Instant Cladding Overview

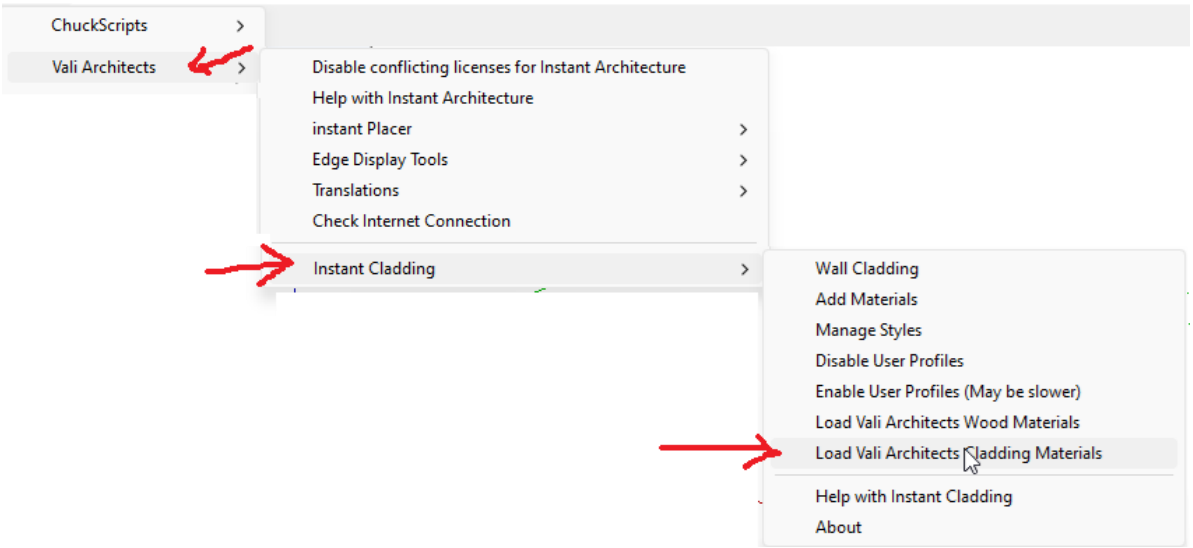
Please see Instant Cladding Parameters pdf tutorial for more information.

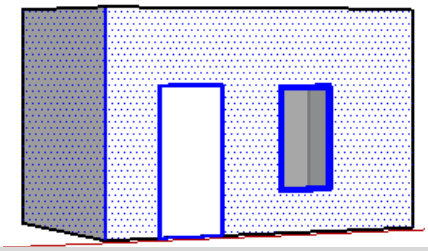
Features

- Multiple cladding location options: wainscot, 2 level, 3 level, gables.
- Cladding type options include stone, masonry, batten, bevel, plank, shingle, log, dovetail log, half log, corrugated metal, more...
- 23 scalable stone/masonry patterns
- 56 example preset styles
- Sample material textures are included
- Several moulding options for Base, Chair Rail, Crown, and Gable moulding or use your own profile.
- Materials can be added during creating the Cladding or added/changed after the creation. Textures are oriented to the cladding elements
- 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 for using this extension.

1 Basic Operation

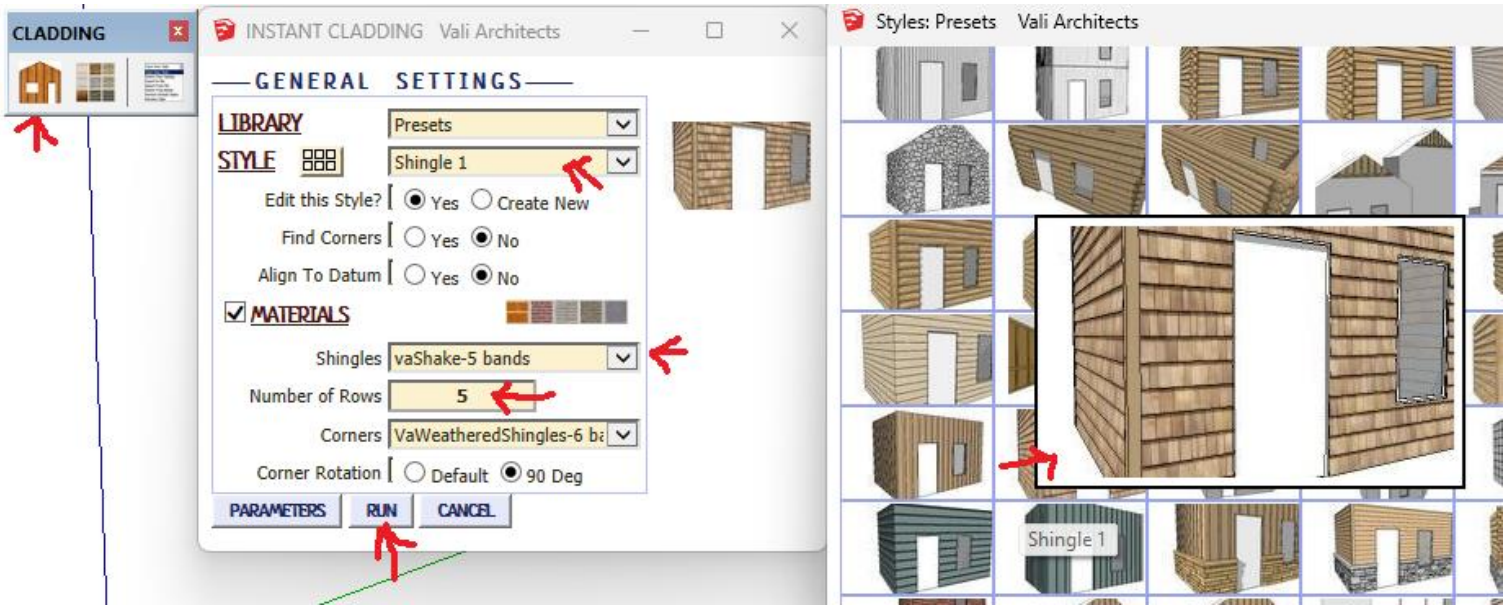
1.1 Load any materials you will be using into the model such as by painting an object using Skechup's materials browser. (To Load Vali Architects materials, click 'Plugins/Vali Architects/Instant Cladding/Load Vali Architects Materials)
1.2 Select one or more active vertical faces, any windows or door components that are glued to the faces, and any vertical corners between the faces.

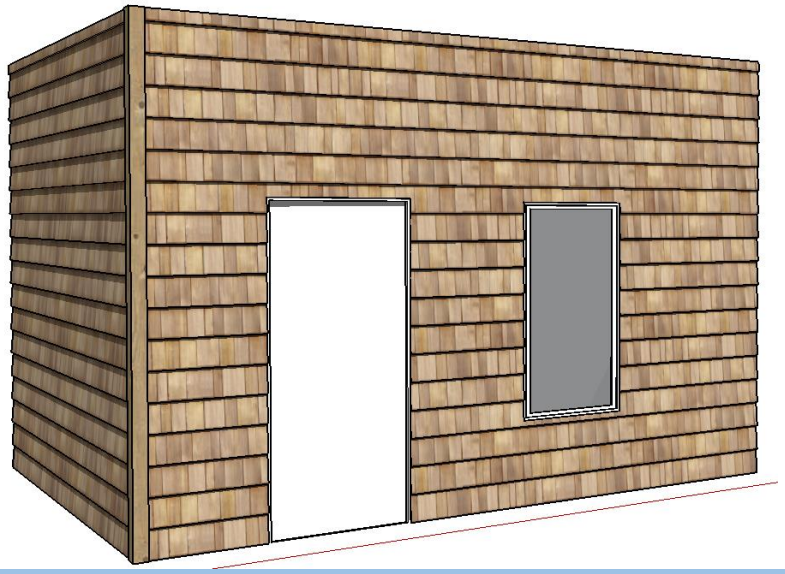




1.3 Click the  *icon to open the menu and do one of the following:*

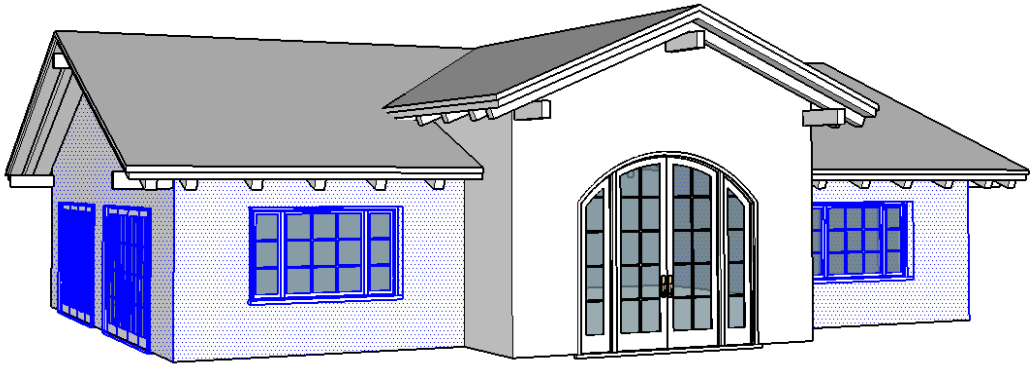
- *Styles are simply saved sets of parameters You can start with a preset style or a saved style you have used before, change parameters, and make a new style, or start from scratch. You should always rename a style after you make changes so you have a history. In this example I choose 'Shingle 1"*
- *Click 'Materials' and choose 'VaShake-5 band' Make sure that '5' is in the 'Number or Rows', click 'Run'.*



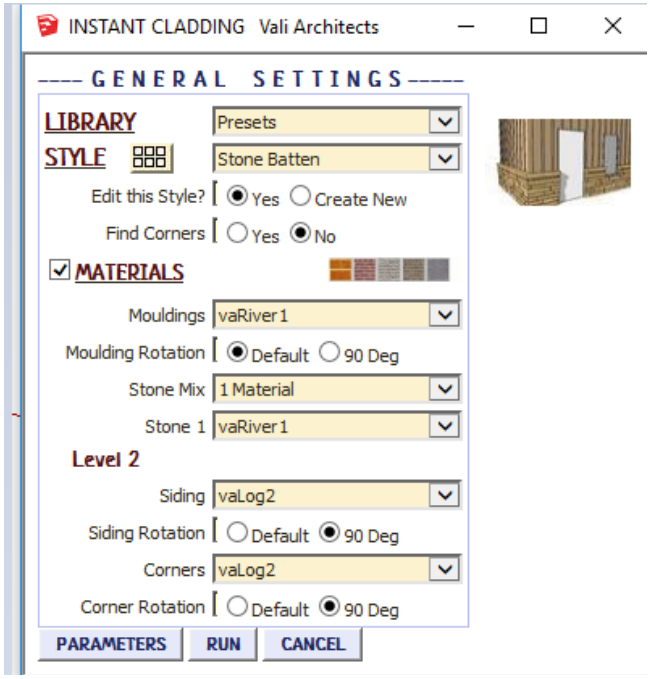


2 Mixing Façade types

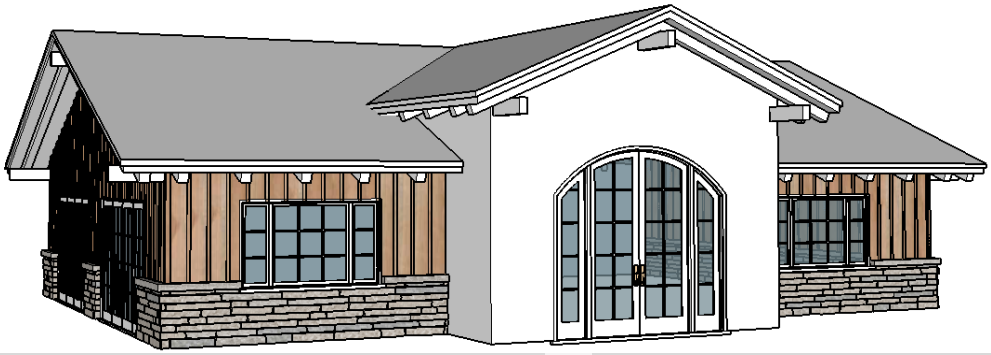
2.1 Different parts of a building can be run separately.In this example,I select all the exterior faces, corners, windows and doors except the main entry extension.



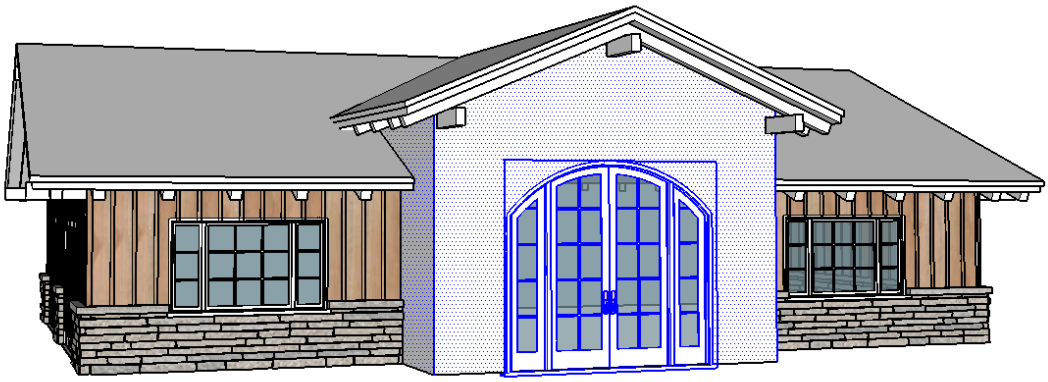
2.2 Click the  *icon and chose to make a cladding style with a stone wainscot.*



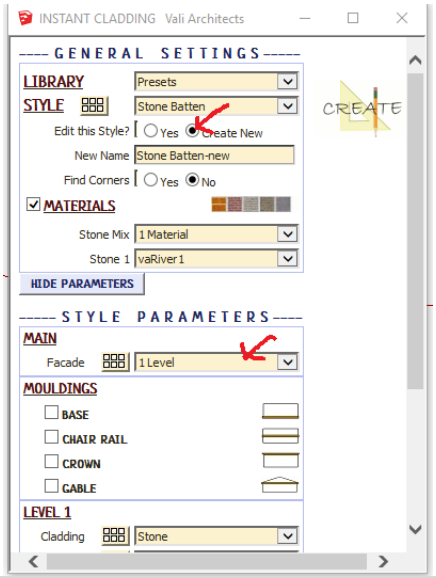
2.3 Click 'RUN'. Here is the result.



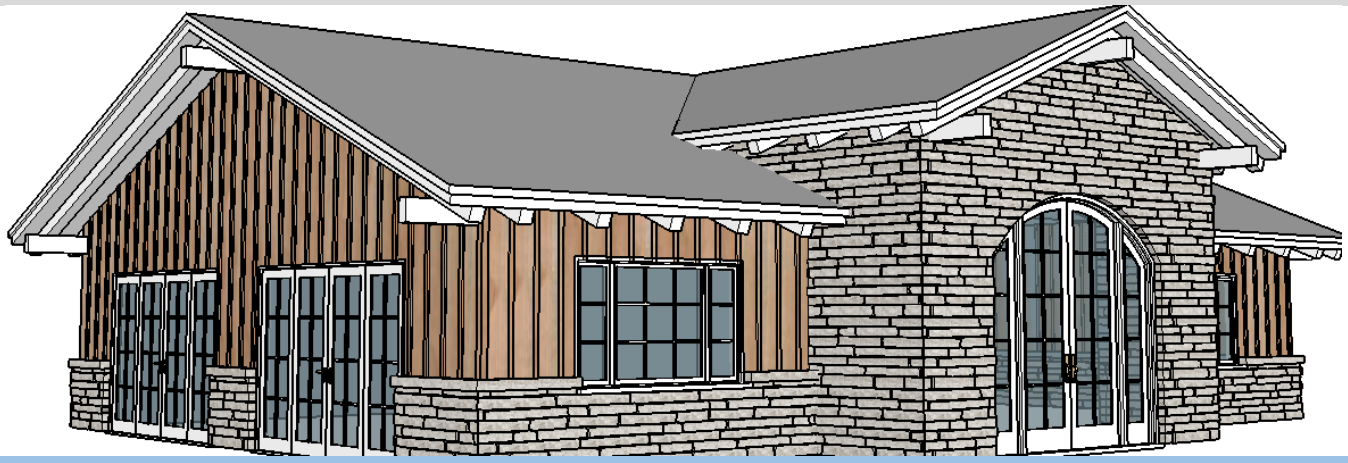
2.4 Select the front piece and entry door component and click the  *icon.*



2.5 Choose a different style. Here I make a new style from the one I just used by changing the Façade type to 1 Level.

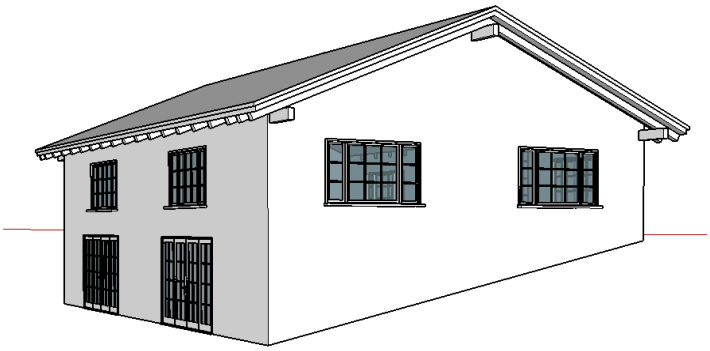


2.6 Here is the final result.

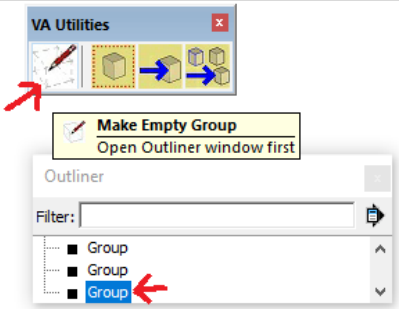


3 Change cladding type above Polyline

3.1 Cladding can be applied above or below a polyline or both. In this example I want the wainscot to step down a slope.

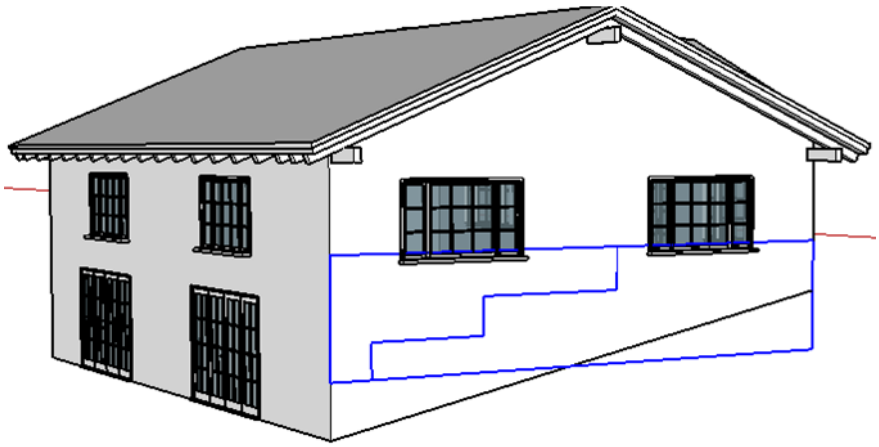


3.2 Make a group to hold the line or lines. You can make a group using basic Sketchup tools or use the included VA Utilities toolbar as follows: Click the 'Make Empty Group' icon, and then in the Outliner window, double click the new empty group to open it.

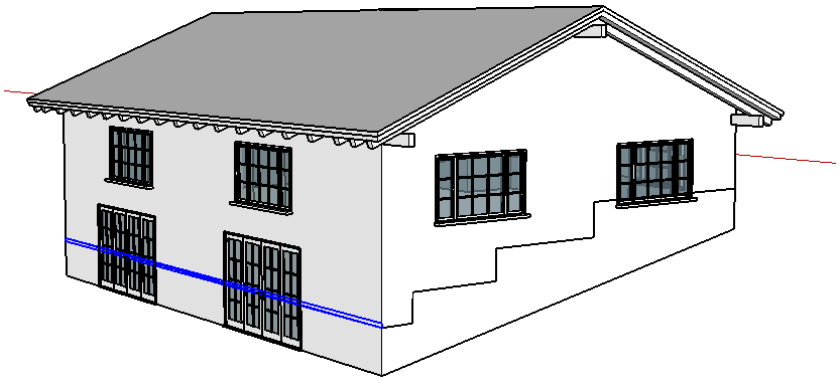


3.3 Draw a line or several connected lines across the face. The polyline should be continuous and extend from wall edge to

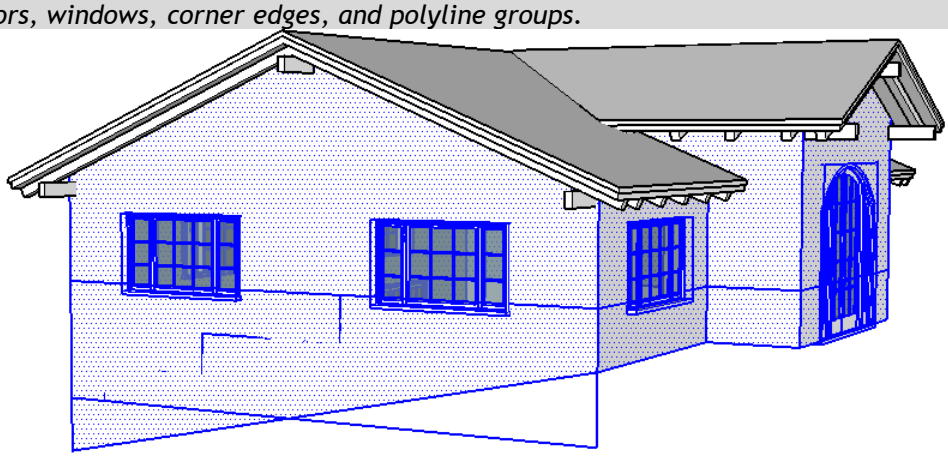
wall edge. Close the group.



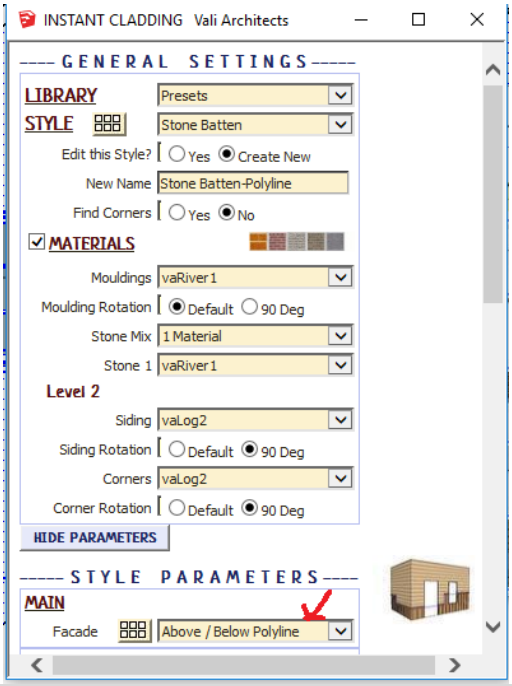
3.4 Each wall needs to have its own group and polyline so I repeat the process for each wall. If a selected face is not given a polyline group, the cladding type for the upper section will be applied to the wall only.



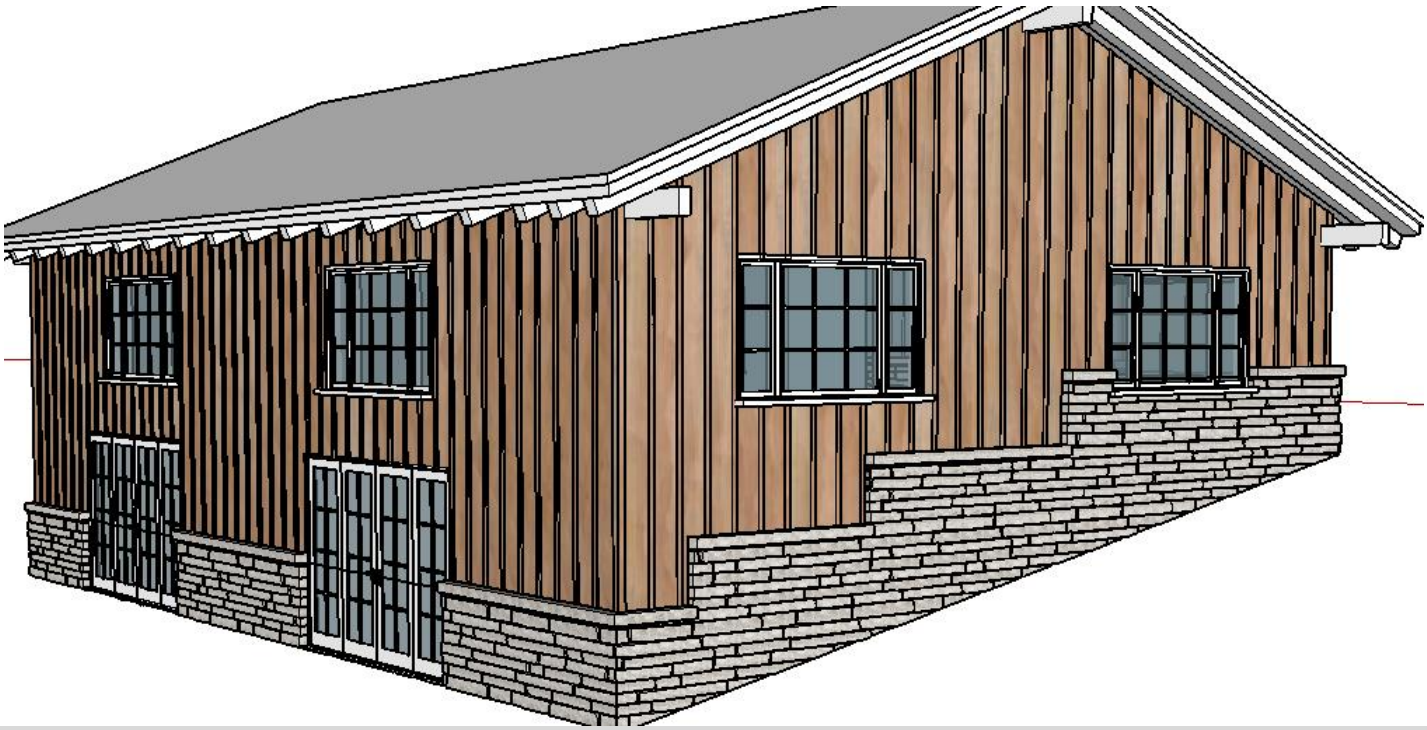
3.5 Select the walls, doors, windows, corner edges, and polyline groups.



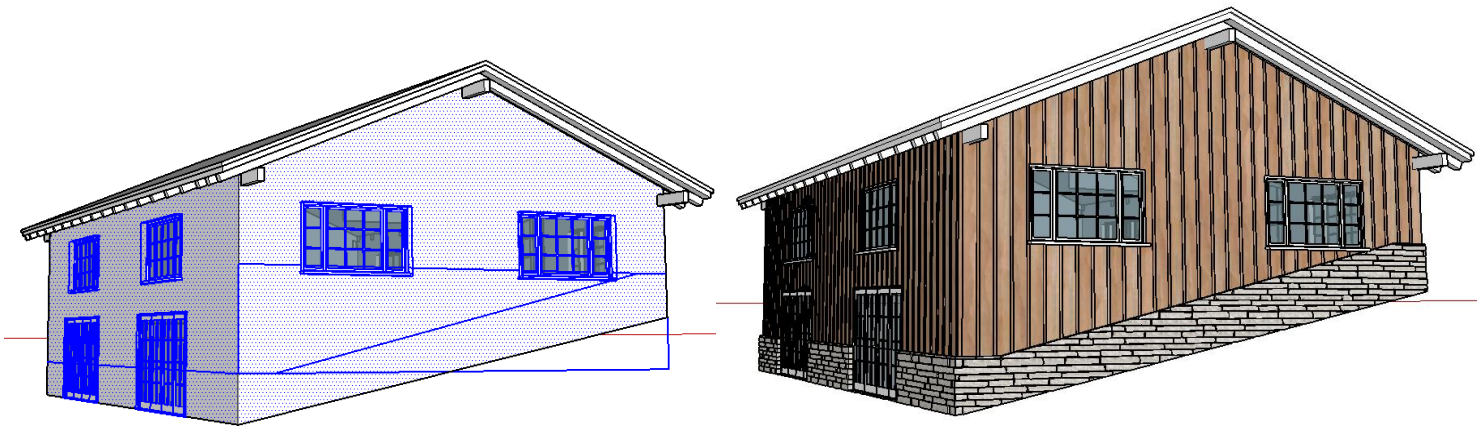
3.6 Click the  *icon and create a new wainscot style by changing the Façade type to 'Above/Below Polyline.*



3.7 Click 'RUN'. Here is the result.

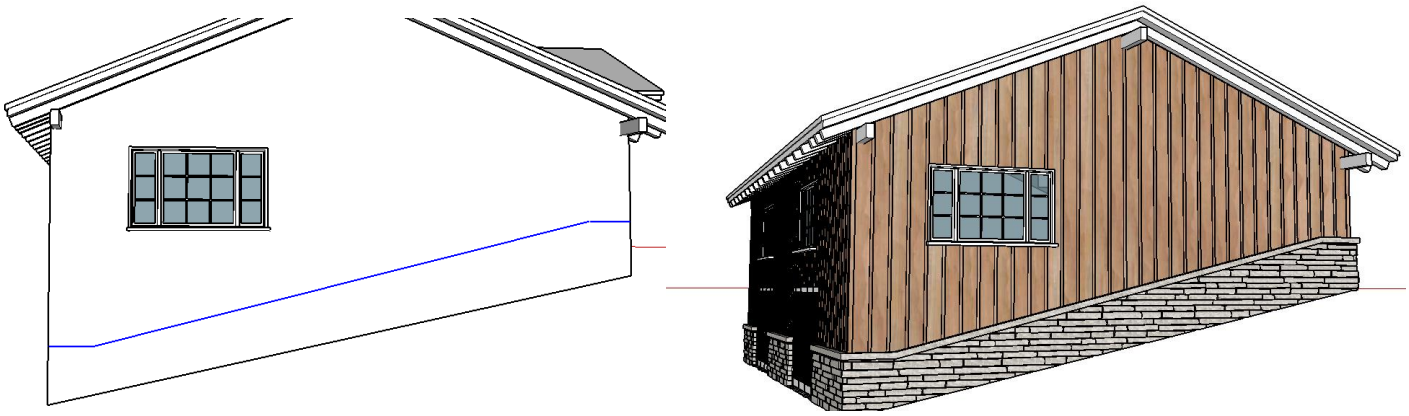


3.8 A sloped polyline will work also, however mouldings are intended to be horizontal, so I turned off Chair Rail.



3.9 If a chair rail moulding is desired where there is a sloped polyline, the following conditions should be observed:

- *Make a horizontal segment for the sloped polyline at each end of the wall*
- *Do not have any doors, windows, cutouts, etc. along the alignment of the moulding. The wall face should be continuous at all points along the polyline. (it is OK to have cutouts above or below the moulding)*

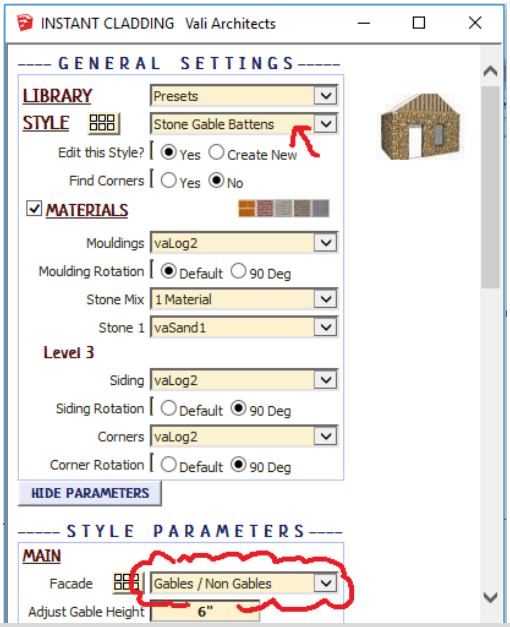


4 Gables

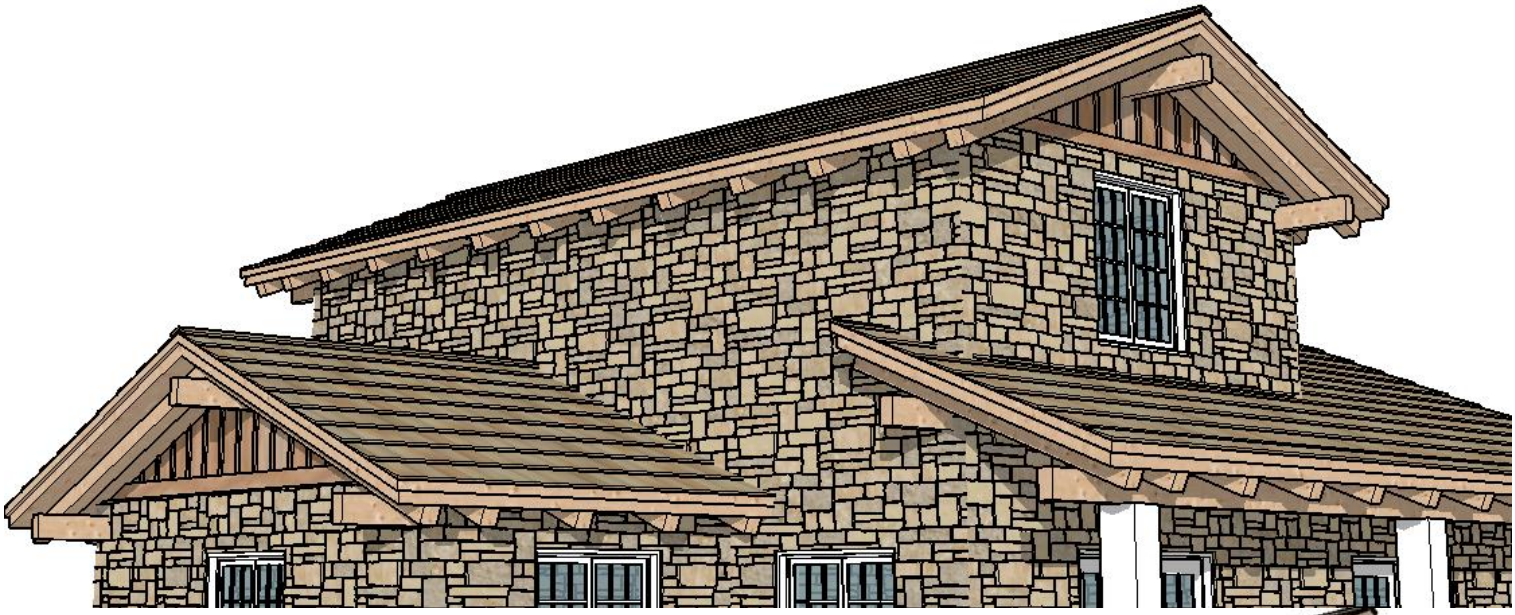
4.1 Gables can have a different cladding. This can be accomplished using drawing polylines similar to lesson 3 above, or the extension can look gables. Start by selecting all faces, corners, doors and windows.

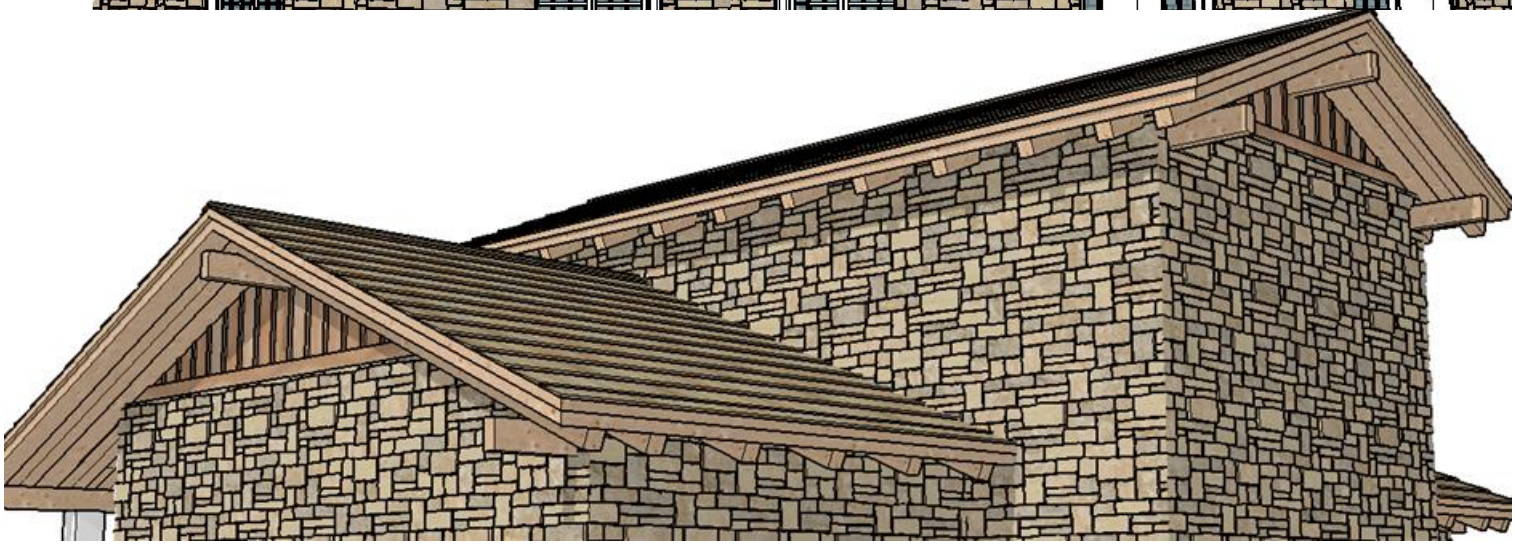


4.2 Choose a preset style such as Stone 'Gable Battens' or make you own gable style by selecting 'Gables/Non Gables' for the Façade type. Click 'RUN'



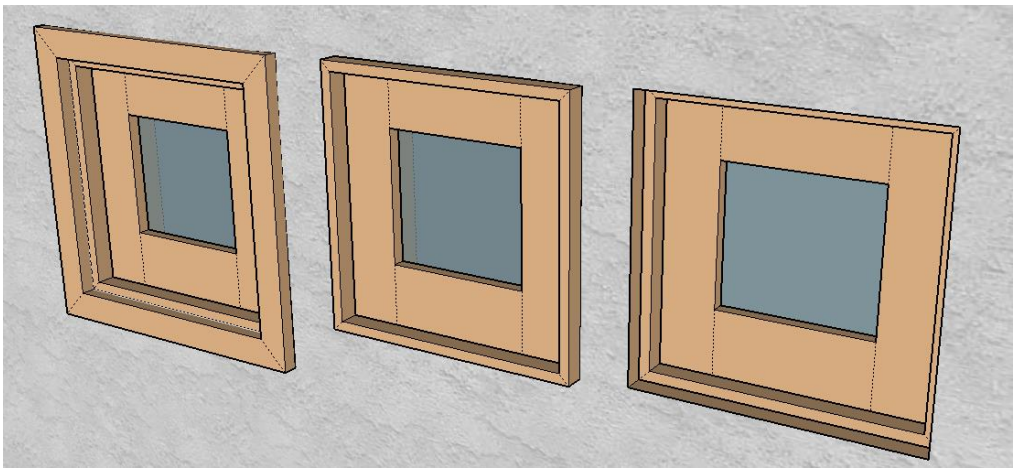
4.3 Here is the result. The script located the gables and placed batten siding on them. It placed stone elsewhere. (Because of the amount of mitered stone, this took a very long time for my computer to model. I should have changed the stone corner type to Overlap to make it faster)

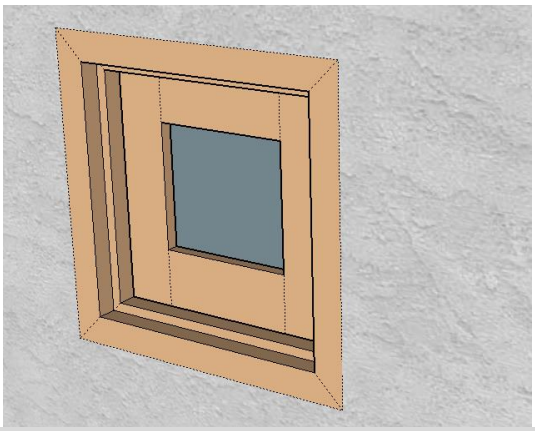




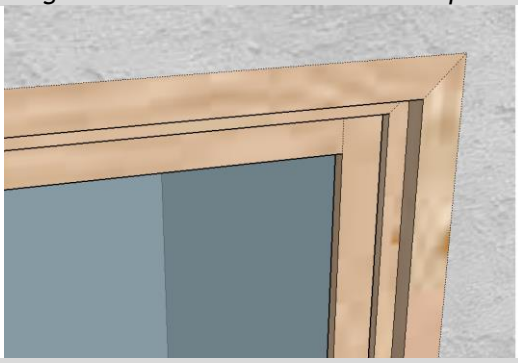
5 Cutting around glued components (windows and doors) *If using my Instant Door and Window plugin, version 2.2 has been updated to work better with Instant Cladding*

5.1 For the cladding to cut around a component, it should have surrounding faces where it cuts the wall as shown in the first image below. The flush in the next image may not always cut the cladding.



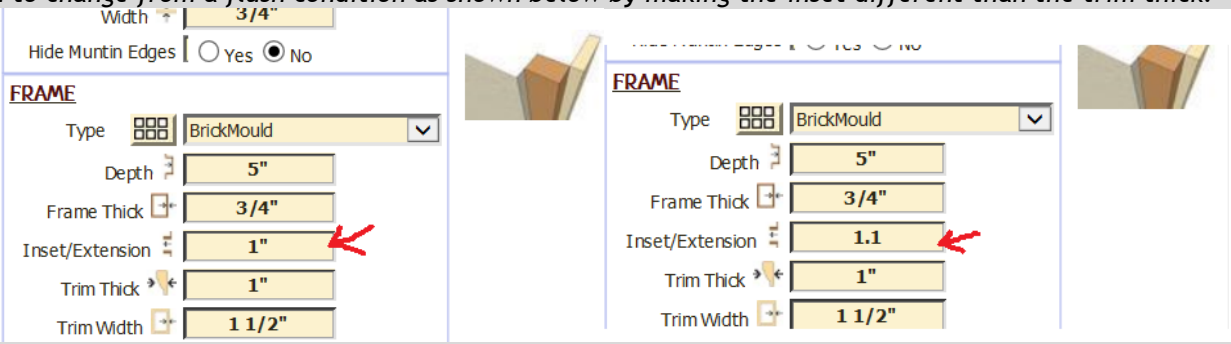


5.2 If your window component has a flush surround, use the push/pull tool to either move it inward or outward a small amount. The cladding should then cut around the component properly.



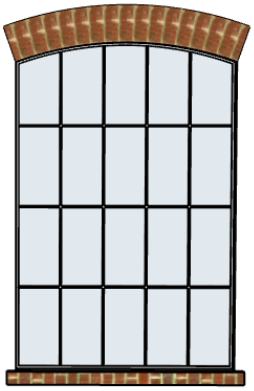


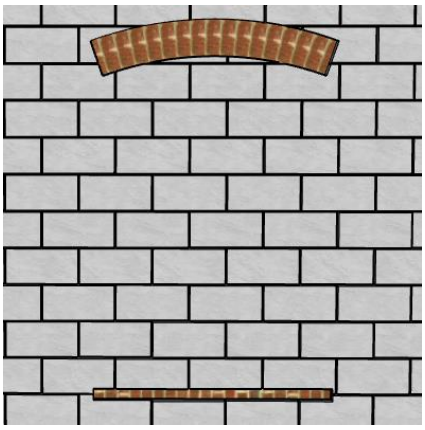
5.3 I tested some door/window components downloaded from the warehouse and the cladding cut around successfully. However, some of the preset door and window styles from my Instant Door and Window extension have a flush surround and will not always cut the cladding.(Example: Win W7040). This can be corrected by the method shown above, or the style can be modified to change from a flush condition as shown below by making the inset different than the trim thick.

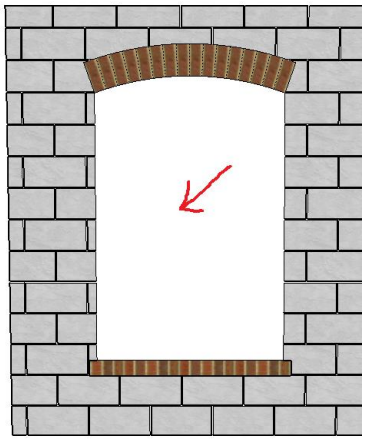


5.4. This plugin employs extensive use of Sketchup's built-in 'intersect with' method which can sometimes fail to intersect everything. This can result in a window getting filled in as shown in the middle image below. (It can also happen that the window cuts the cladding but the 'Grout' does not. If this happens, you can either delete the grout or continue with the

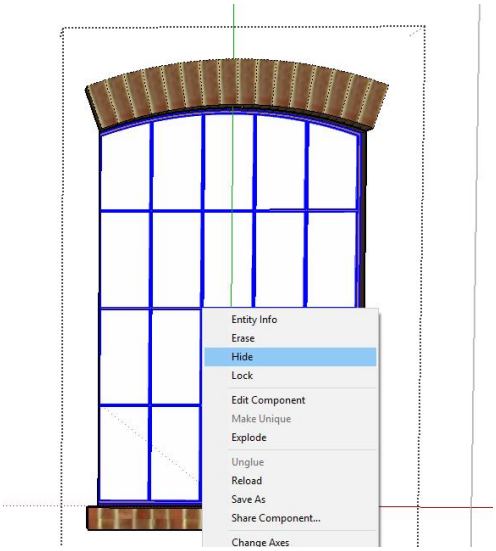
options starting in 5.5.)

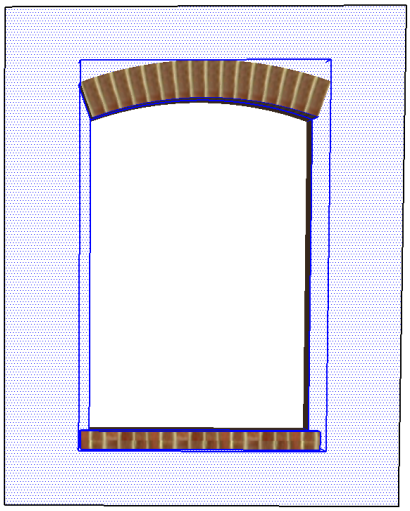


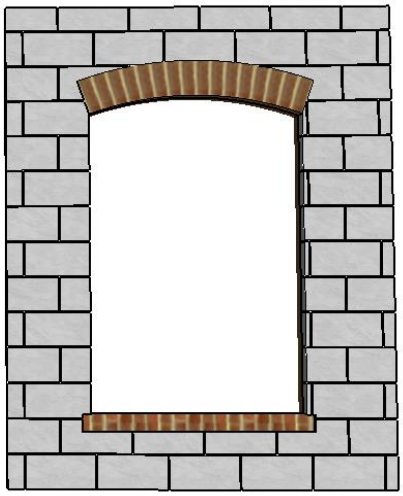


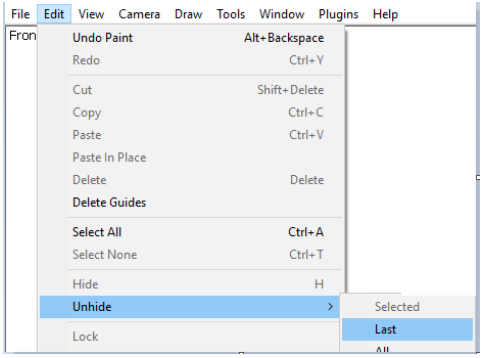


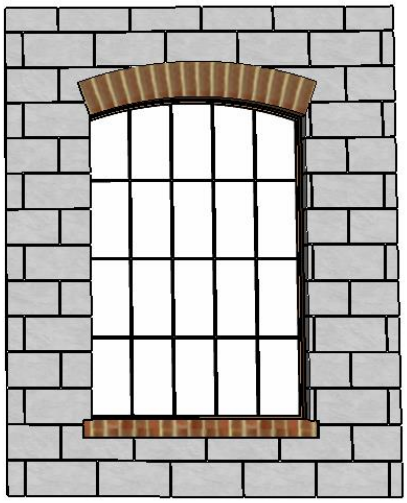
5.5 The most reliable way to exclude an area from cladding is to simply draw a line around the opening and exclude the interior face from the selection. But for a more complicated shape that a rectangle, the following can sometimes help Sketchup intersect properly.
Hide window elements such as any muntin groups. This will reduce the amount of intersections that Sketchup needs to do. After running Instant Cladding, unhide the muntin groups.





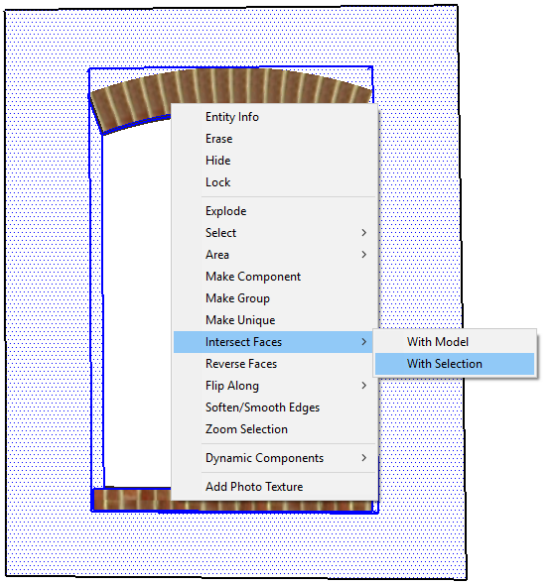




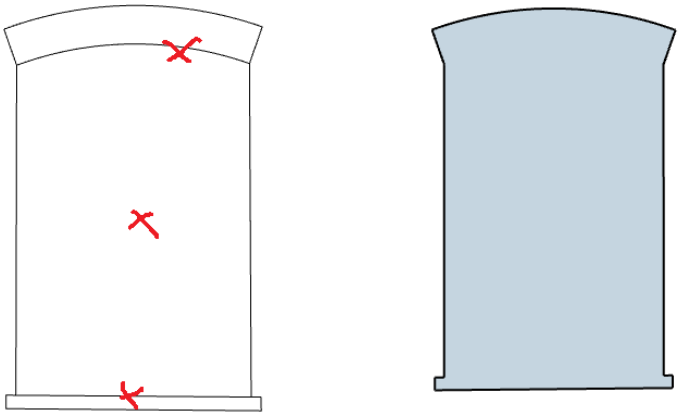


5.6 Other things to try include moving the door/window component slightly or erasing and reinserting the window/door component. Then run Instant Cladding again.

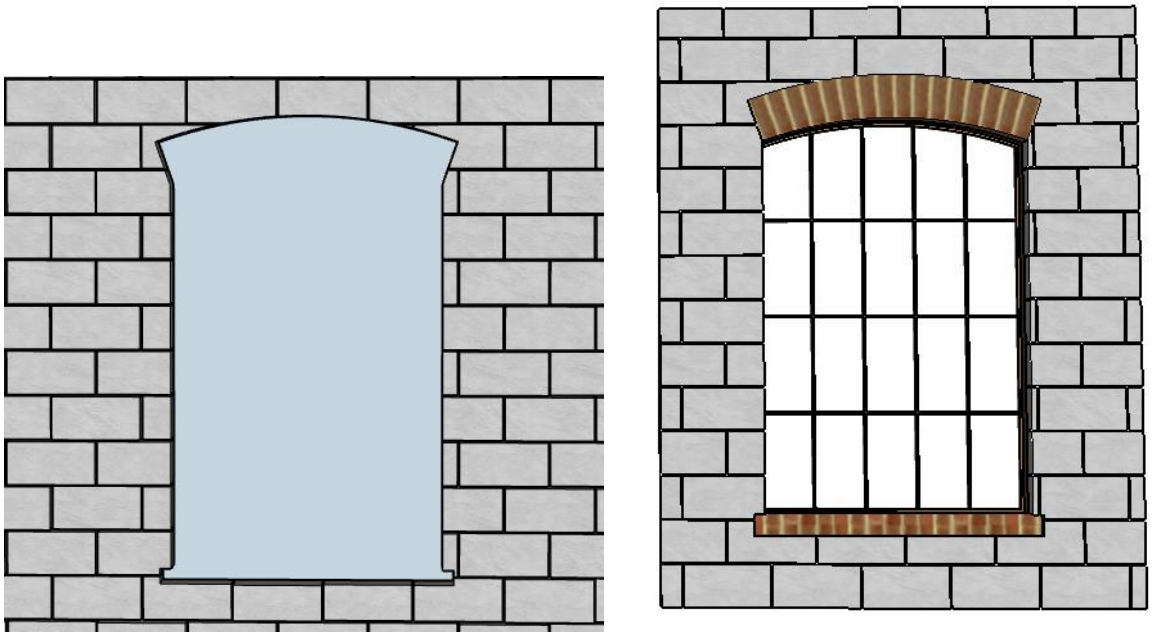
5.7 If the above steps fail to cut the cladding, it may be necessary to manually intersect the door/window. First hide any muntin groups in the window/door components. Then select the windows/doors and the wall face and use Sketchup's 'Intersect Faces with Selection' tool.



5.8 Then hide the component and edit/or erase faces and lines so the wall face so there is a clean cut out:



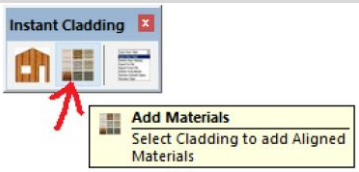
5.9 Select the wall and run Instant Cladding. Finish by unhiding the door/window and then unhiding the muntin group.



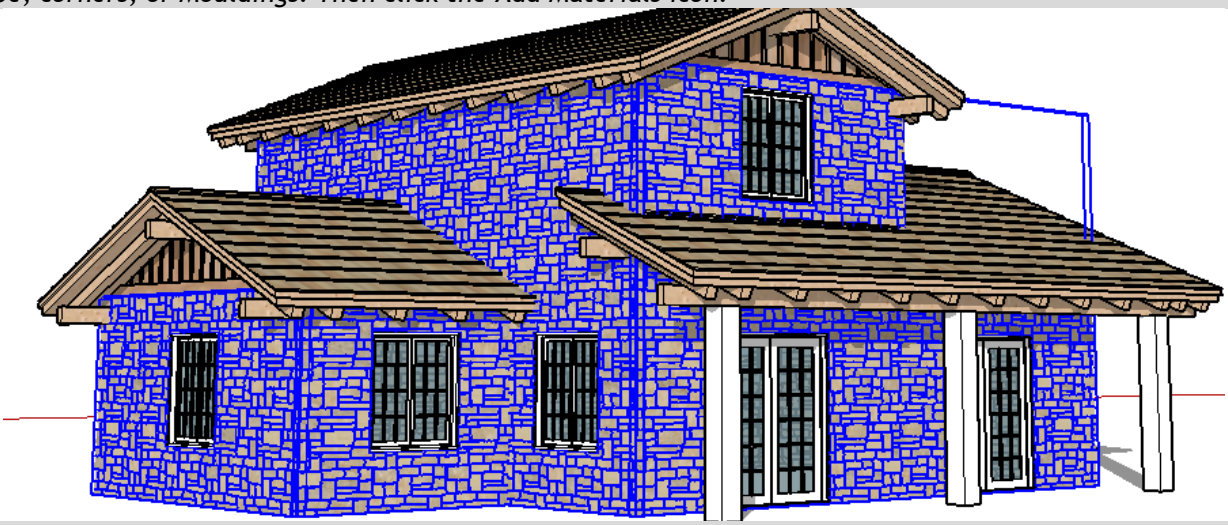
6 Changing or adding Materials *Materials can be added or changed after the cladding has been modeled*

6.1 Load materials as in Step 1.1 above.

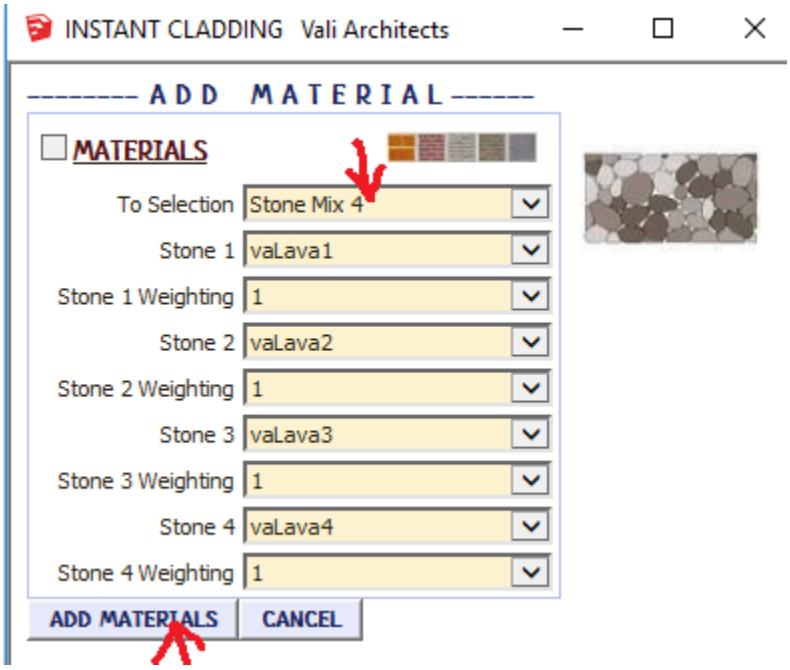
6.2 Select a group or groups containing a type of cladding. (All the groups selected should include the same type such as stone, battens, corners, mouldings, etc). Then click the Add Materials icon.



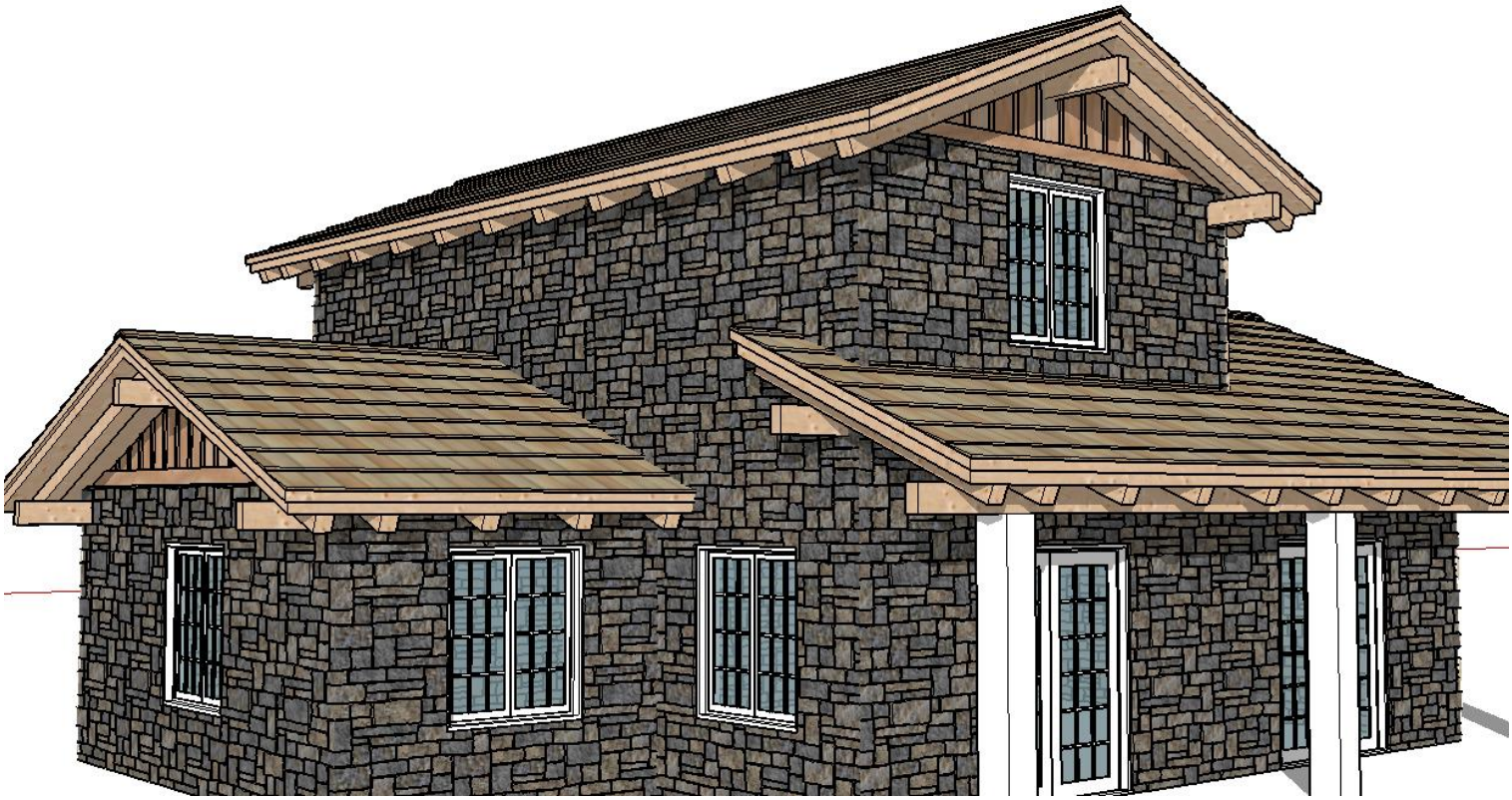
6.3 Materials can be added or changed after the cladding has been modeled. Select the group or groups containing a cladding type, corners, or Mouldings. Then click the Add Materials icon.



6.4 Set the type of Cladding in the 'To Selection' parameter. Choose the desired materials. Here I changed to a random mix of 4 lava textures.



6.5 Click 'ADD MATERIALS'. Here is the result.



7 Material texture maps with rows.

There are 2 cladding types that can use material textures that have rows, 'Shingles' and 'Shingles Corner Trim'. You can use any texture material, but you must enter the number of rows in the icon shown in Sketchup Materials tool. I've included 3 with the extension as examples and list the number of bands to use in the title.

7.1 Follow steps in 1 above.

7.2.Choose a material such as VaLiveEdge-11 bands, enter '11' I the numbe of rows box, and run the plugin.

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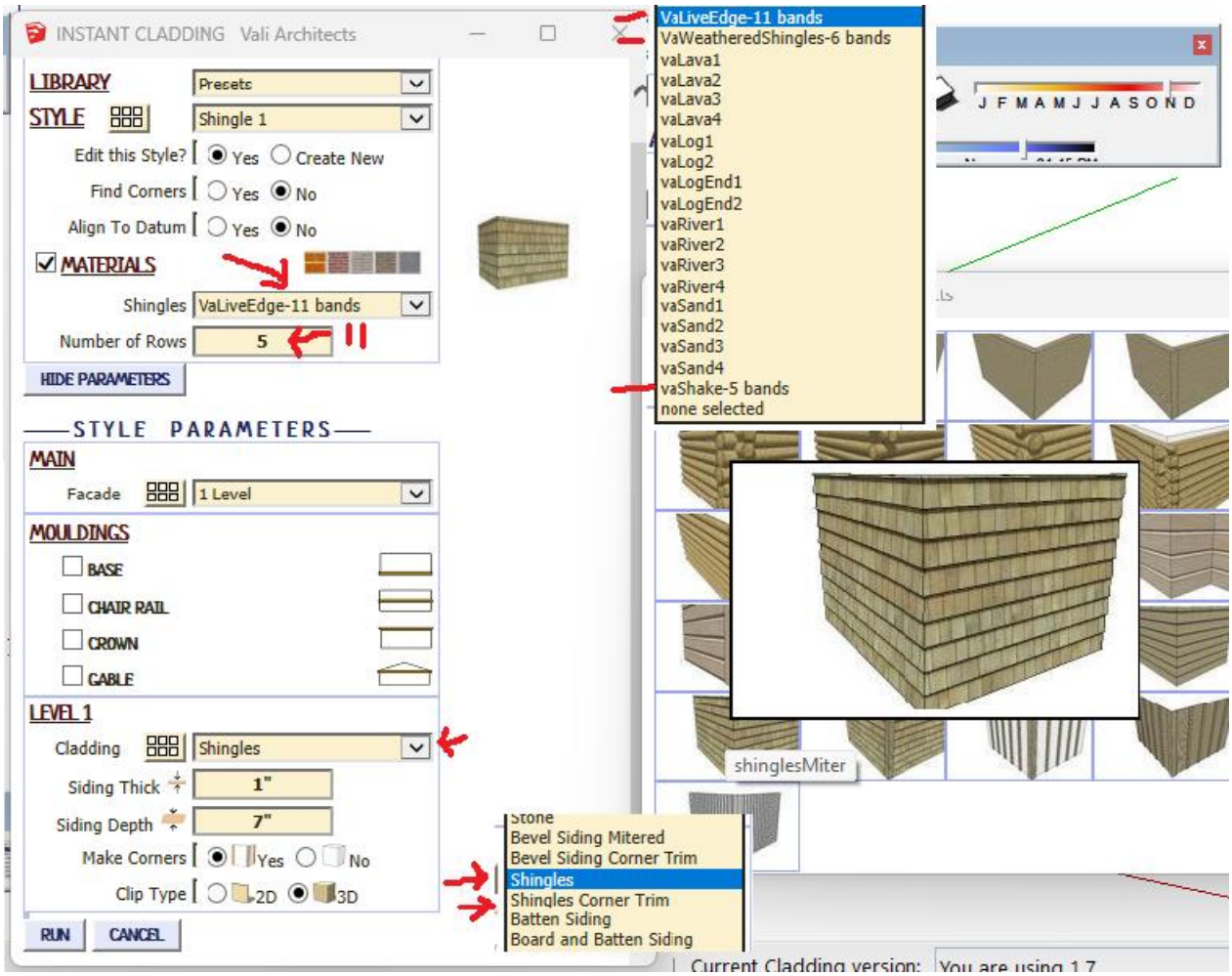
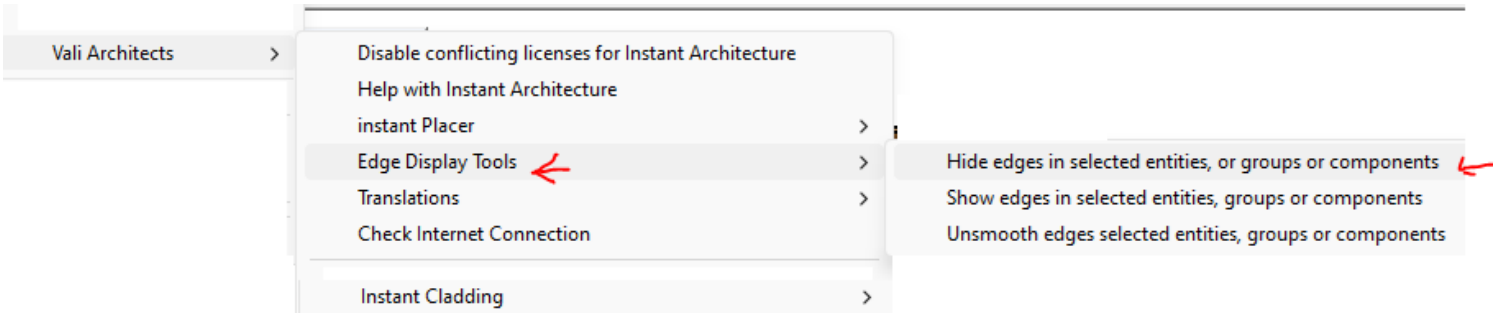


7.2 Here is the result. For the Live Edge texture, it doesn't actually wiggle the edges, it simply arrays the texture rows on to the siding shape.



7.3 For a better looking result for this and many other cladding types, it might help to turn hide the edges using a tool I included in recent versions. Select the cladding group and click <Extensions/Vali Architects/Edge Display Tools/Hide edges…>



7.4 This way the colors and shadows will be more pronounced that the straight edges in the cladding geometry. You may wish to paint the wall face surface a dark color because Sketchup sometimes shows light lines if you leave it a light color.



7.5 Here is an example of the VaWeatheredShingle material with hidden edges and shadows

