

andrew harris woodwork

Office Cabinet Plans



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Introduction

I wanted a cabinet primarily made from 1 by 4 no2 whitewood. I chose this wood as I knew it the grain of the wood would take the stain well and also it would provide a cost effective build.

All my builds are made with pocket hole joinery. You will need a pocket hole jig tool such as a Kreg Pocket Hole Jig in order to build them.

I have tried to ensure all steps are covered in these plans but if you find any errors in the plans or have a question then please email me at info@andrewharriswoodwork.com to let me know.



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Shopping List

Size	Length	Quantity	Board Number
1 by 4	8 feet	12	1 to 12
¾ inch plywood	17.5 by 33	2	
¾ inch plywood	49 by 17.5	1	
¼ inch plywood	14.5 by 26.75	2	
¼ inch plywood	22.75 by 28	2	

You will also need:

- Pocket Hole Tool such as a Kreg Pocket Hole Jig
- 1.25 inch pocket screws and
- 1.25 inch wood screws
- ¾ inch finishing nails
- Wood glue
- Two door pulls
- Four door hinges
- Shelf pins

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Cut list

Please read all instructions before cutting wood as shown below. I suggest some pieces are cut as you go to ensure a tight fit.

At the end of this document I have also included a board cut list plan to help you maximize the boards you buy. If you follow that list you will need 11 8ft 1 by 4 boards and 1 6ft one. Then just plywood for the side inserts and base (and optional shelf).

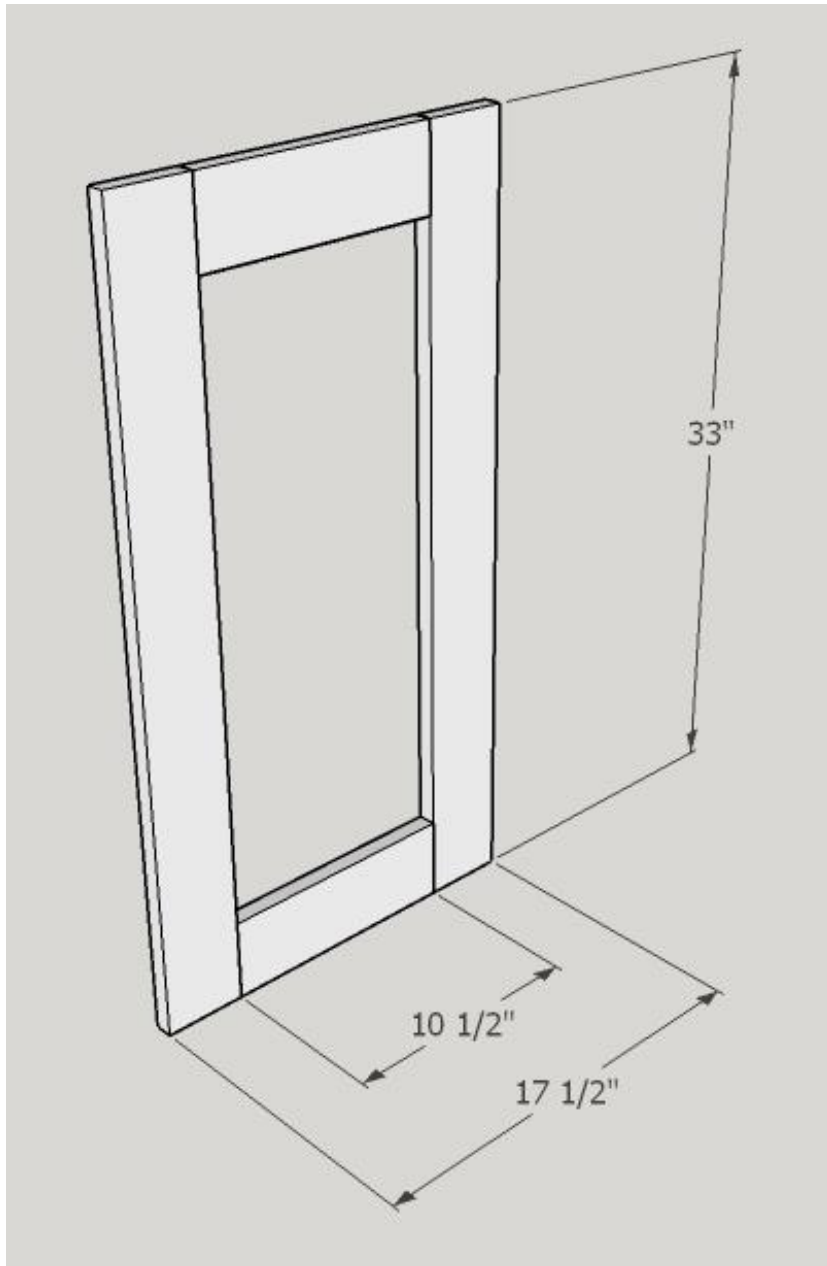
Size	Length (inches)	Quantity	Used For	Board Number
1 by 4	10.5	4	Side horizontals	Two from board 1 and two from board 2
1 by 4	33	4	Side Verticals	Two from board 4 and two from board 5
1 by 4	45	4	Front and back top and bottom rails	Two from board 6, one from board 1 and one from board 2
1 by 4	33	4	Front and back vertical outer rails	Two from board 3 and two from board 7
1 by 4	26	2	Front and back vertical middle rails	One from board 1 and one from board 2
1 by 4	25.75	4	Doors	One from board 5, one from board 7 and two from board 8
1 by 4	13.5	4	Doors	Two from board 3 and two from board 4
1 by 4	54	2	Top	One from board 9 and one from board 10
1 by 4	47	4	Top	Two from board 11 and two from board 12
1 by 4	21	2	Top	One from board 9 and one from board 10
¾ inch plywood	17.5 by 33	2	For side inserts	
¾ inch plywood	49 by 17.5	1	Cabinet Bottom	
¼ inch plywood	14.5 by 26.75	2	Door backs	
¼ inch plywood	22.75 by 28	2	Cabinet backs	

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Step 1 – Make the two Side frames

Make each side using two of the 33 inch length pieces and two of the 10 ½ inch pieces.

Place your pocket holes in the ends of the two shorter pieces.



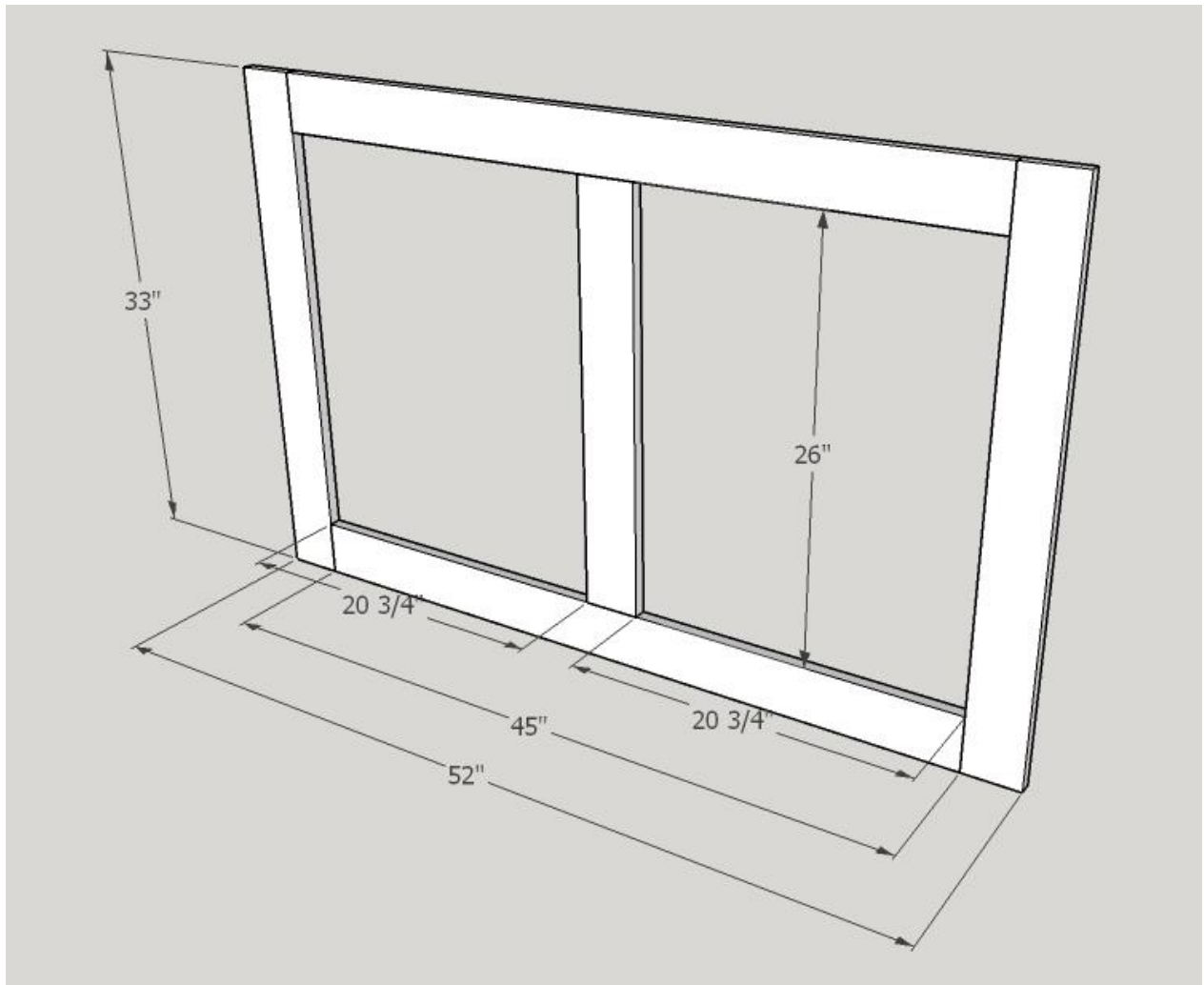
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Step 2 – Make the front and back frames

Make the front and back frames as shown below.

Place your pocket holes in the ends of the two long 45 inch pieces.

I suggest you cut the 26 inch piece once the outer frame is done and cut it to fit.

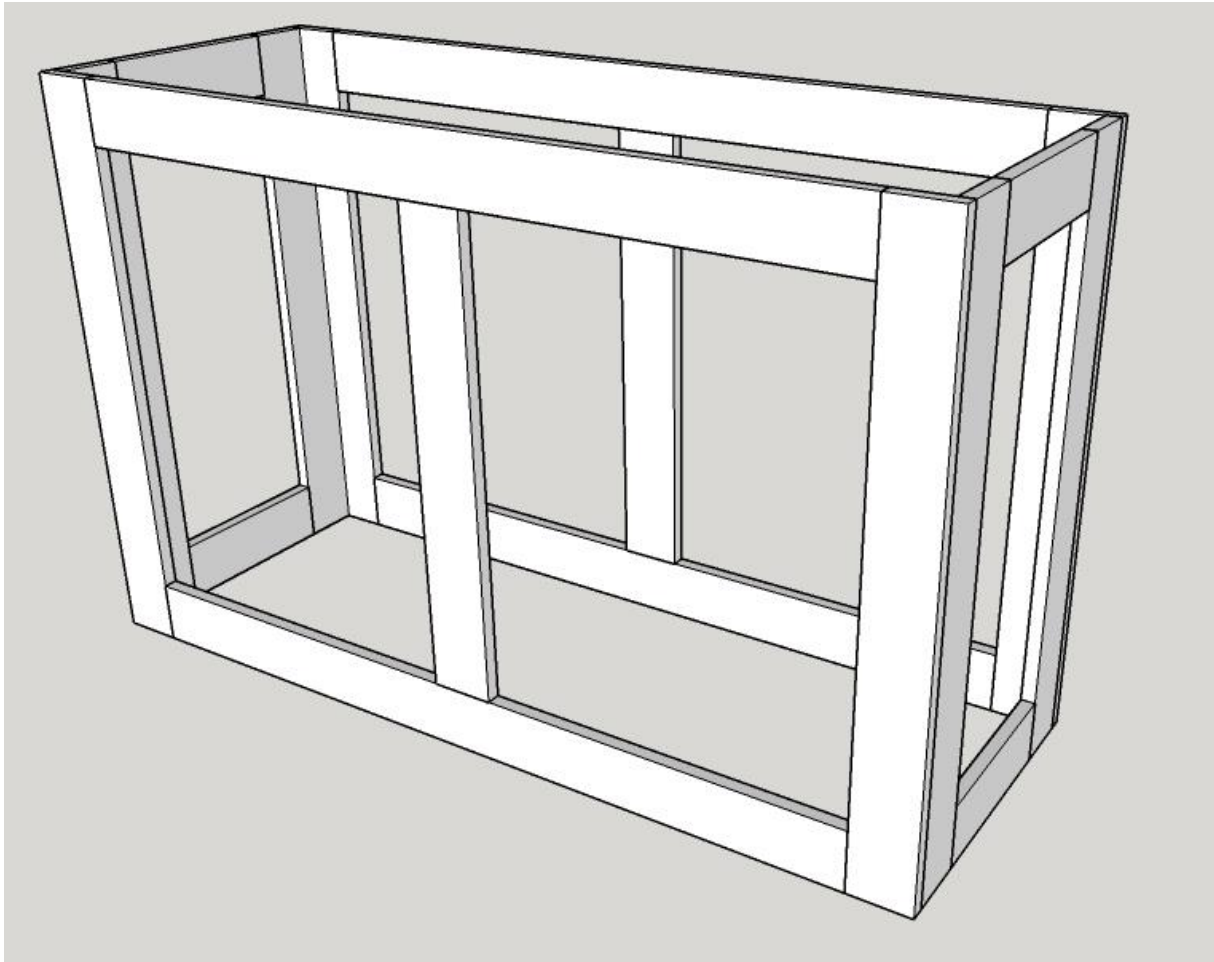


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Step 3 – Make the main cabinet frame

Drill pocket holes in the sides of the two end frames.

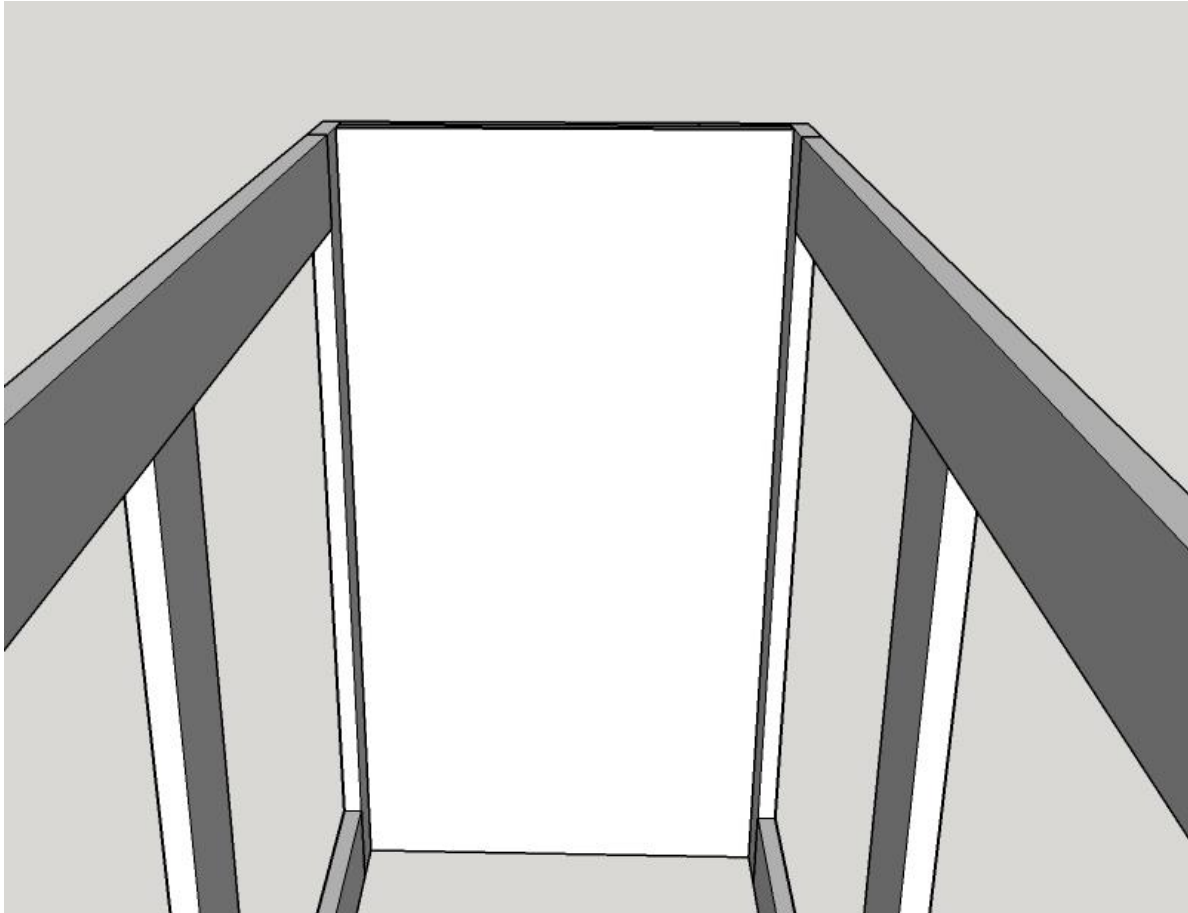
Attach the two sides to the front frame and then the back frame as well. The front and back frames will overlap the edges of the sides as shown.



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Step 4 – Add side inserts

Add the two 33 by 17.5 inch pieces of $\frac{3}{4}$ inch plywood as the side inserts using 1.25 inch finish nails and glue if desired



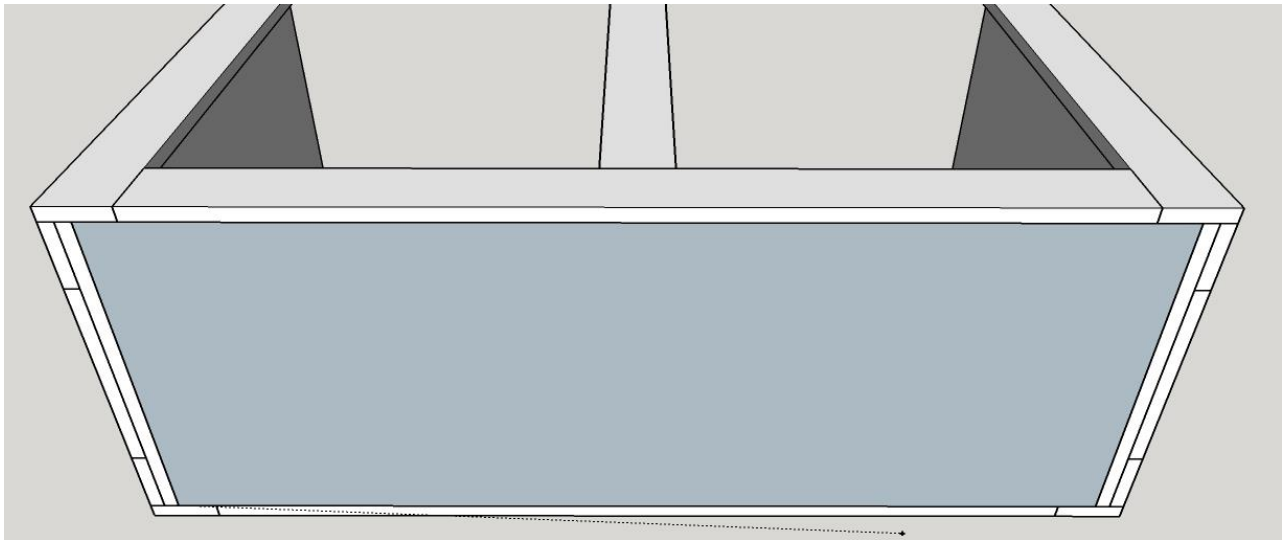
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Step 5 – Add the bottom shelf

Add the 49 by 17.5 inch piece of $\frac{3}{4}$ inch plywood as the bottom.

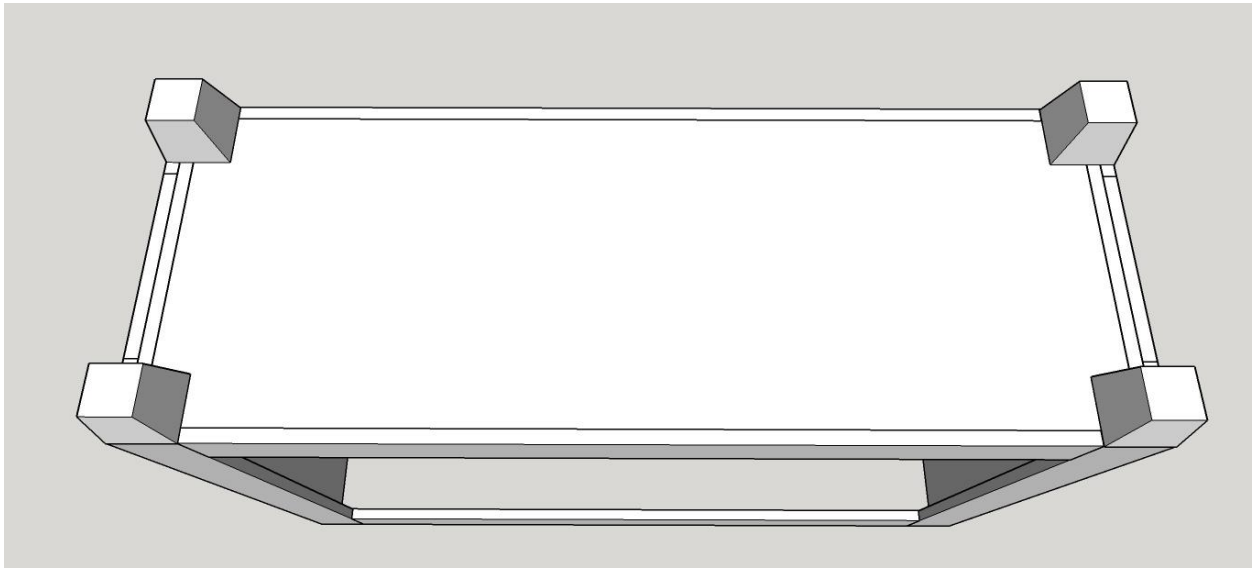
Drill pocket holes every 6 inches around the edge and then fix in place with the pocket holes on the bottom. Don't place a pocket hole right in the corner as we need something solid to screw the foot into at each corner. Leave a couple of inches at each corner before placing the pocket hole.

I fitted it flush with the bottom of the frame as shown below.



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Step 6 – Attach the Feet



Attach the feet. I used 3.5 inch tapered ones from Home Depot.

Depending on which ones you get, measure out where the screw for the feet needs to go, drill a pilot hole and screw the feet in.

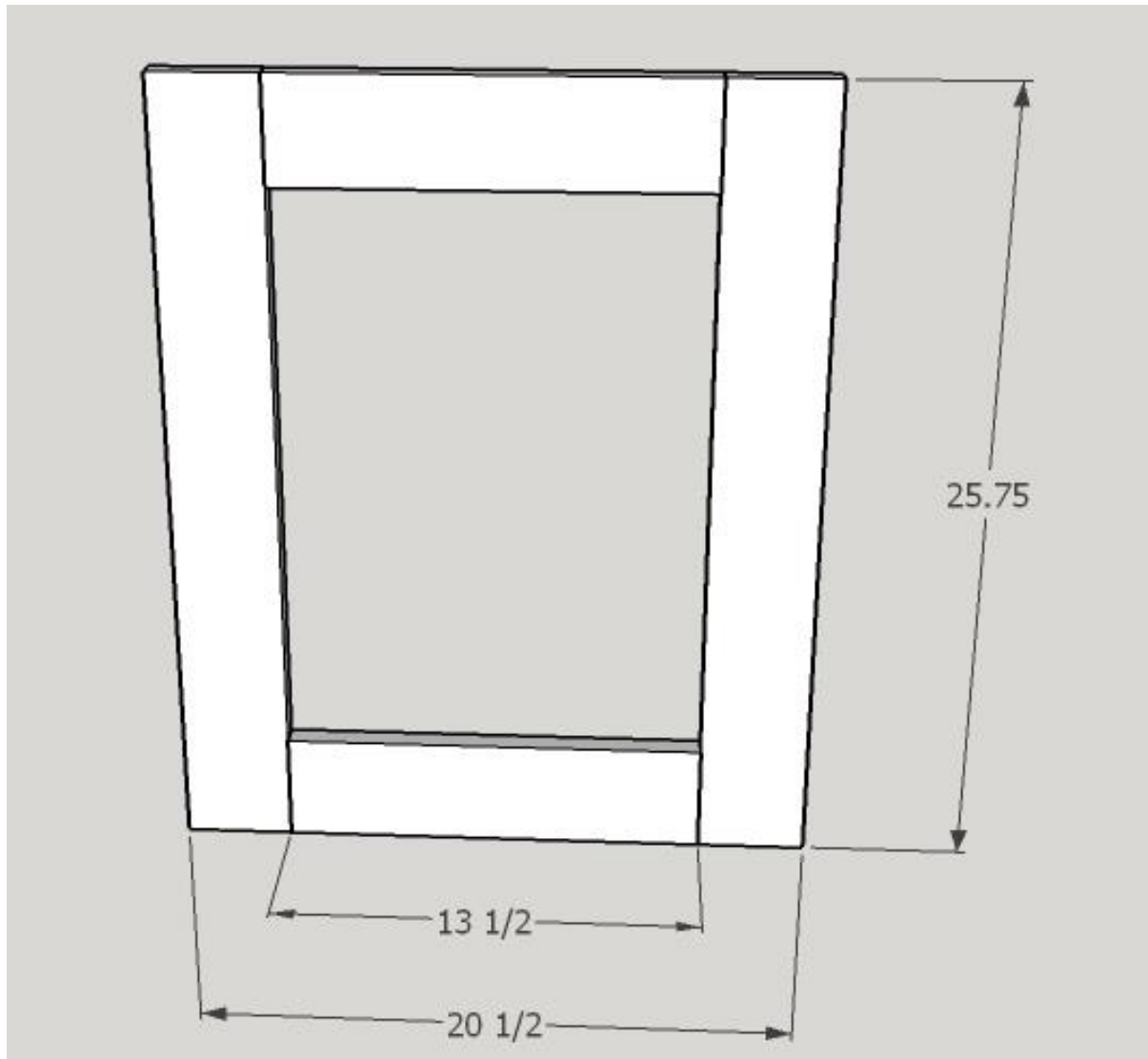
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Step 7– Make the Doors

Drill pocket holes at both ends of the two shorter pieces and make the doors as shown below.

Remember the total width of the door should be $\frac{1}{4}$ inch less than the width of the opening for the door.

Same applies to the height of the door and the height of the opening for.

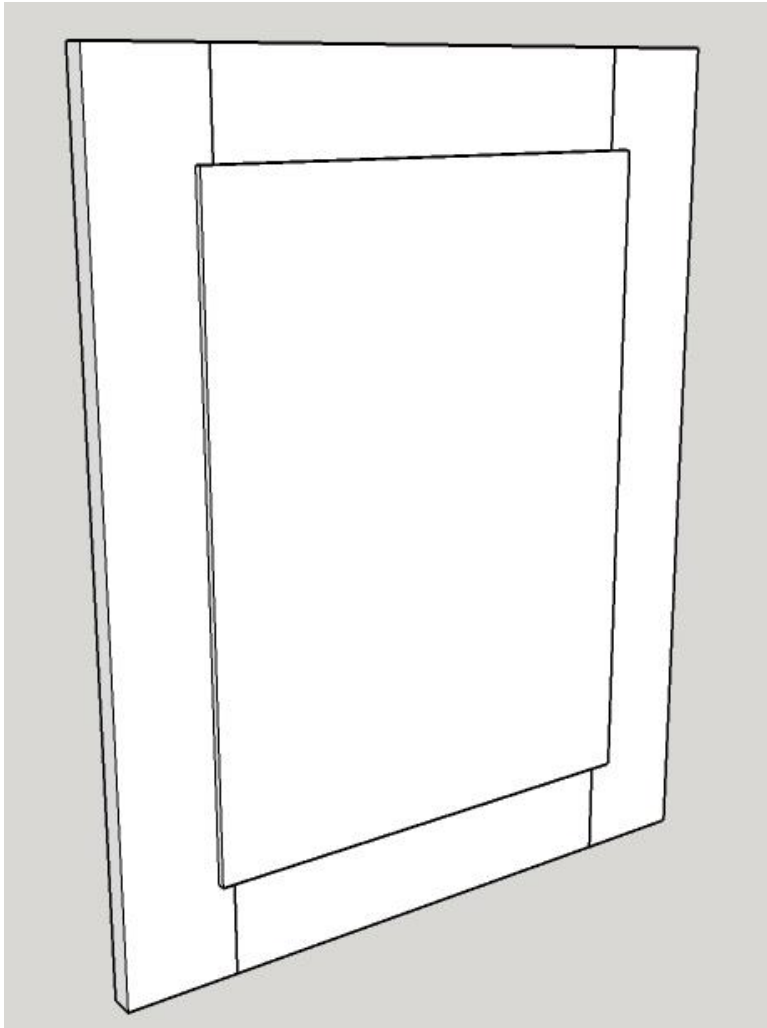


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Step 8 – Door Insert

Fix $\frac{1}{4}$ inch thick ply to the back of the door overlapping the frame by at least $\frac{1}{2}$ inch on each side to allow fixing.

I like to overlap sufficiently to try to cover the pocket holes and then add $1\frac{1}{2}$ inch trim around the edge of the back just to tidy it up but the diagram below shows the minimum size you would need.



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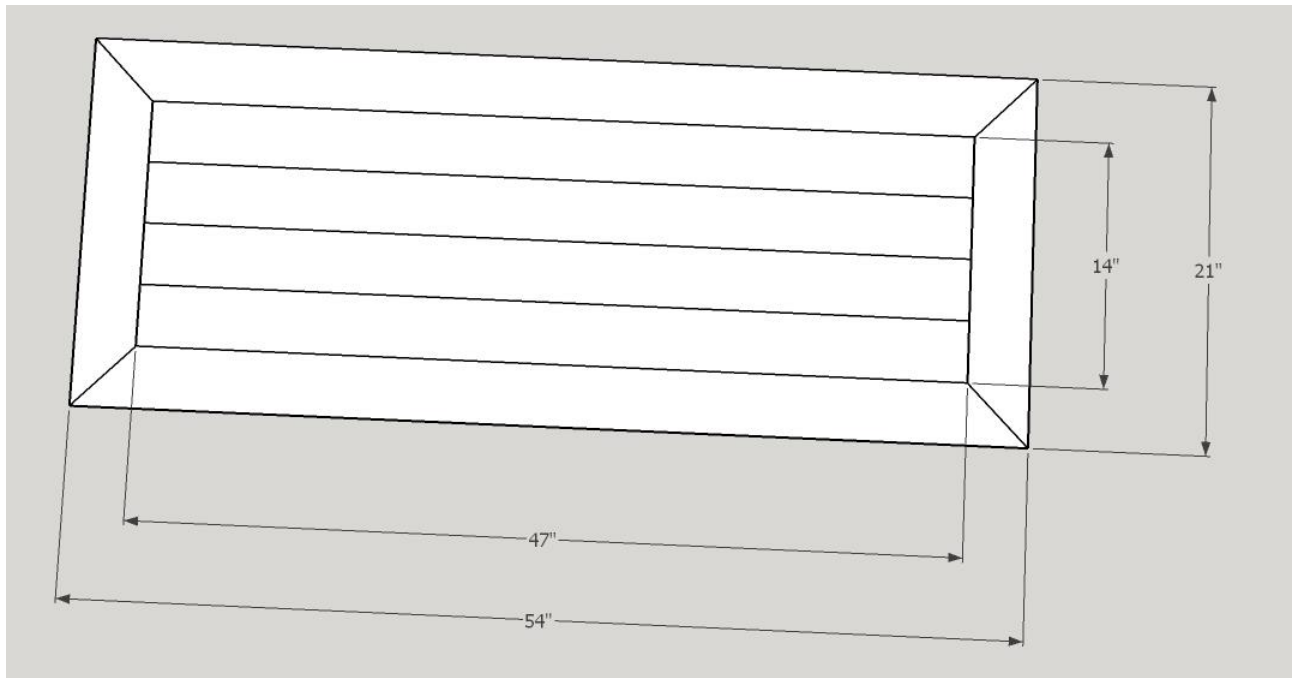
Step 9 – Make the Top

I wanted a top with mitered corners but you could just make a plank top from 6 pieces of 1 by 4 at 54 inches long each.

If making the mitered top like below I would suggest making the four middle pieces first. Then cut and fit the outer mitered pieces to give a snug fit.

The reason is that sometimes the planks are not exactly 3.5 inches wide and so if you make the outer mitered frame first, then when you fit the four inner pieces they may be slightly narrower.

I roughly sanded the edge of piece so that when joined together the joints were obvious and gave some interest to the top.



Step 10 – Drilling holes to fix the top

On the sides and front and back rails drill pocket hole screws facing upwards to use to fit the top.

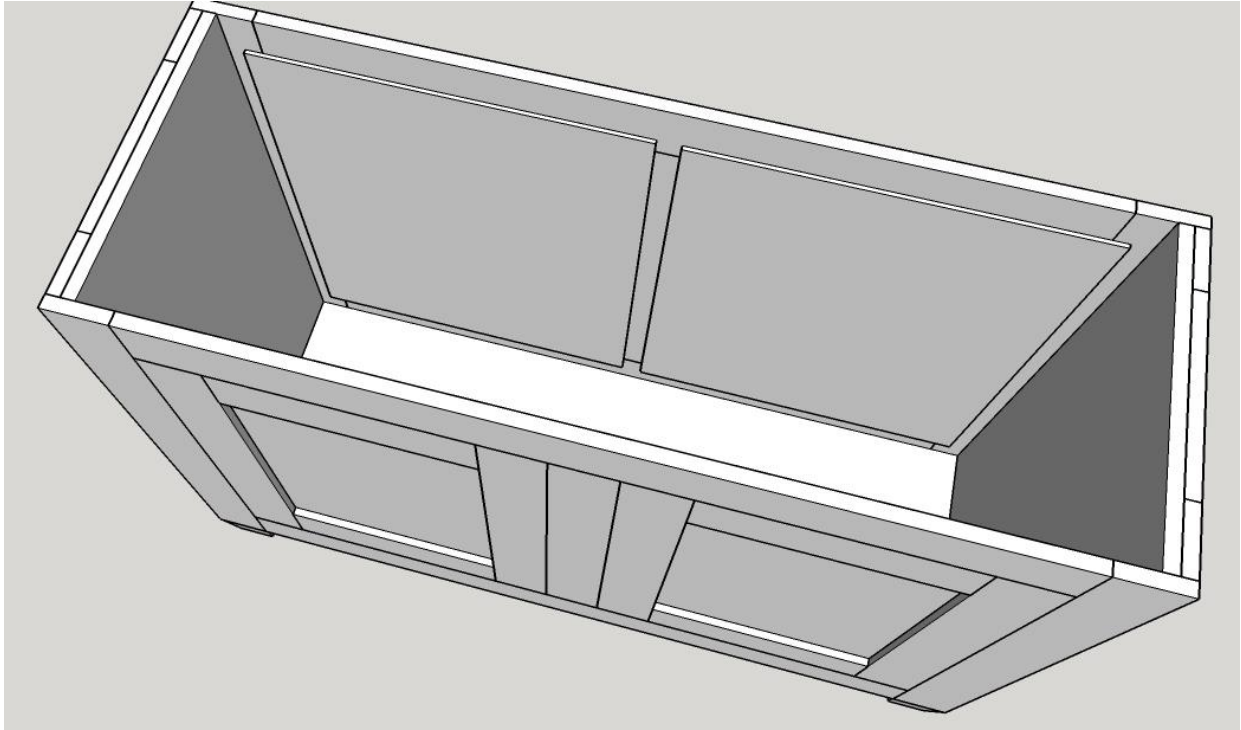
Step 11 – Fit the doors

Fit the doors ensuring an equal gap around each edge.

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Step 12 – Fit the back panels

Cut two pieces of $\frac{1}{4}$ inch plywood at least $22\frac{3}{4}$ by 28 inches and use $\frac{1}{4}$ inch finishing nails to nail them to the back of the cabinet from the inside.



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Step 13 – Fit the Top

Place the top with the good side down and then place the upturned cabinet on top. Make sure you have equal gap all around and then fix with 1 ¼ inch pocket hole screws.

Step 14 – Optional Shelf

A shelf can also be added. If you use plywood you may want to add a 1 by 2 piece of trim on the edge to hide the plywood front (as shown in the finished pictures at the end).

If you want to add shelf then you will need 4 lengths of 1 by 4 at 49 inches long each or a piece of plywood measuring 14 by 49 inches. Join them with pocket holes.

Then either fix side rails as supports at desired location or use a shelf pin jig to drill holes where you want the shelf and support it with shelf pins. If using shelf pins then I suggest you cut the boards ¼ inch shorter as some shelf pins have a lip on them.

Step 15 – Finish

Sand all joints smooth.

Apply Pre stain and your choice of color or paint as desired.

Step 16 – Hardware

Add hardware of your choice.

I also fit magnetic latches to the inside of the doors to stop them going inside the cabinet.

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