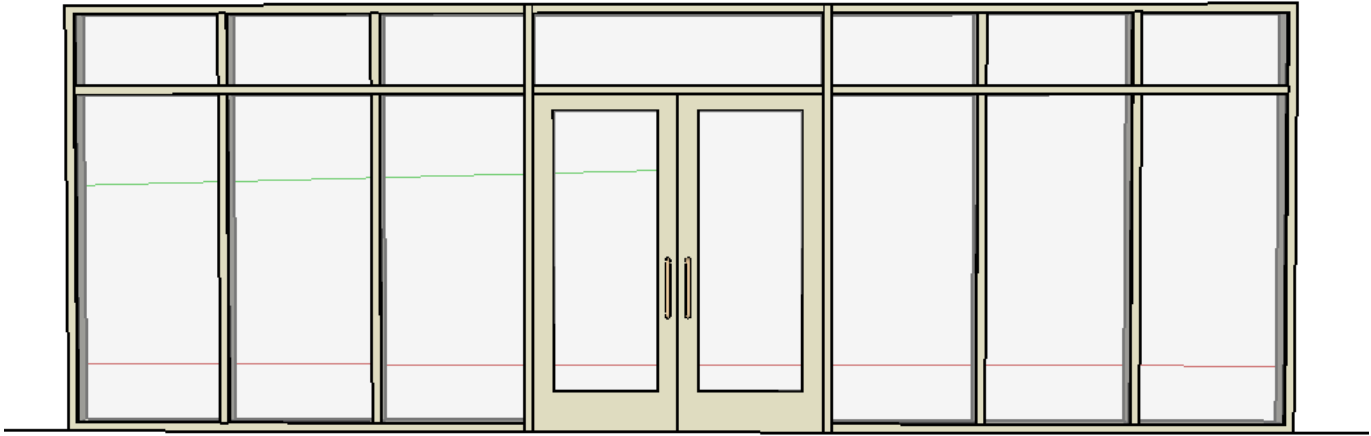
As an example, I first make the door assembly style "Store 1 doors" from the Storefront library.



Then I make style "Store 1 Glass"

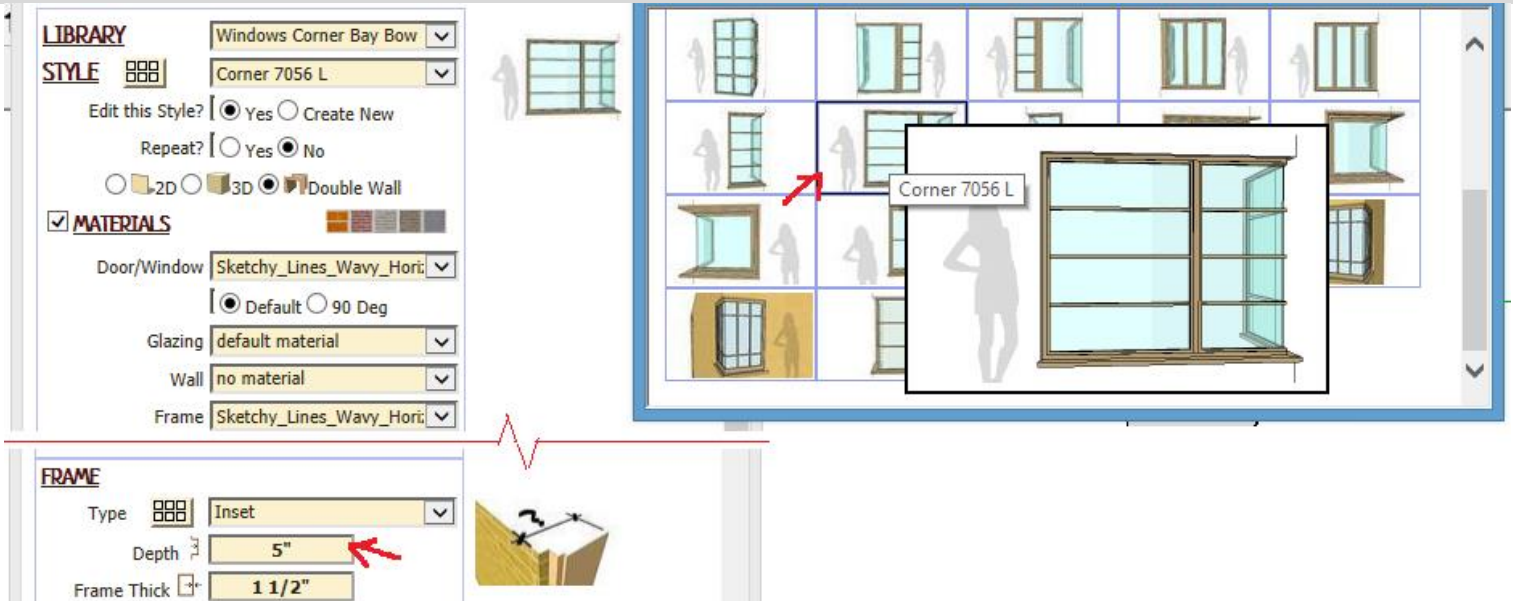


I position it next to the door assembly and place another copy of the window assembly on the other side:

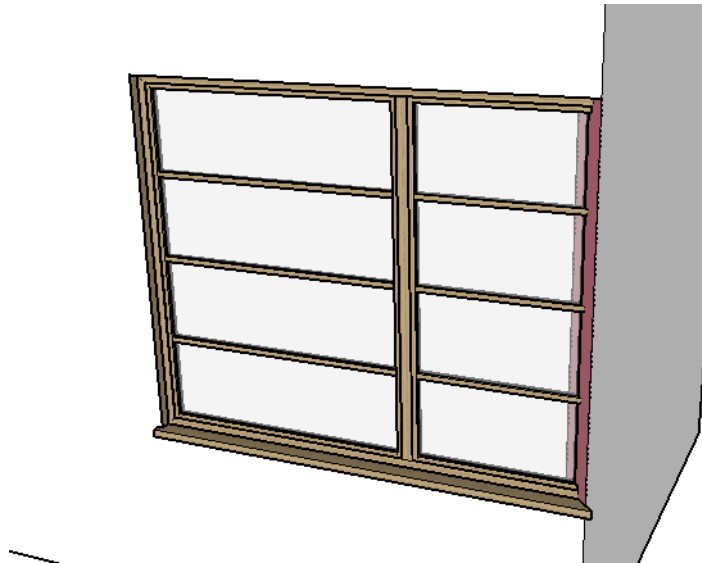


Corner Window Corner windows are modeled in 2 pieces, a left and right style.

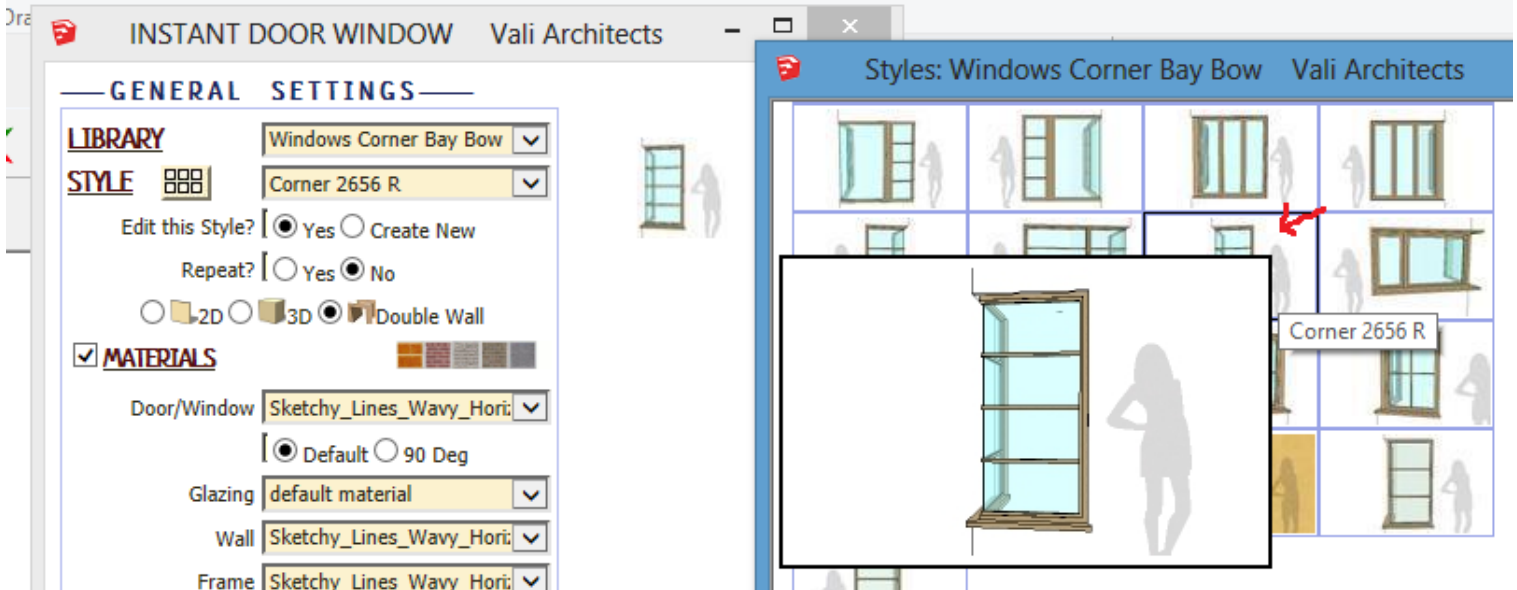
1 For corner windows that cut double walls, set the outside Frame Depth parameter to the thickness of the wall. Here I chose the left side preset style "Corner 7056 L"



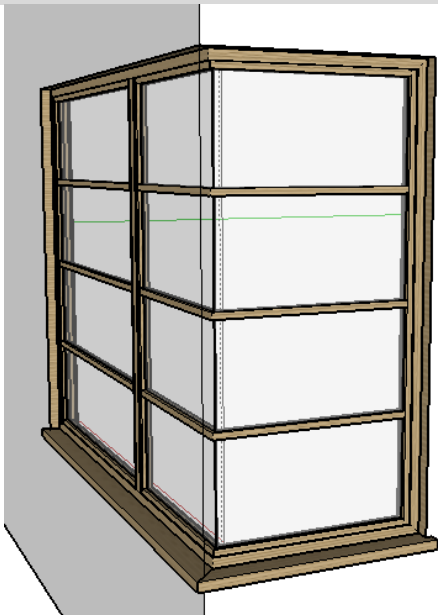
2 And placed the component to align the miter with the building corner"



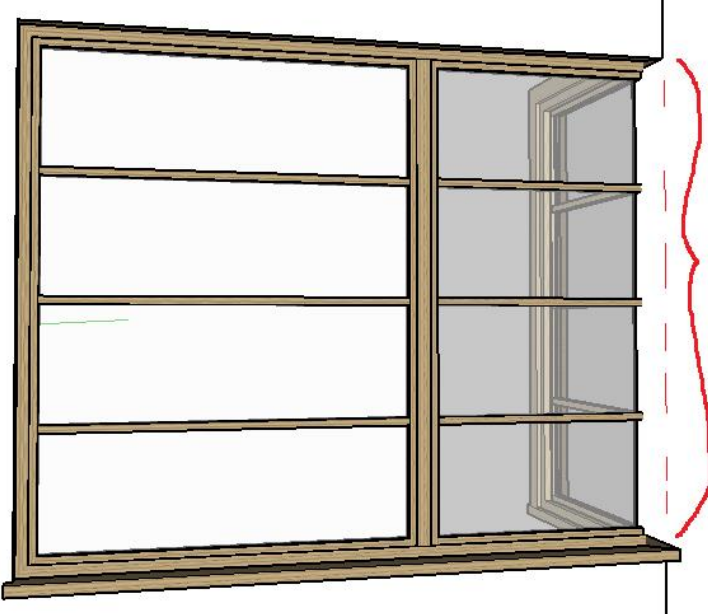
3 And similarly chose the right side component:



4 Placed it on the other building face and aligned the miter. Note: it is easier to align with hidden lines turned on.

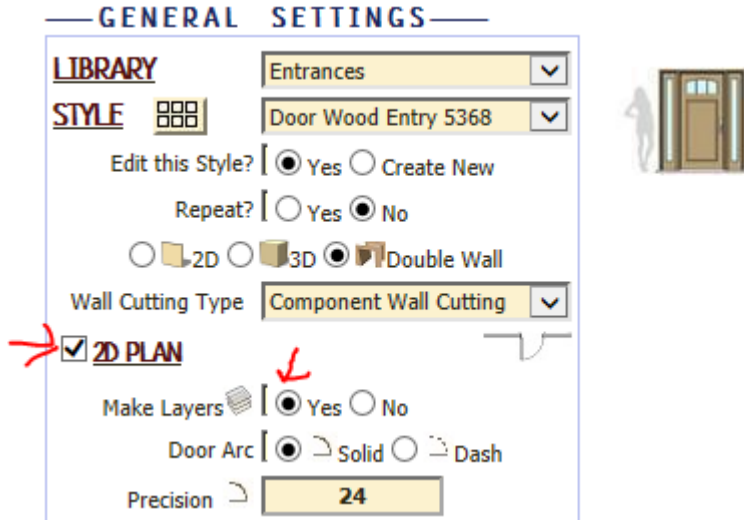


5 I finished by drawing lines between window top and bottom over the building corner inside and out and hiding the lines.

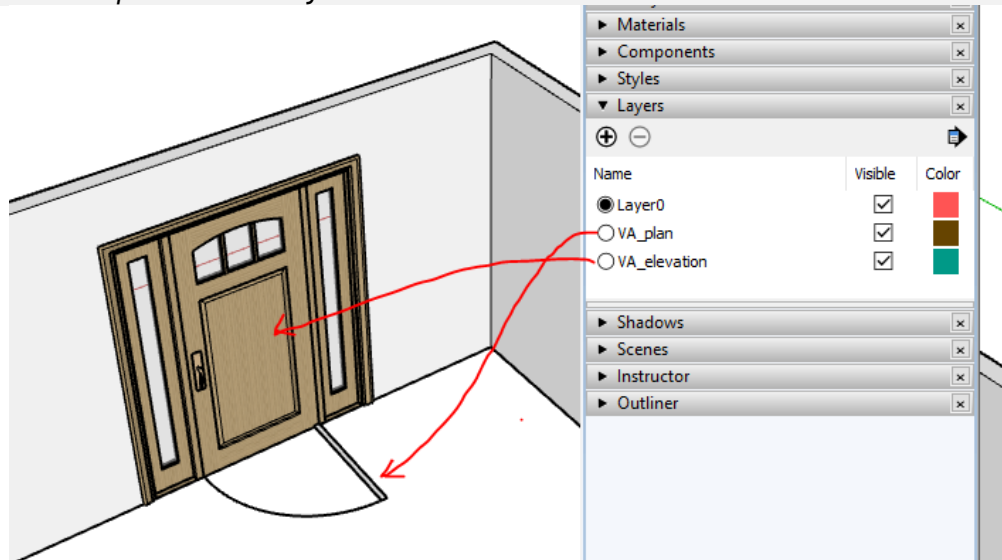


Plan view 2d door symbols For documentation, it may be preferable to show a door closed in elevation view and show a door symbol in plan.

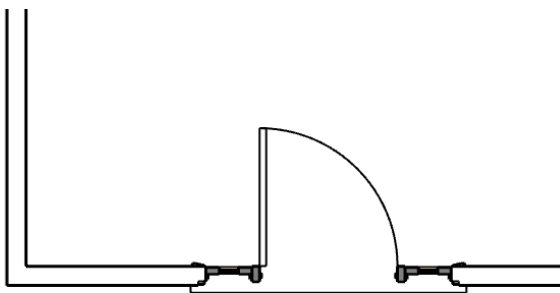
1 Here I selected a preset door unit and checked the 2D Plan box to add the door symbol. I could either use Hide/Unhide for displaying the door symbol and door, but I chose to place these on different layers instead.



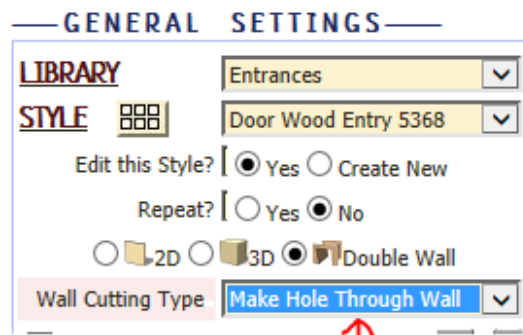
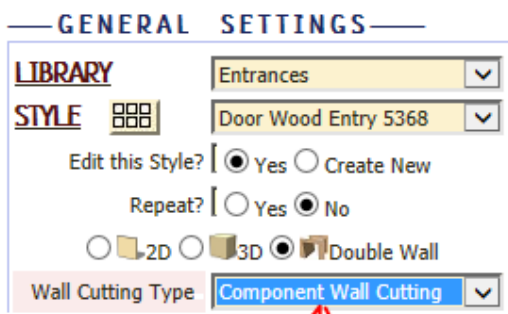
2 The result is a 3d door unit plus a 2d door symbol



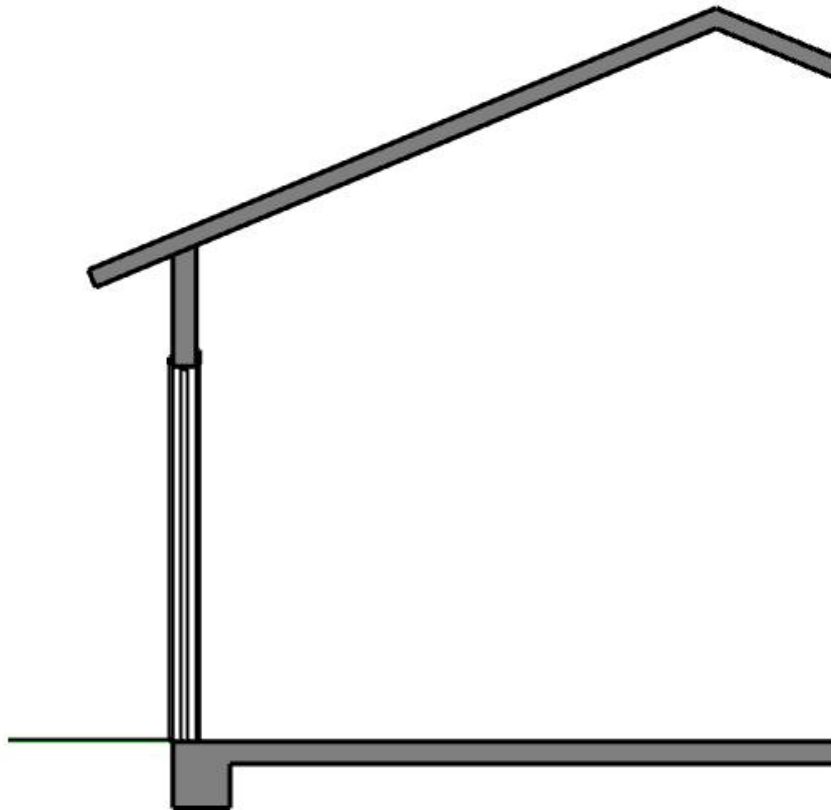
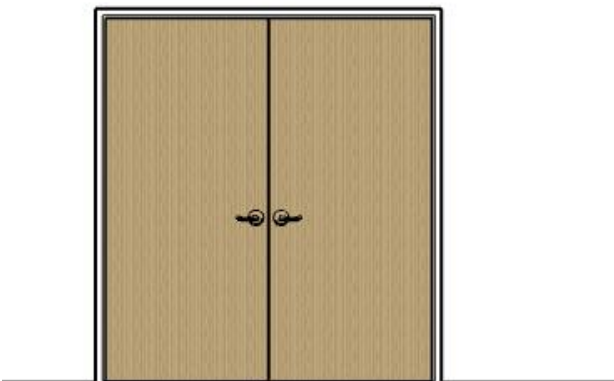
3 So if I display the door in my elevation view and the door symbol in the plan view (after adding a section cut) my documents look more normal:



Wall cutting For double face walls, either the standard Sketchup component wall cutting behavior can be used for both back and front component, or the a hole may be cut through the wall instead. Note that this is only available for Double Wall - typical component wall cutting is used otherwise. This may be helpful in displaying sections - especially with the Su2018 section fill option. (Both wall faces must be active)

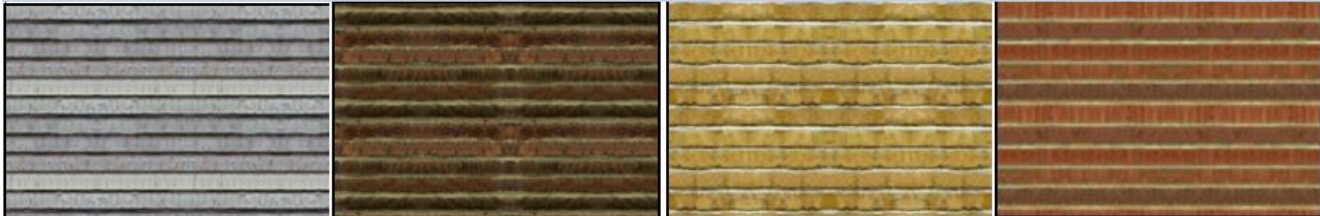
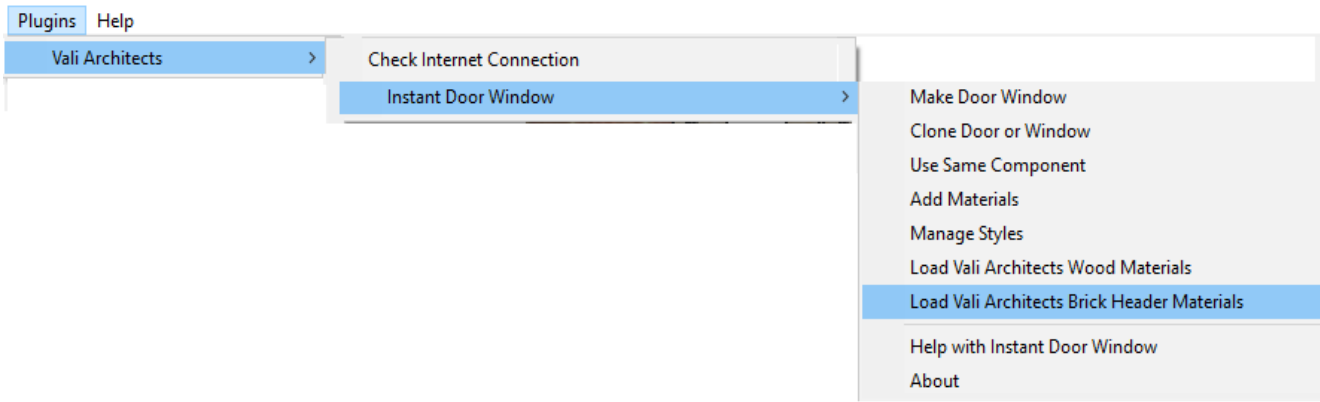


Below are some images using the 'Make Hole Through Wall' option and 'Display Section Fill' turned on in Su2018:

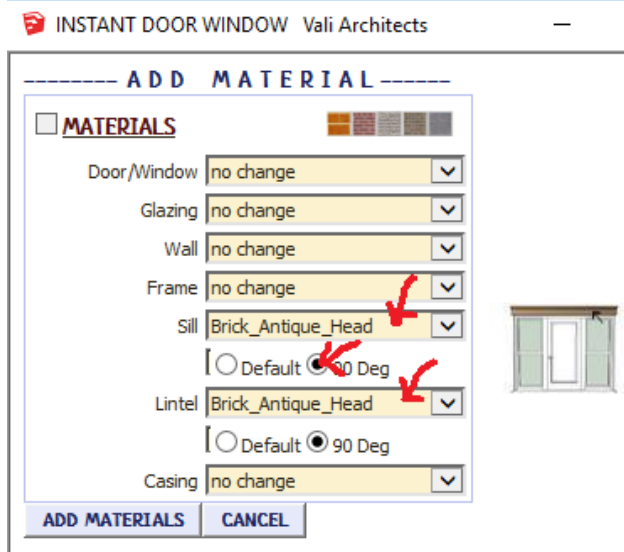


Brick Header Textures

In version 2.3 I added 4 texture patterns to use with Sketchup's brick materials. To load them into your model click *Load Vali Architects Brick Header Materials* as shown here:



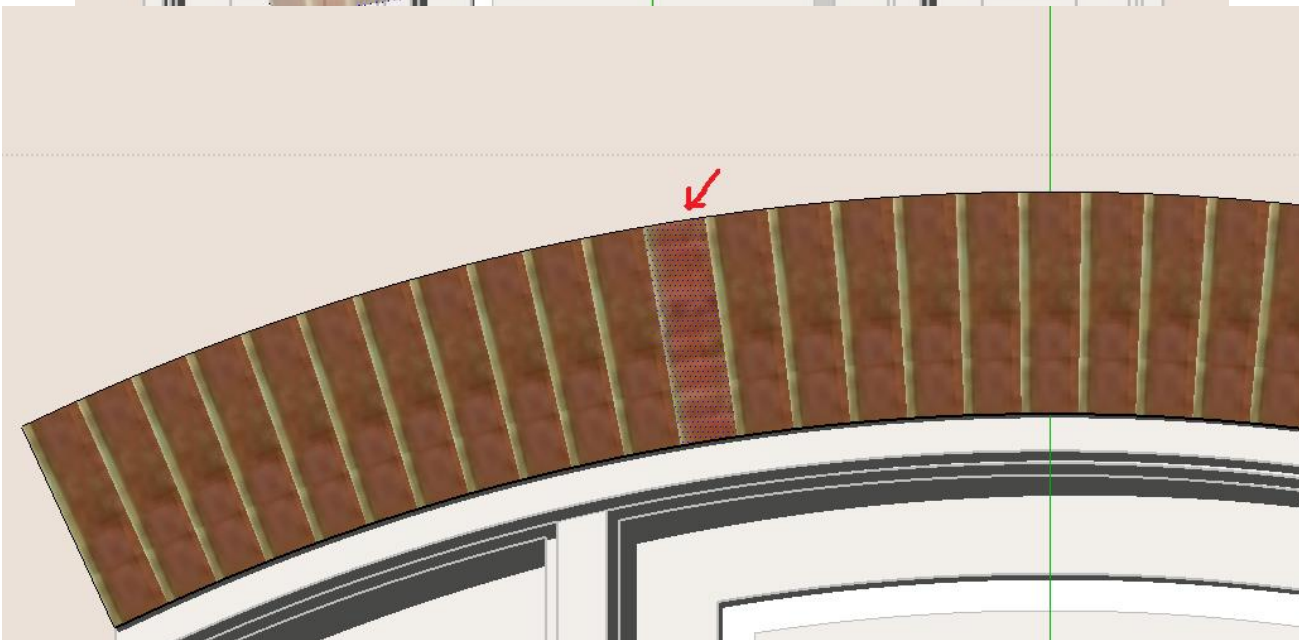
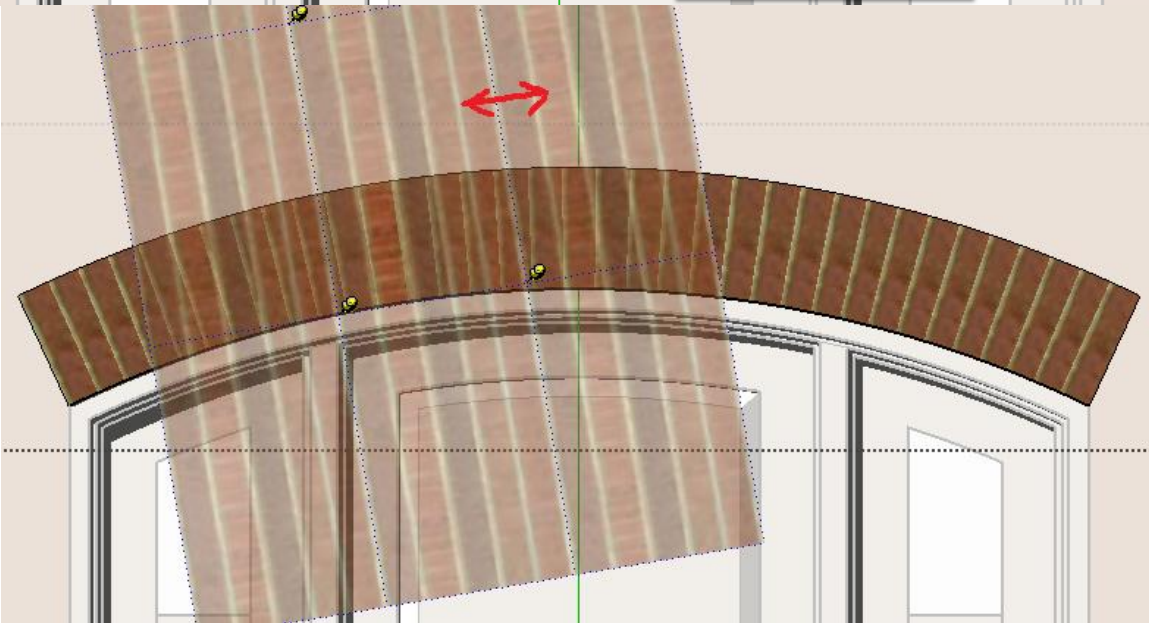
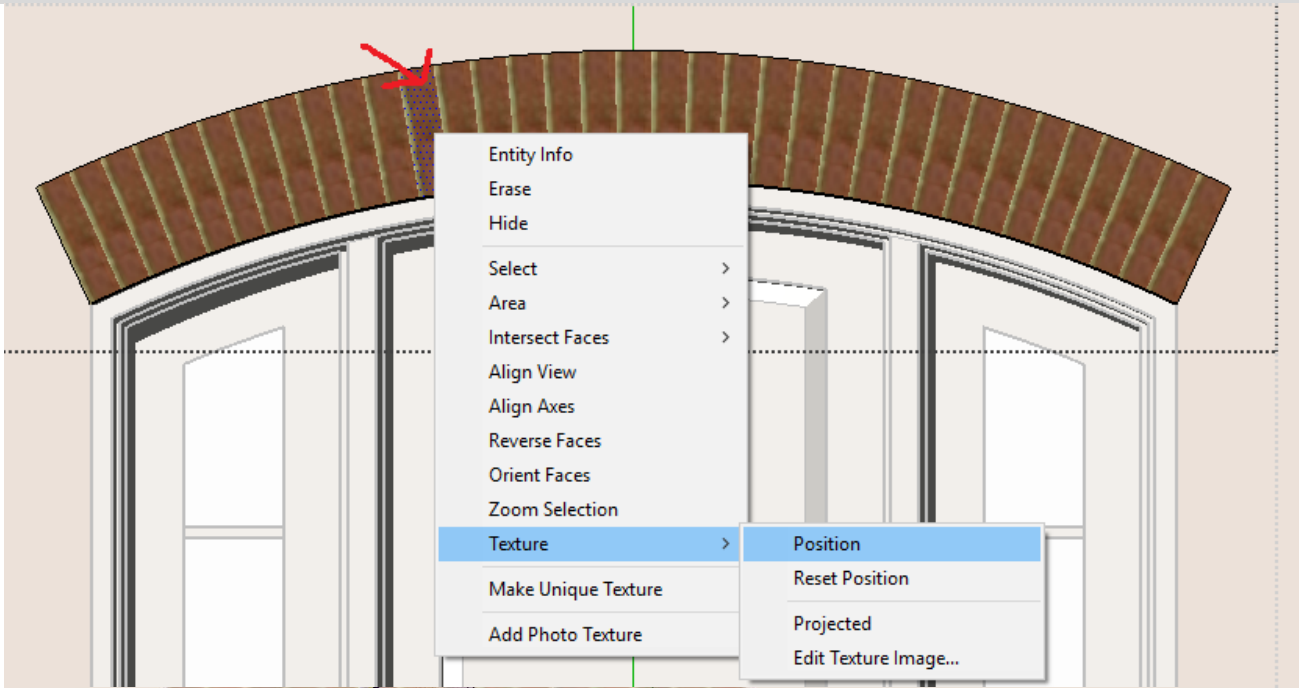
Then use them in the menu for lintels and sills similar to this:



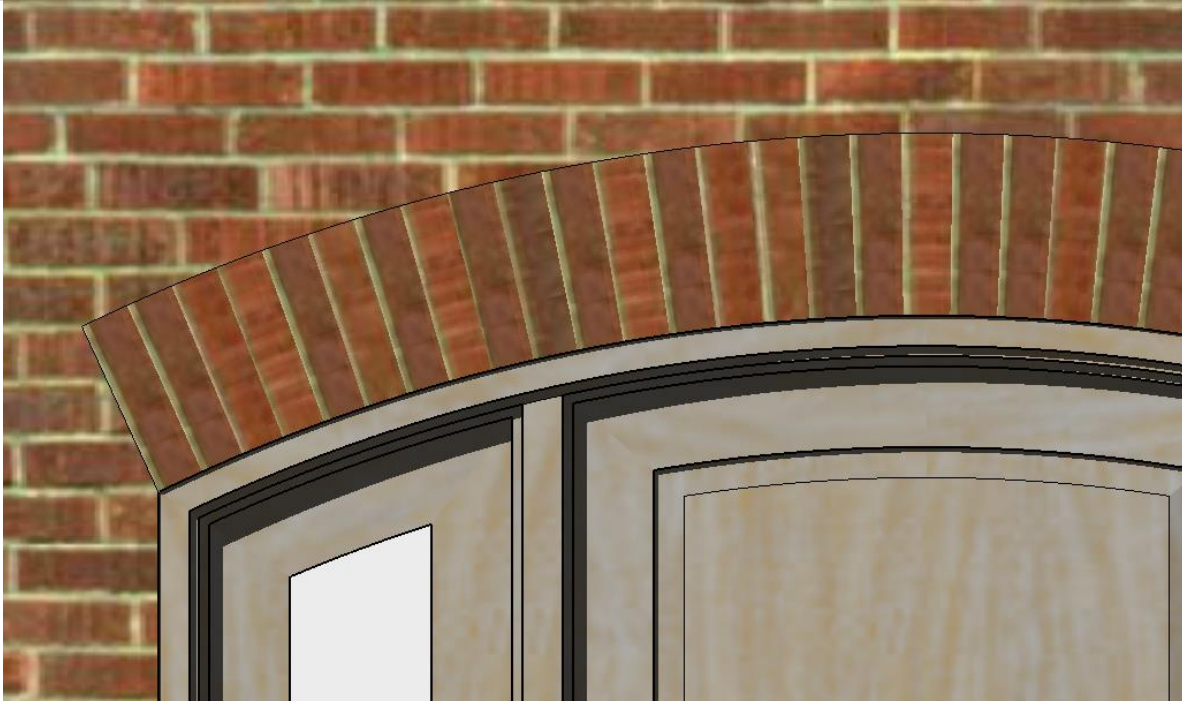
Here is the result. If you use the corresponding Sketchup brick material for the wall surface.



Note that the arch does not have a variegated pattern, so I edited some of the brick face texture positions. The pattern is already rotated for each brick face, so it is only necessary to shift the pattern.

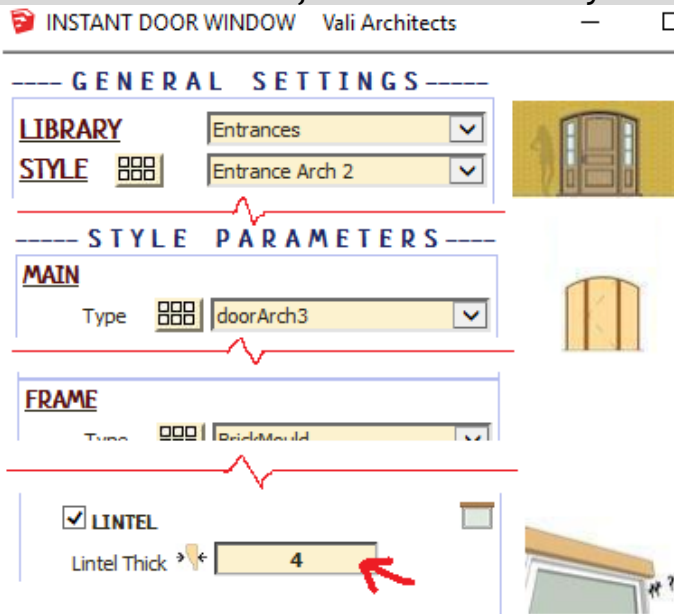


Here is the result. I shifted the pattern on about half of the brick faces:

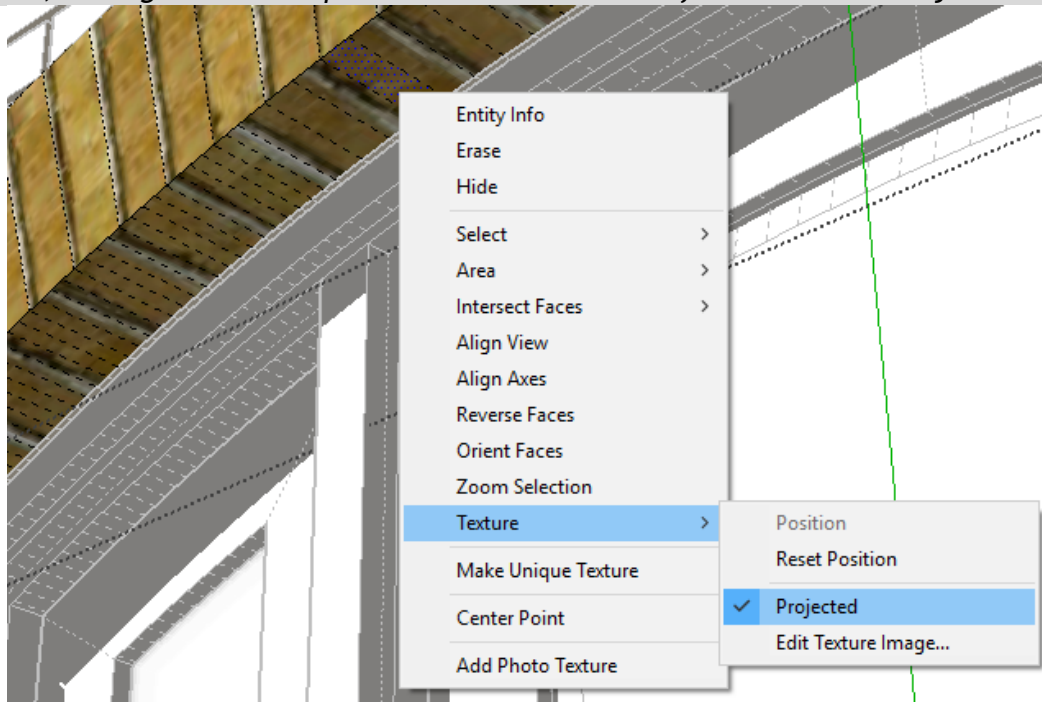


Thick Brick Arch Header

I also added the option to make a thick brick header for better use with my cladding plugin.



To improve the look, I changed the brick pattern on the underside of the header to Projected:





Here I used my Cladding plugin to thicken the wall by the same dimension as the header thickness. I used the "Solid" cladding type and painted it with the corresponding Sketchup brick pattern:






But my Instant Cladding plugin is not necessary for the brick inset look- it can be done with Instant Window alone as shown here. I set the inset depth parameter for the brick thickness and painted it with the same brick header texture.


FRAME


Type  BrickMould

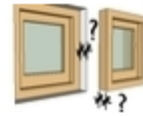
Depth  5"

Frame Thick  1/2"

Inset/Extension  4" 

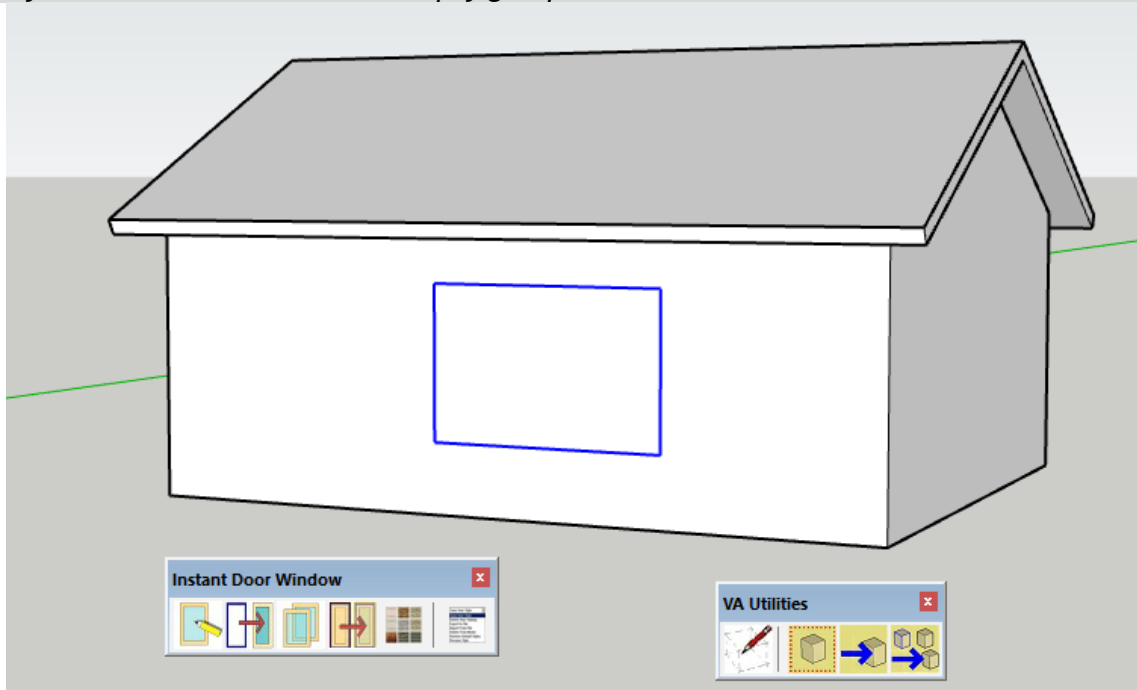
Trim Thick  3/4"


Trim Width  1 1/2"

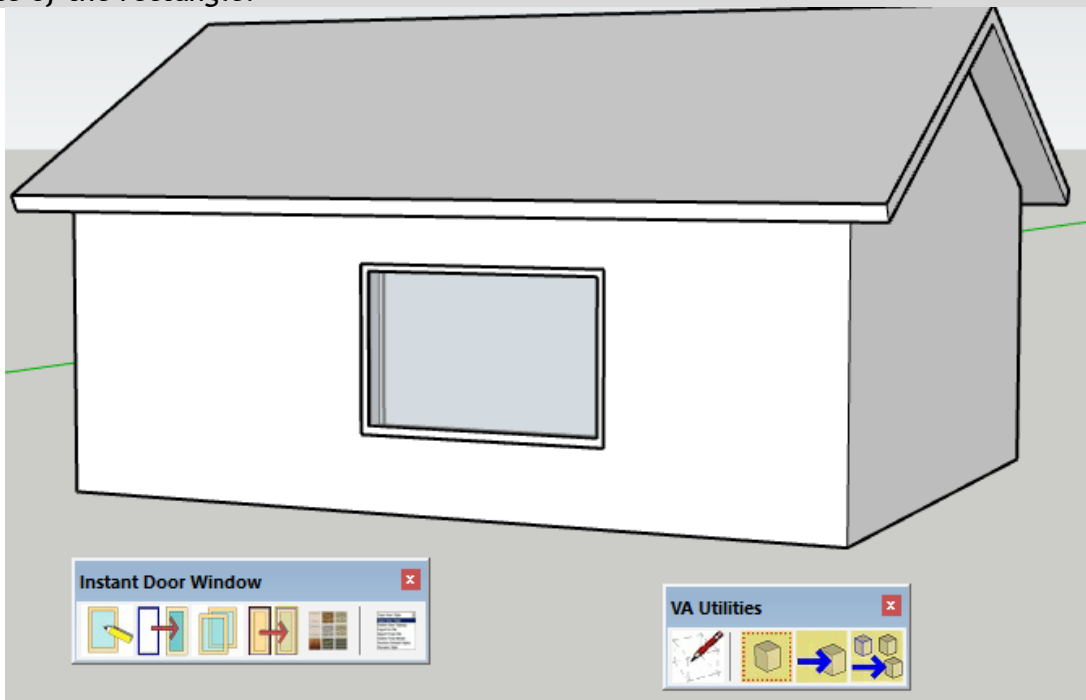


Make Door or Window from rectangle *New in Version 2.6*

To make an opening from a rectangle first make an empty group. Then open it and draw a rectangle or rectangular face within the group that is located on a wall face. (The face must be active and oriented properly or the door/window will be made backward) Use the Sketchup empty group tool or if using an older version of Sketchup use my Utilities tool to make the empty group.



Select the group plus the wall face and click the  icon. Choose parameters from the menu. (The size options will not be available but will be taken from the rectangle). Click 'Make Door Window'. The opening will be modeled in place of the rectangle.



Note that this method works for opening types that have a single row of doors or windows or the 'winMulled' type. Use of other types may lead to unexpected results