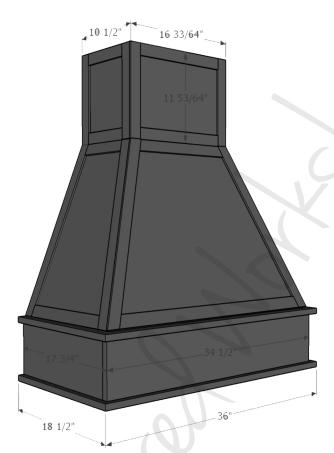
DIY Vent Hood for 30" Insert



Materials:

- -5-2x2x8
- -1 1x6x8
- -2 1x2x8
- -1 4x8 sheet of 1/4" plywood
- -5 1/4" x1 1/2" x8 ft. lattice strips
- -1 2x4 sheet of 3/4" plywood

Cut List:

- -4 2x2 @ 33" (bottom frame -top and bottom boards)
- -4 2x2 @ 14" (bottom frame -side boards)
- -4 2x2 @ 4 3/4" (bottom frame vertical boards)
- -4 2x2 @ 15 1/2" (top frame top and bottom boards)
- -4 2x2 @ 7" (top frame side boards)
- -4 2x2 @ 9" (top frame vertical boards)
- -2 2x2 @ 24 11/16" (middle frame front angled boards) mitered at 20.7 degrees off square, and beveled at 17.7 degrees off square
- -2 2x2 @ 23 43/64" (middle frame back angled boards) mitered @ 21.7 degrees off square
- -1 3/4" plywood @ 33"x14" with cutouts
- -2 1x2 @ 36" ends mitered at 45 degrees off square, ends not parallel
- -4 1x2 @ 18 1/2" one end mitered at 45 degrees of square
- -1 1x6 @ 34 1/2" ends beveled at 45 degrees off square, ends not parallel
- -2 1x6 @ 17 3/4" one end beveled at 45 degrees off square
- -2 1/4" plywood pieces @ 10" x 11 29/32"

Cut List (cont)

- -2 1/4" plywood pieces @ 16 1/64" (bottom) x 11 29/32" (top)
- -1 1/4" plywood pieces @ 33" x 15 1/2" bottom to top measurement of the front bottom piece
- -1 1/4" plywood piece @ 16 1/64" x 11 29/32" front top piece

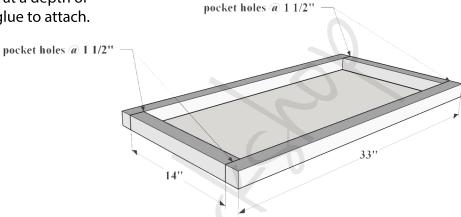
LATTICE:

Sides:

- -2 strips @ 23 21/32" (long sides back)
- -2 strips @ 24 37/64" (long sides front) ends mitered
- @ 16.1 degrees off square
- -2 strips @ 7 7/32" one end mitered @ 16.1 (sides lower top)
- -2 strips @ 13 3/4" one end mitered @ 16.1 (sides lower bottom)
- -4 strips @ 7 1/4" (side top top and bottom)
- -4 strips @ 11 29/32" (side top front and back) Front:
- -2 strips @ 24 1/2" ends mitered @ 20.7 degrees off square (front long sides)
- -1 strip @ 14 33/64" ends mitered @ 20.7 degrees off square (lower top)
- -1 strip @ 33 23/32" ends mitered at 20.7 degrees off square (lower bottom)
- -2 strips @ 11 29/32" (top sides)
- -2 strips @ 13 33/64" (top top and bottom)

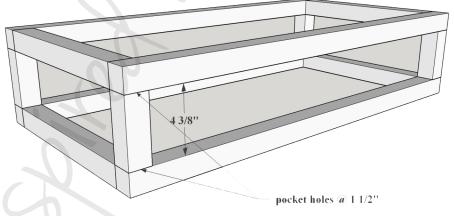
Step 1:

Build the bottom frame. You will need to build two of the rectangles shown. Use pocket holes drilled at a depth of 1 1/2", along with 2 1/2" screws and wood glue to attach.



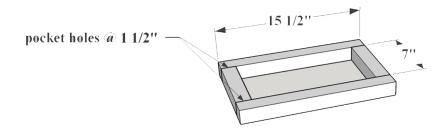
Step 2:

Attach the two rectangles from step 1 using the 2x2s @ 4 3/8", drill 1 1/2" pocket holes and use 2 1/2" screws...make sure and use wood glue as well.



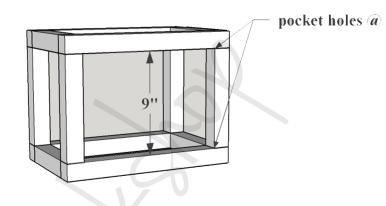
Step 3:

Build the top frame. Build two rectangles the same as shown. Use 1 1/2" pocket holes, 2 1/2" screws and wood glue to attach.



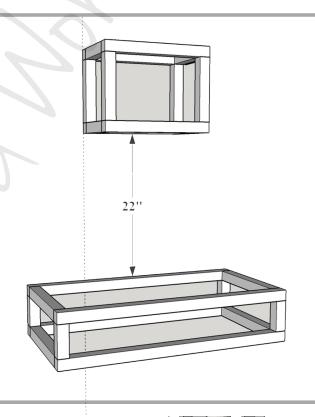
Step 4:

Attach the two rectangles together from step 3 using the 2x2s @ 9". Same pocket holes, etc.



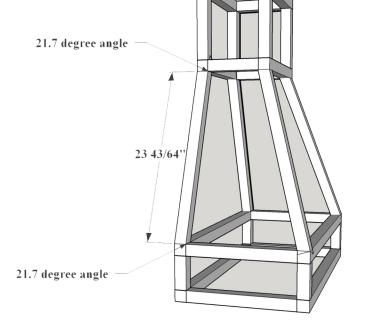
Step 5:

Attach the large bottom frame and the small top frame to the wall using large screws and make sure to drill holes in tile first if it will be mounted over tile (see blog post). There should be 22" between the two of them.

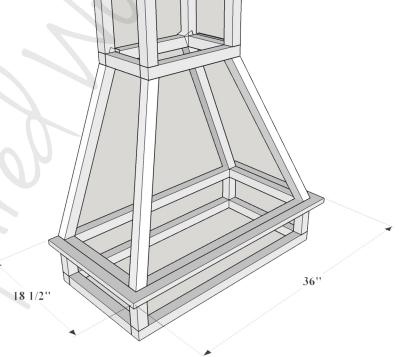


Step 6:

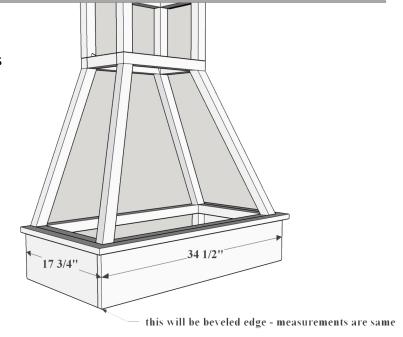
Add the middle boards to connect the two frames! These are some very tricky boards! The front boards are compound angles, leaning both inward and backwards! You will not be able to use pocket holes, so I used wood glue and 2" brad nails to attach.



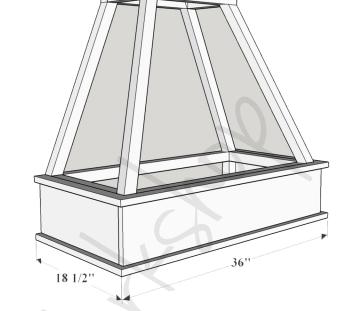
Step 7: Add the first of two 1x2s around the edge of the bottom frame. this is just brad nailed with 2" nails and wood glue. Front ends are mitered at 45 degrees of square.



Step 8: Add the 1x6s below the 1x2 added in the last step! Again, just using brad nails and wood glue! The 1x6s are beveled on the front @ 45 degrees off square. I know the board shown isn't beveled but the measurements are for them being beveled!

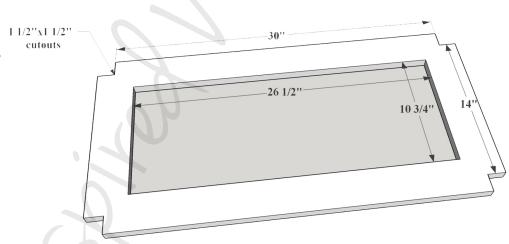


Step 9: Add the bottom 1x2, it is the same as the top 1x2 added earlier! It is flush with the 1x6.

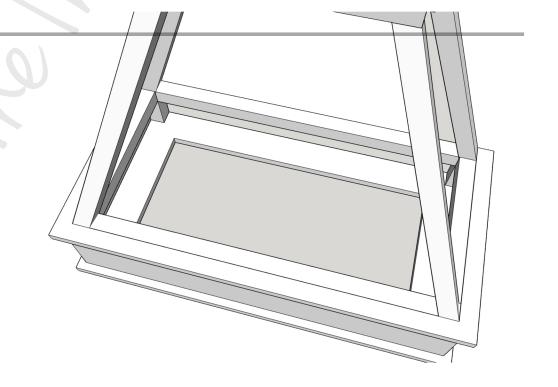


Step 10:

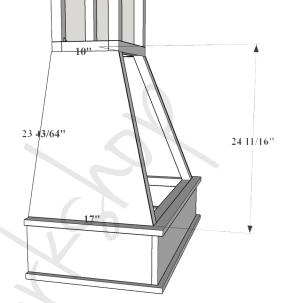
Add the 3/4" piece of plywood. This is the actual board that the insert will attach to. Make sure and make the cutout to the specs of your insert! This is to the specs of the Amazon one! (see blog post for link) Just screw straight down into the 2x2 below it with 1 1/2" screws. If you do not want to mess with the cutouts of the corners, you could cut it at 30x14 and pocket hole it into place, but depending on how heavy it is, I don't know that I would trust it!

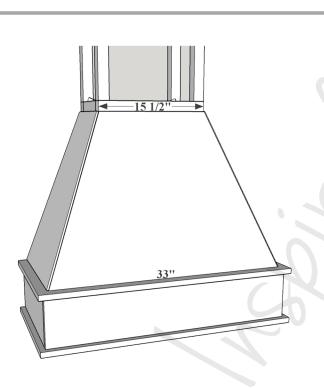


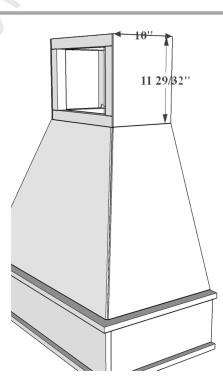
Step 10 (cont)

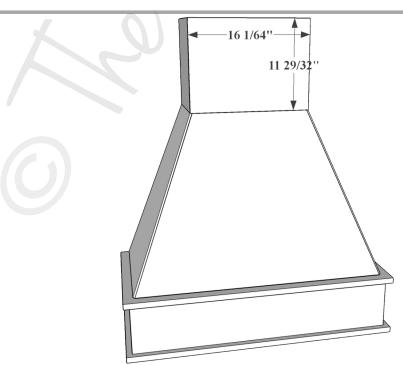


Step 11: Start adding the 1/4" plywood. You want the front to overlap the sides, so start on the sides. Again, a little wood glue and some 1" brad nails will attach this perfectly.







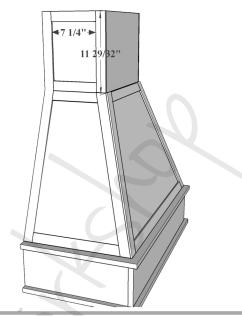


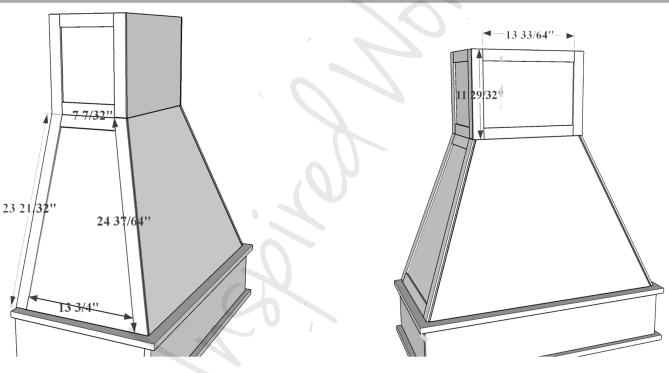
Step 12:

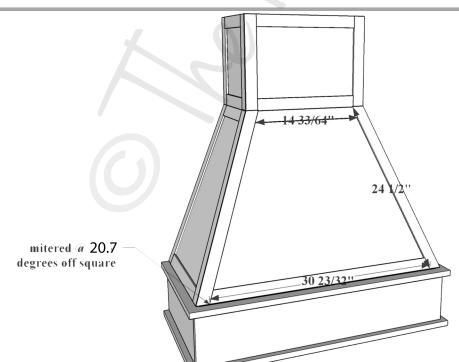
Add the lattice strips! Again 1" brad nails will suffice to attach, you don't even have to use wood glue because it will all be caulked and that will make sure it stays in place!

Side lattice is mitered at 16.1 degrees off square on all angled boards in middle section.

Front lattice is mitered at 20.7 degrees off square on all angled boards in bottom section.







Caulk all the seams, wood fill all the brad nail holes, then sand, prime and paint!

NOTE: I have not built this vent hood, I put the plans together to the best of my ability but there will be times where your measurements will be slightly different than the ones in the cut list as those are based on perfect measurements, and we are human. Make sure and measure your spaces as you go and use this as a guide! Check out the blog post if you need any additional help and feel free to email with any questions!