

The Coro Dog House



Designed and Constructed by

Paul Elkins Copyright 2015

Thank you for purchasing the Coro Dog House plans. As mentioned in my video, my friend Jeff has a big German Shepard named Max who needed a dog home. I've made several bigger Coroplast arced shelters for human use, but I was curious to see what could be made using just two sheets of Coroplast.

This doghouse is pretty much the maximum size you can make using two sheets, but once you know the principles of how this is made, you can size it down to suite the size of your dog.

You may see differences from the Video or photos compared to what you see in the plan, but once I've had a chance to use the prototype, I always find improvements and incorporate them in the plan.

Finding Coroplast or fluted plastic can be difficult. Here in America some Home Depots are starting to sell individual sheets. Home Depot also sells a 10 pack on line for \$120 as of 2015.

An alternative is to check out sign shops. They usually keep a healthy supply in stock for campaign seasons, and will usually part with a sheet or two.

Helpful hints:

You can make a creasing tool using a thin blunt edge of a board. Practice on the sidewall cut offs. Don't press too hard when running along a flute.

Coroplast exposed to direct intense sunlight usually lasts only a few years before becoming brittle. Spray painting the exterior with Krylon plastic spray paint will give some protection from UV degradation.

Another helpful hint is to use black zip ties. They hold up better in the sun.

On my prototype shelter, I did not add silicone to the zip tie holes. The ties were even fastened on the exterior rather than the interior, as we were in a hurry to build the original shelter. You may opt to fasten the ties on the interior and seal them. So far it's been pouring for days, and my friend tells me that he faced the entrance away from the wind and reports that no water is getting inside.

If your dog chews things up, consider lining your entrance with 'L' metal or something equivalent.

Materials list:

- * 2-sheets 4x8 foot 4mm thick fluted plastic
- * 1-package 50 count 8" long zip ties (black)
- * 1-length ½ foam pipe insulation
- * 1-package 3/8" I.D. grommets and crimp tool
- * 6" long 1" wide Velcro peel and stick
- * 4- 12" long by 3/8" Diameter steel spikes

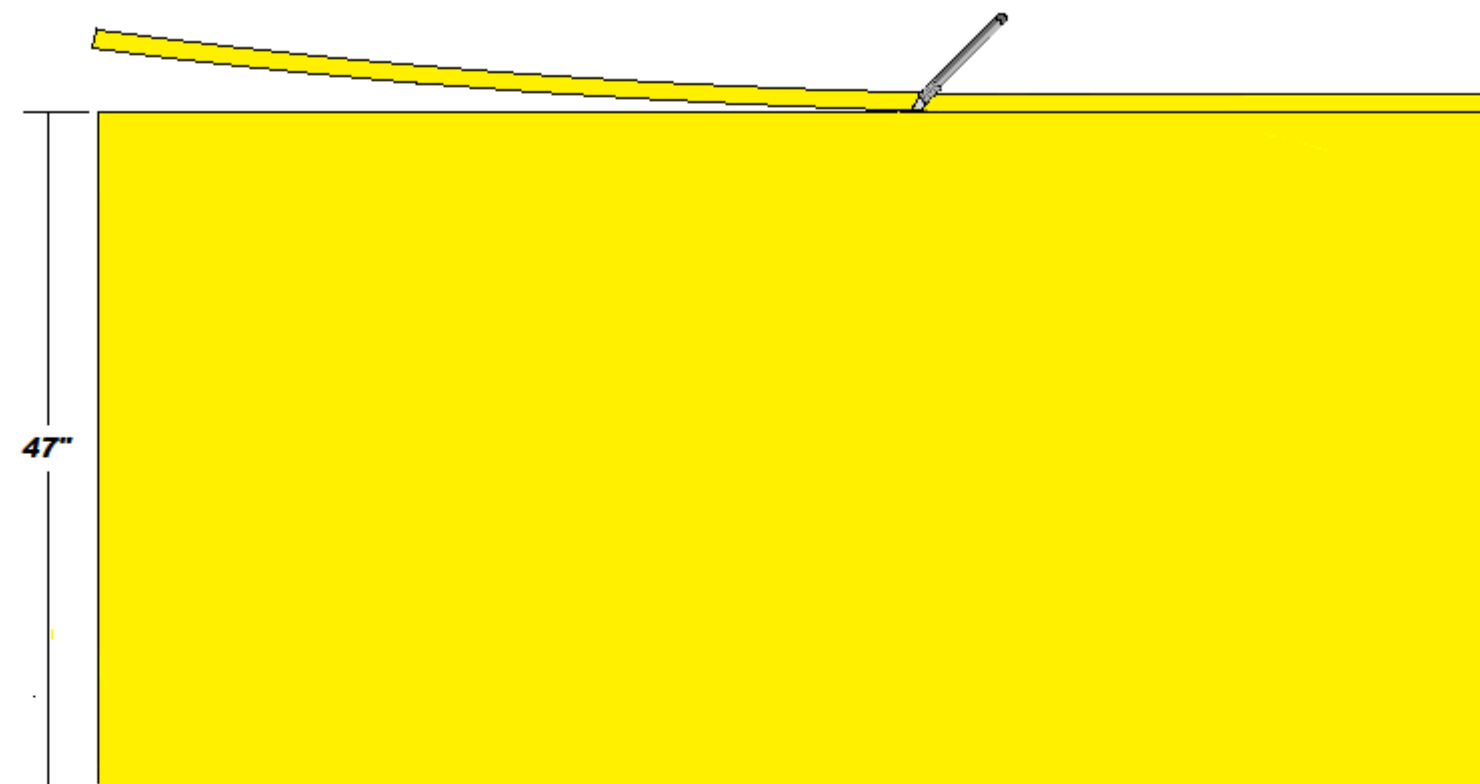
Tool list:

- * Flat work area, preferably a plywood table
- * Minimum 12 foot tape measure
- * Hammer
- * Wire cutters (for trimming zip tie ends)
- * Drill - 3/8" and 3/16" drill bit
- * Roller or blunt thin board for creasing
- * Utility or snap-off razor knife
- * 4 ft straight edge or carpenters square
- * Pencil
- * Drawing compass
- * Roll of painters tape
- * Two 2" long nails

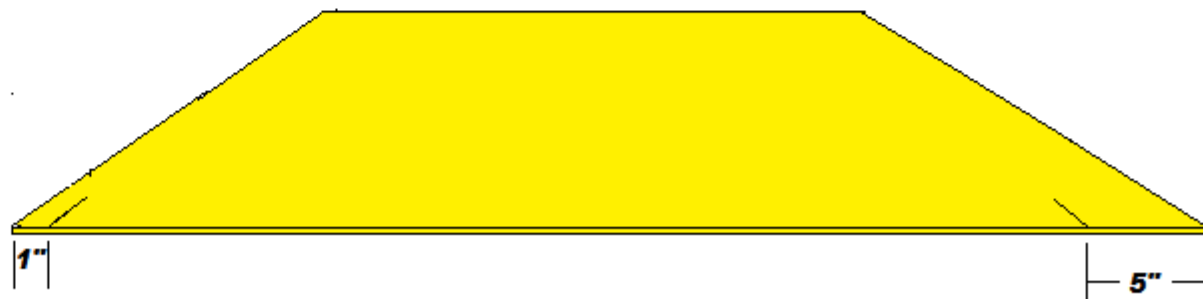


Roof panel

*Take one of your panels.
Measure up 47".
Make a mark and cut an 8
foot long strip off the top.
This will be used later for
drawing out the arc on
the sides.*

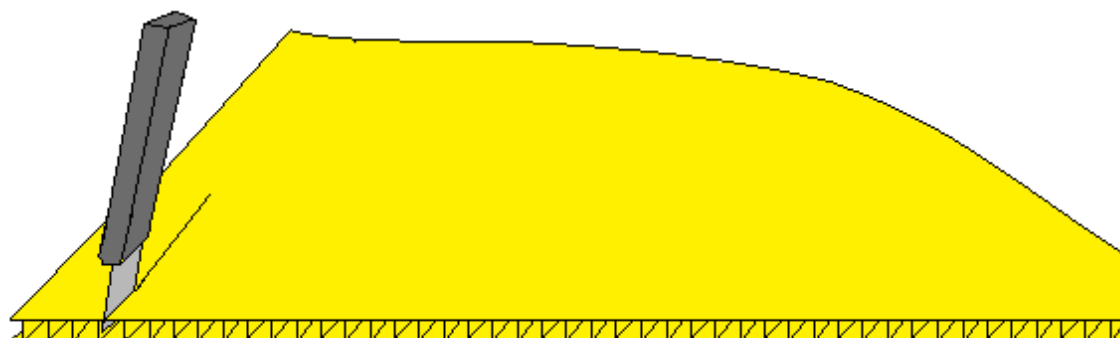


*Measure in 1" and make
a mark.
On the other side of the
panel measure in 5" and
make a mark.*

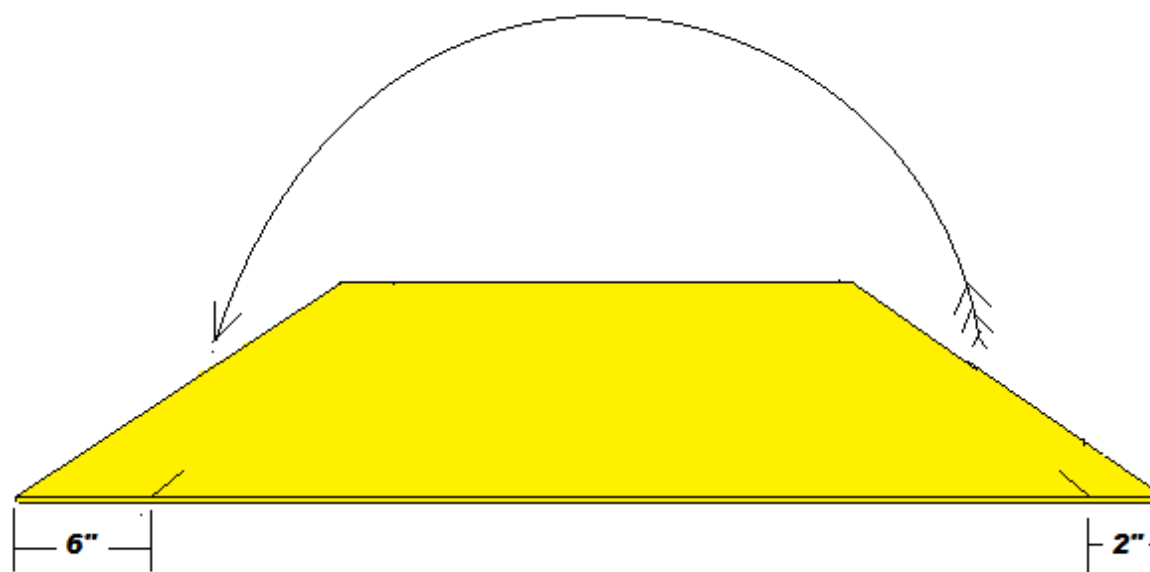


Roof panel

(continued)

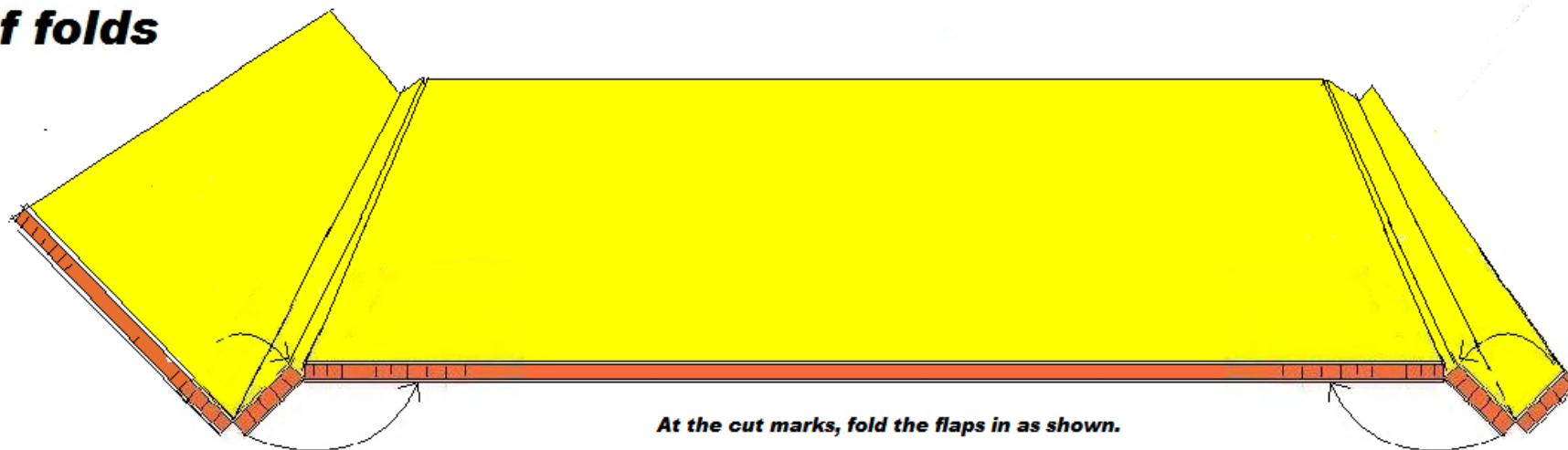


On both marks cut down the closest flute to the measurement. ONLY GOING THRU THE TOP LAYER! Be very careful when making this cut. Going thru both layers will weaken the panel.

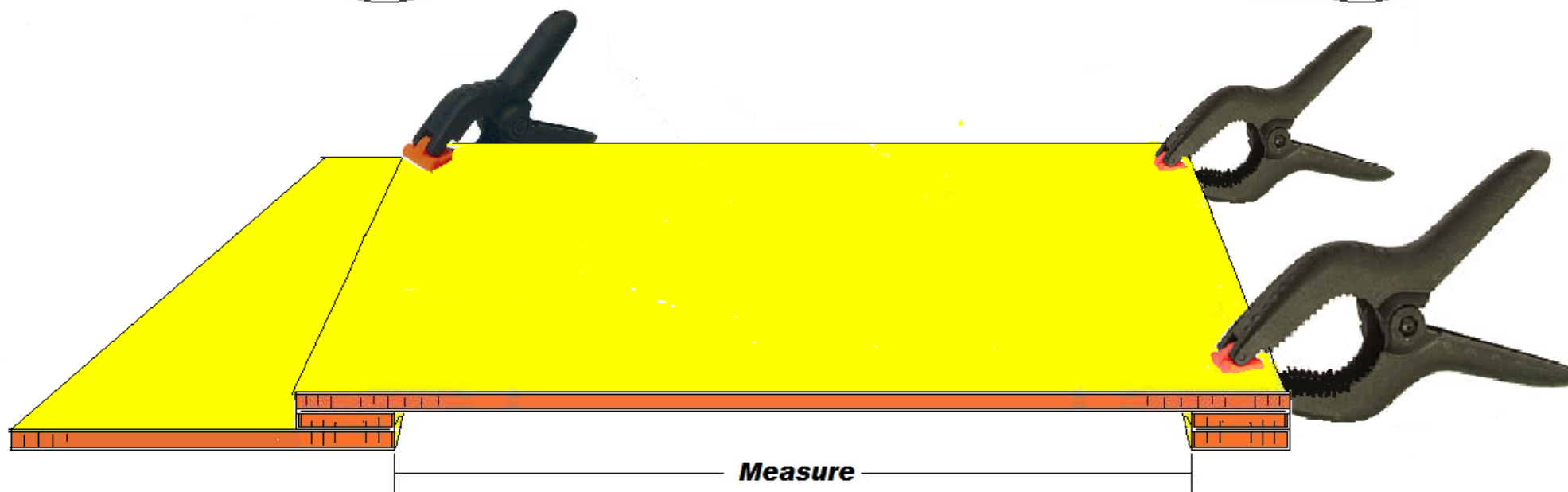


Flip the panel over. Measure in 6\" on one side and 2\" on the other. Again, find the closest flute to the measurement and run your knife down the flute as shown above, but only going thru the top layer.

Roof folds



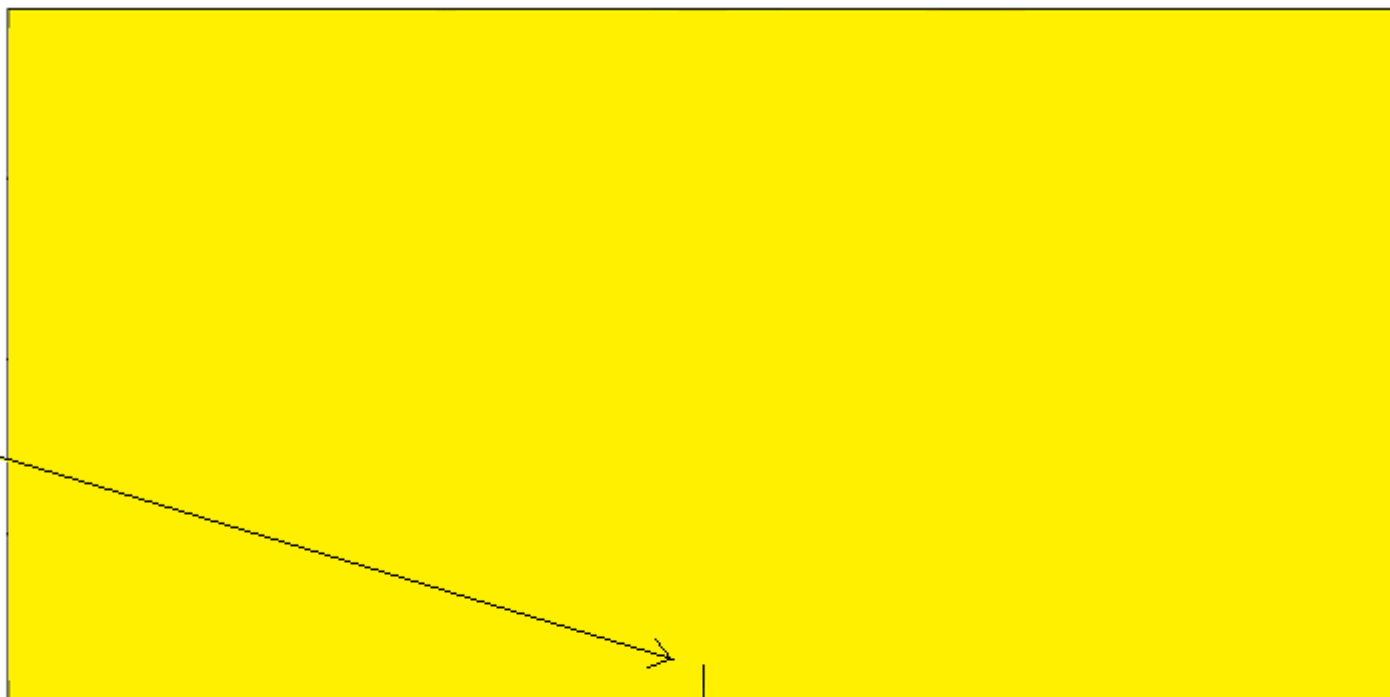
At the cut marks, fold the flaps in as shown.



Clamp the folds together and take a measurement between the inside fold edges.

Floor and sidewall panel

***Take your other panel and make a
mark at the center of the panel.***

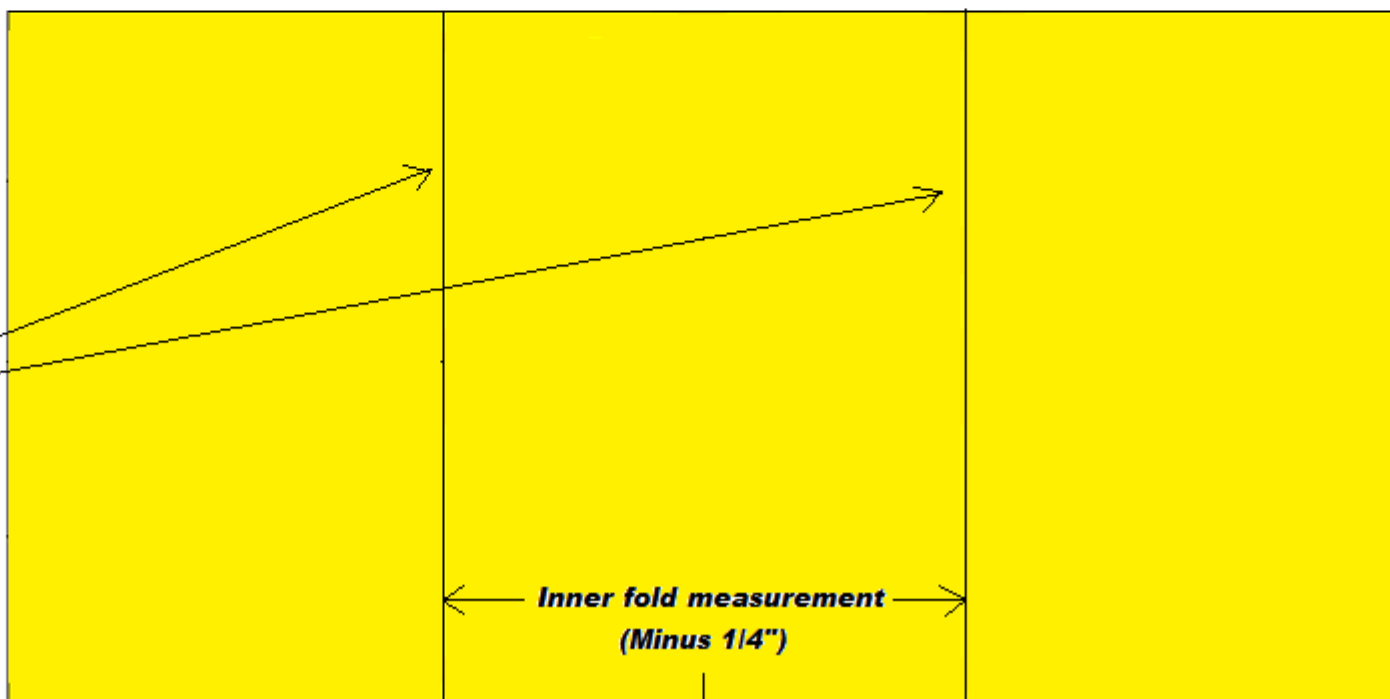


***Take the measurement from the
previous page and subtract a
quarter of an inch.***

***Take this dimension
(roughly 36") and split it
between the panel center mark.***

***Draw two vertical lines at the
end of the measurement.***

***These will be the crease lines
for the bottom of the side walls.***

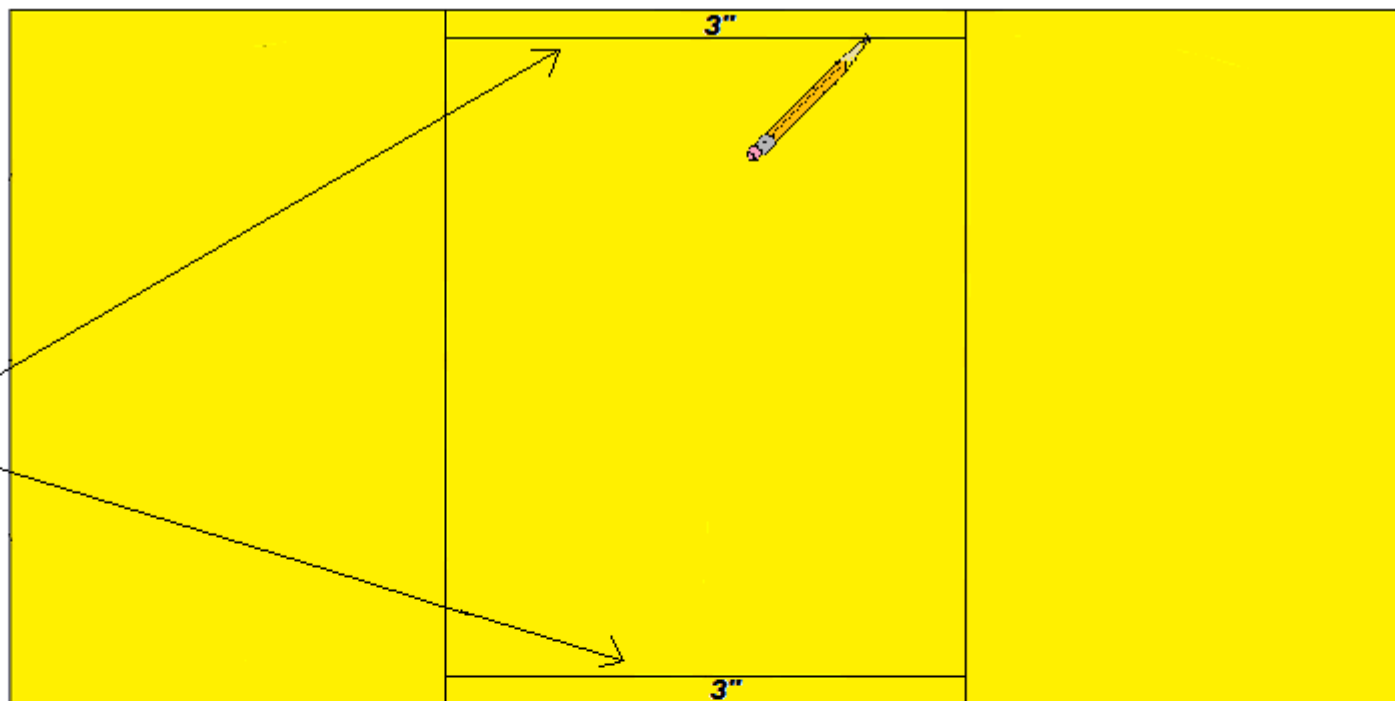


Floor and sidewall panel

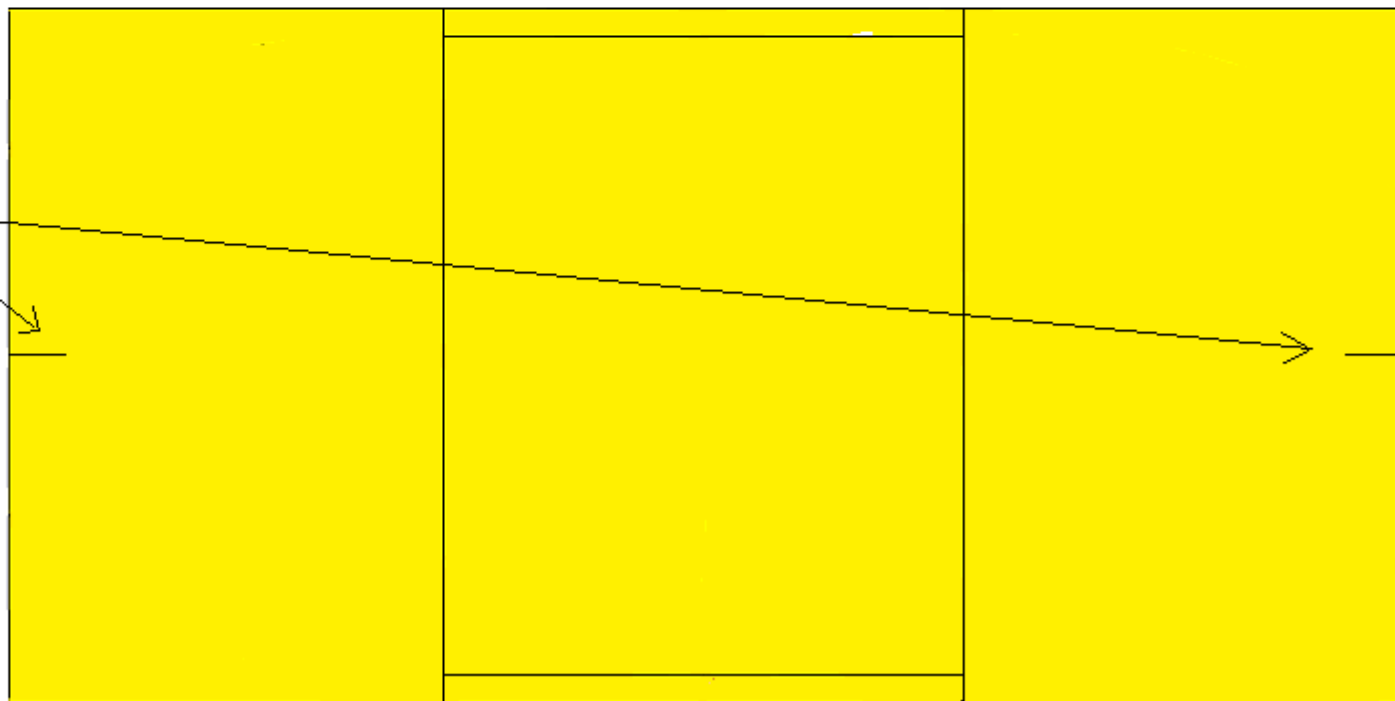
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*The center section will be
the floor.*

*To create the side flaps that
attach the roof panel to
the floor, measure in 3" on
the top and bottom of the
sheet and draw a horizontal
line.*



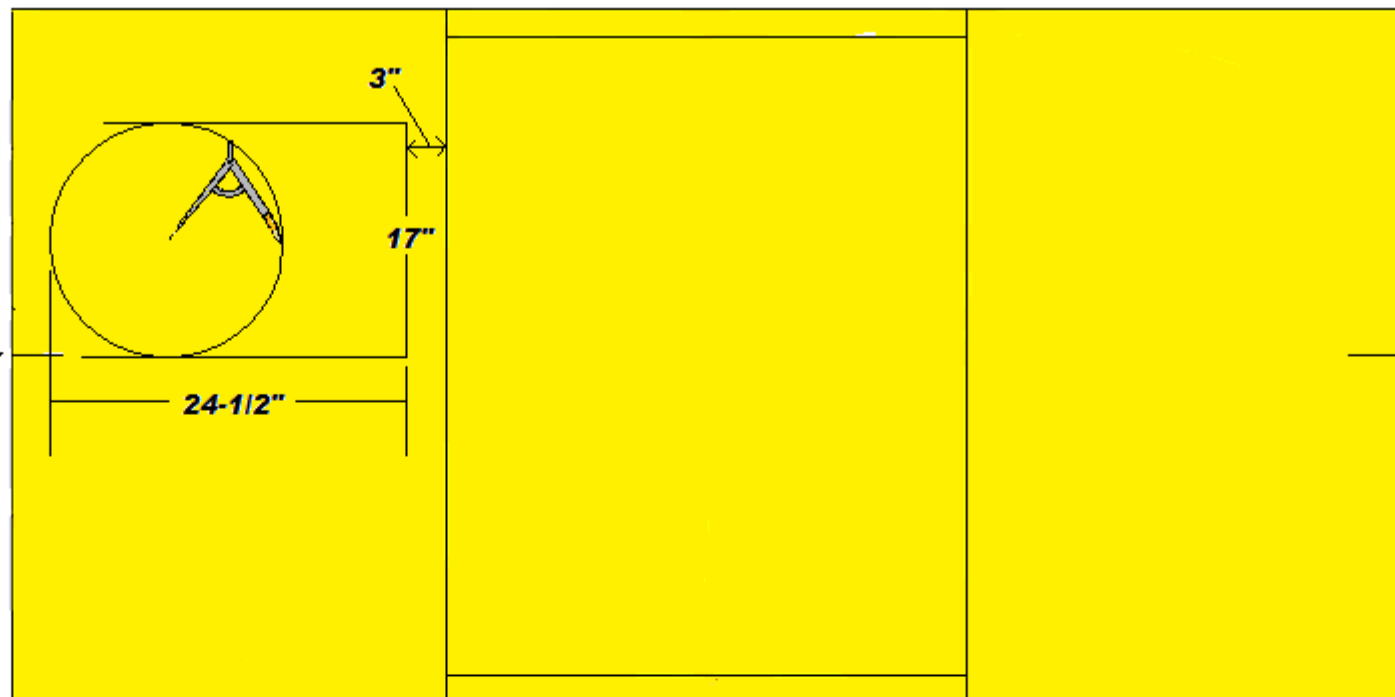
*Measure and find the middle
point at each end of the
panel. Make a mark.*



Door opening

These are the door measurements for the original Coro dog house.

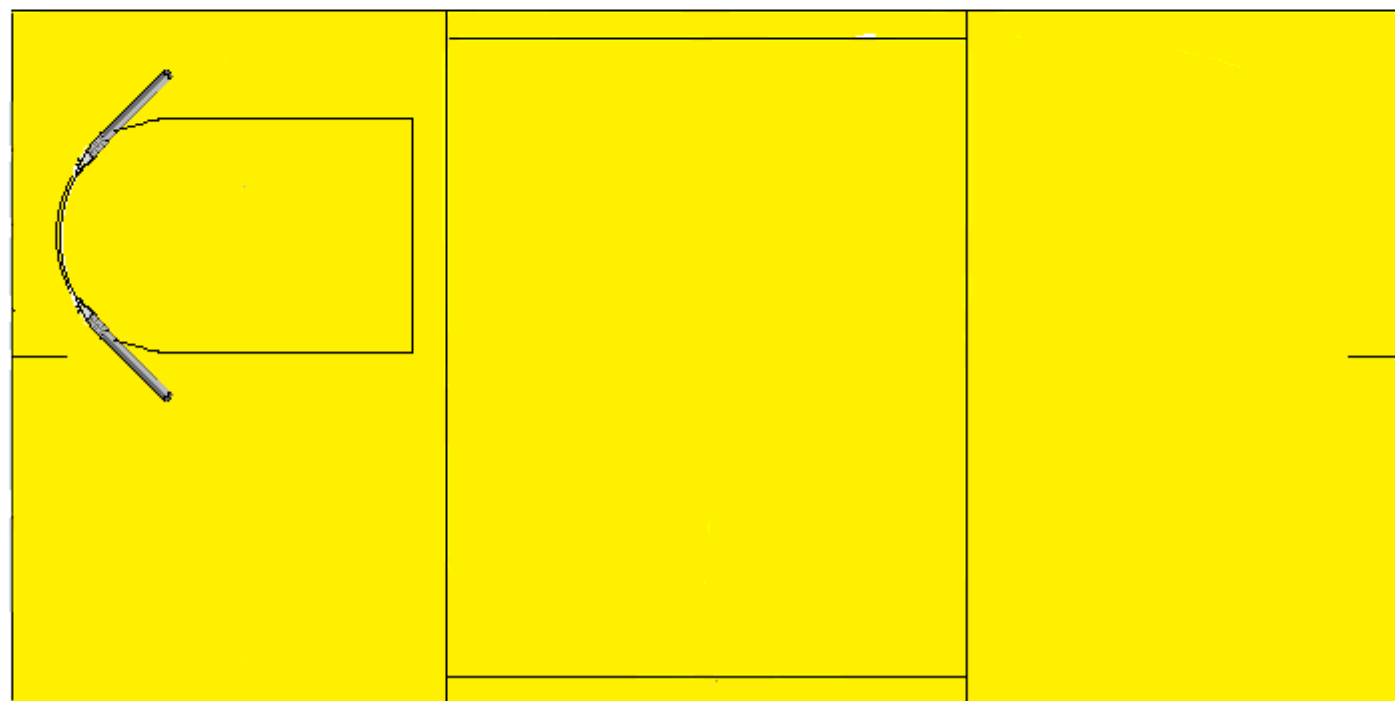
Line up the side of the door to the mid point on the panel.



Cut the door out using a razor knife.

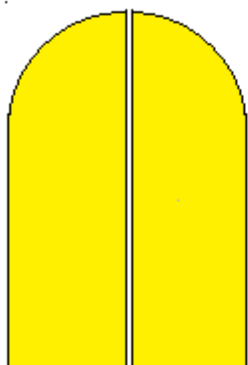
For the arc and sides, start each cut at the top of the arc and work your way down.

Save the door cut-out.



Making the vents

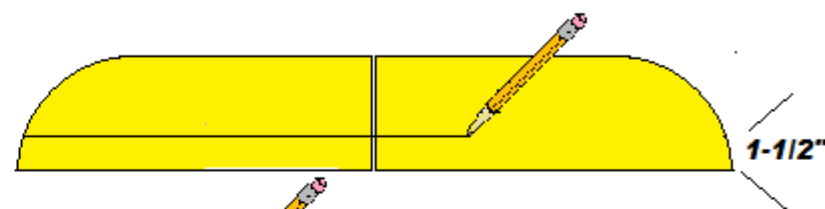
Take the door cut-out and cut it down the middle.



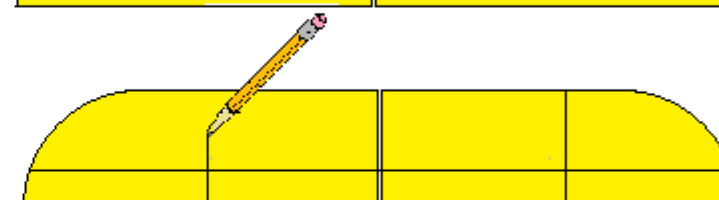
Lay both sides together as shown.



Draw a horizontal line 1-1/2" above the bottom.

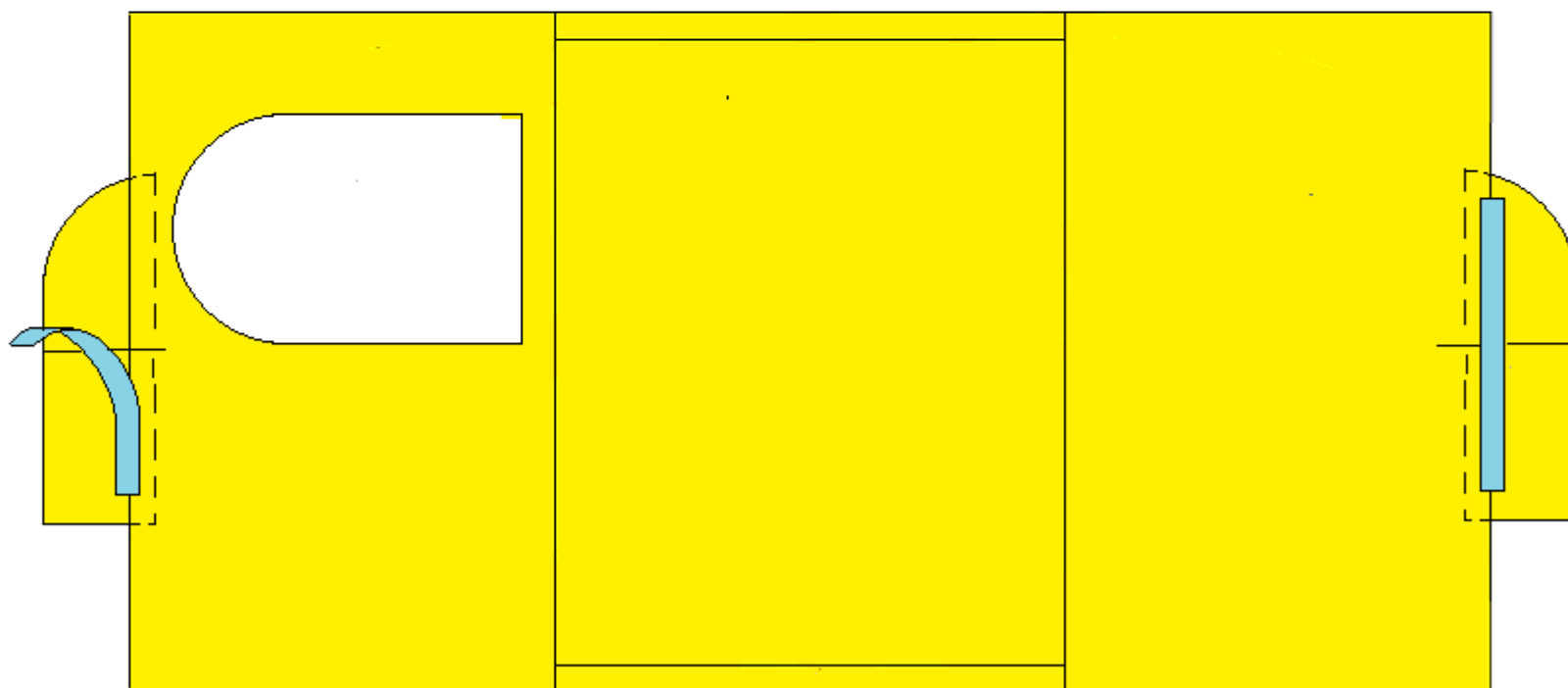


Find the centers and draw a vertical line.

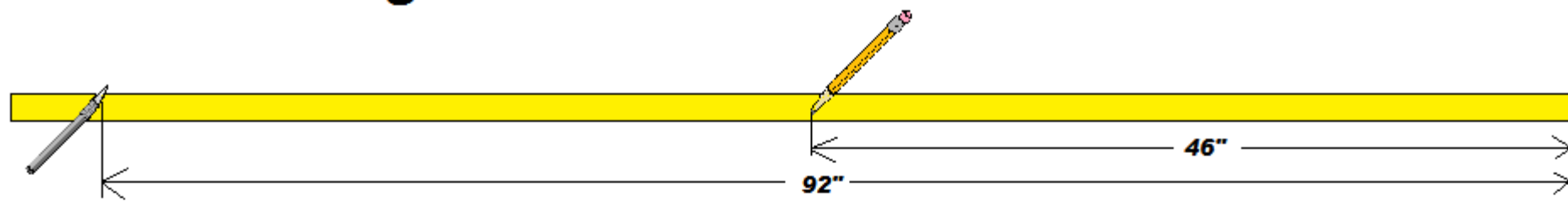


Slide the pieces under the panel as shown, lining up the center marks and the 1-1/2" line with the panel edge.

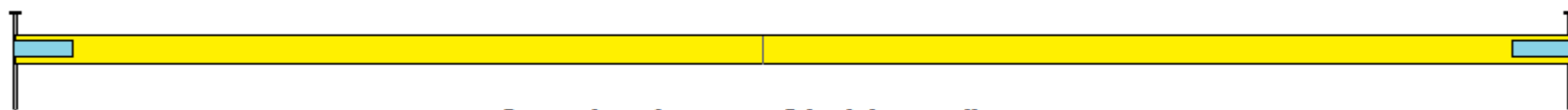
Tape down the pieces to the panel as shown.



Making the Arc



**Take the long 1" wide strip and cut it down to 92 inches.
Find the center, (46") and draw a reference line.**



On each end, tape on 2 inch long nails.

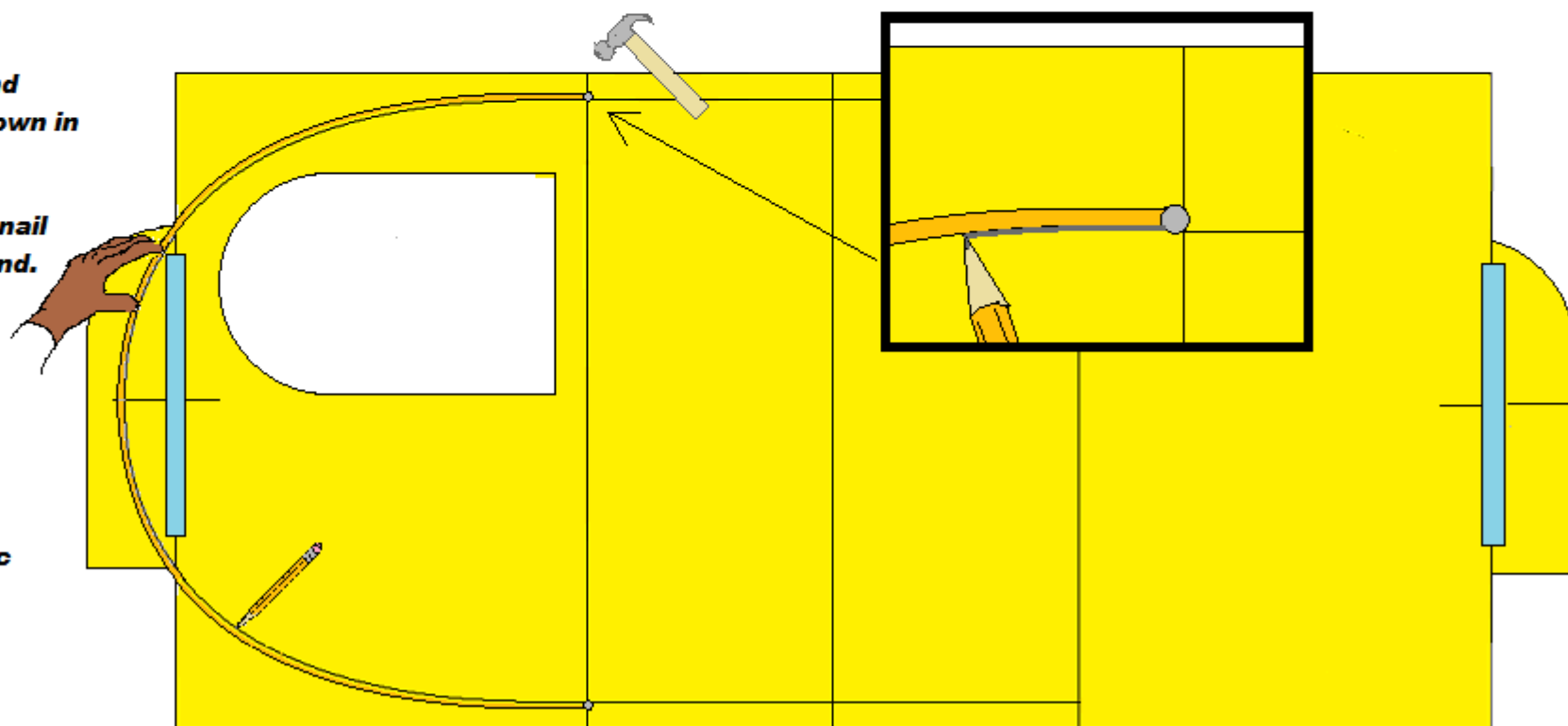
**Nail down one end
of the strip as shown in
the detail box.**

**Arc the strip and nail
down the other end.**

**Place the arc
center reference
mark in line with
the scrap center
mark.**

**Hold down the arc
and trace around
the inside.**

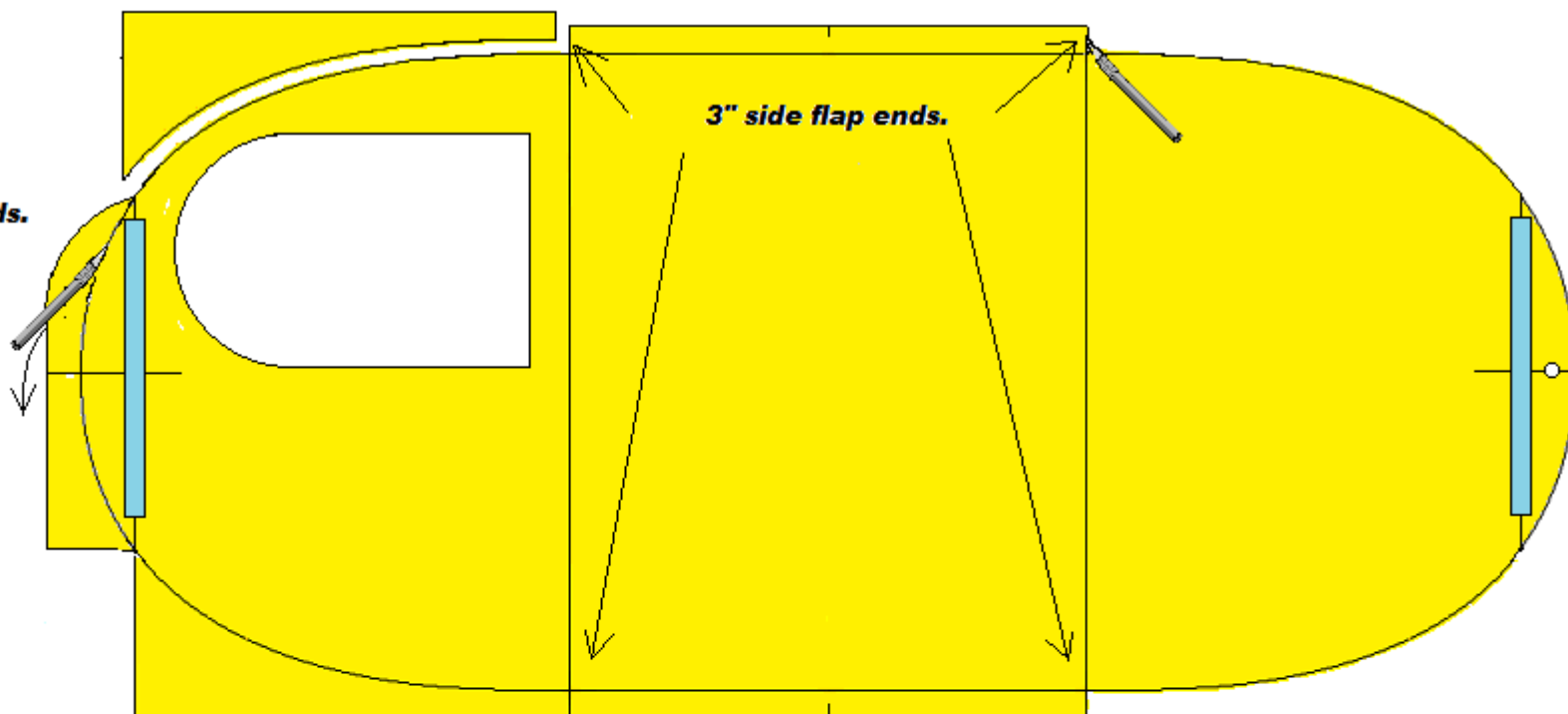
**Repeat on the
other end.**



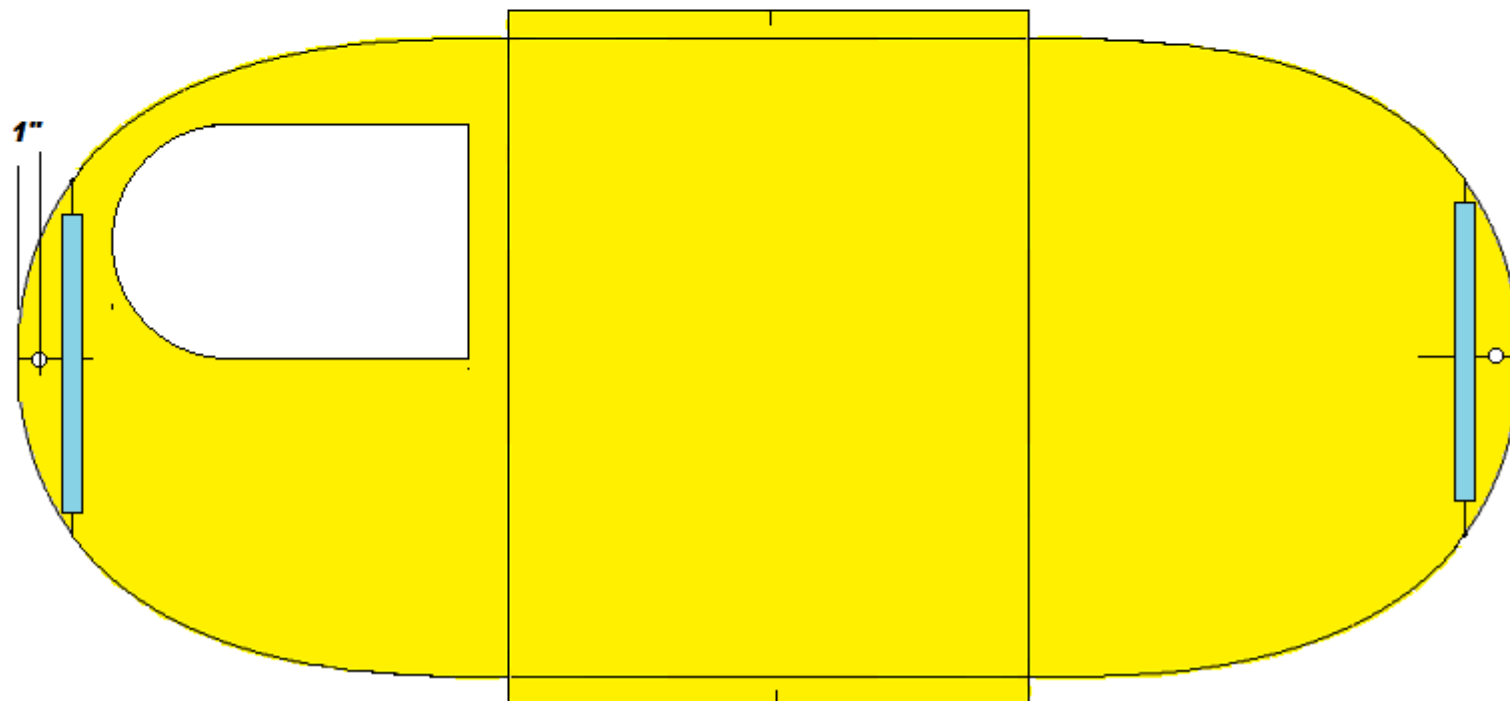
Cutting the arc

First, cut the 3" flap ends.

Start each cut from the nail hole to the top of the arc. This way the knife won't get caught in a flute and mis-direct the cut into the panel.



On the top center of each vent flap measure down one inch and drill a 3/4" hole .



Attaching vent flaps

Untape the vent flaps from the panel.

Flip them over and lay them on top of the panel positioning the 1-1/2" reference line on the reverse side of the vent flush with the flat top of the panel.

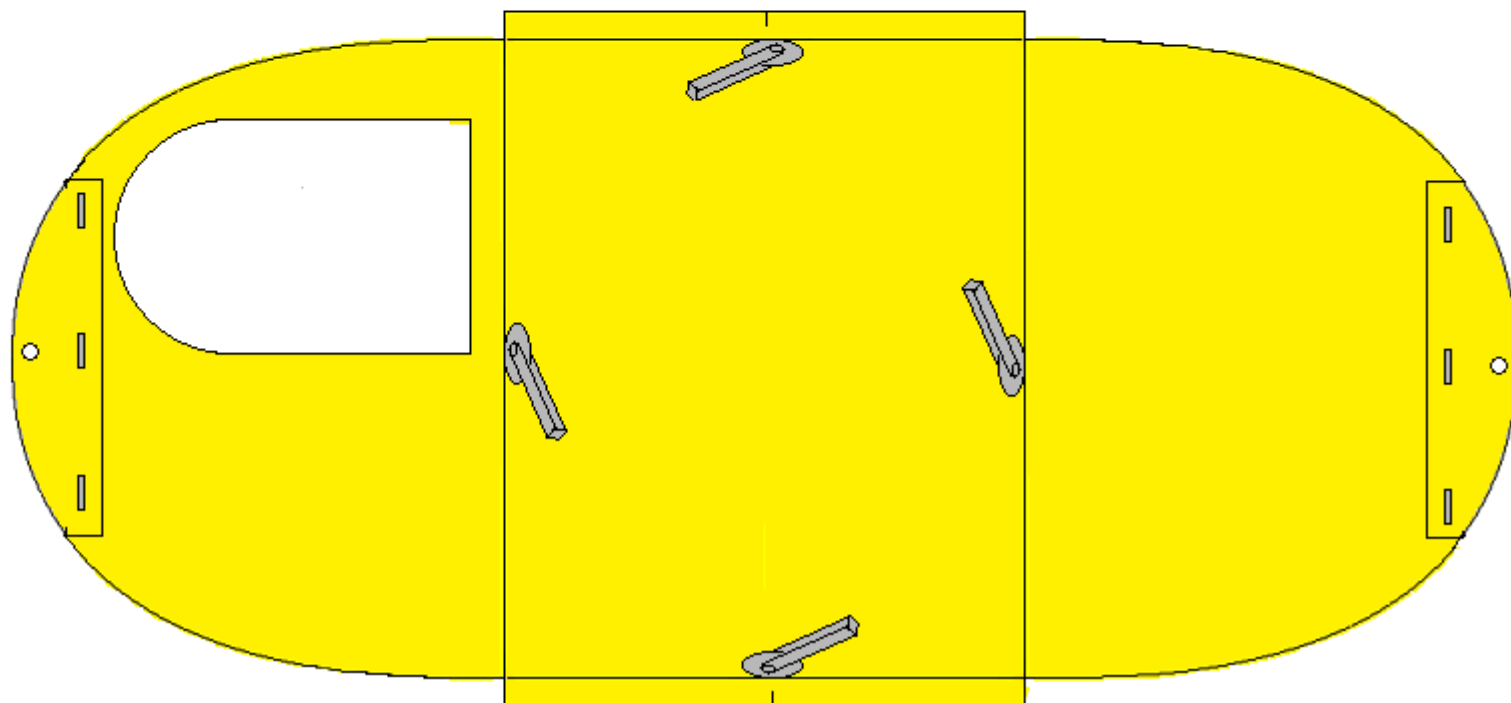
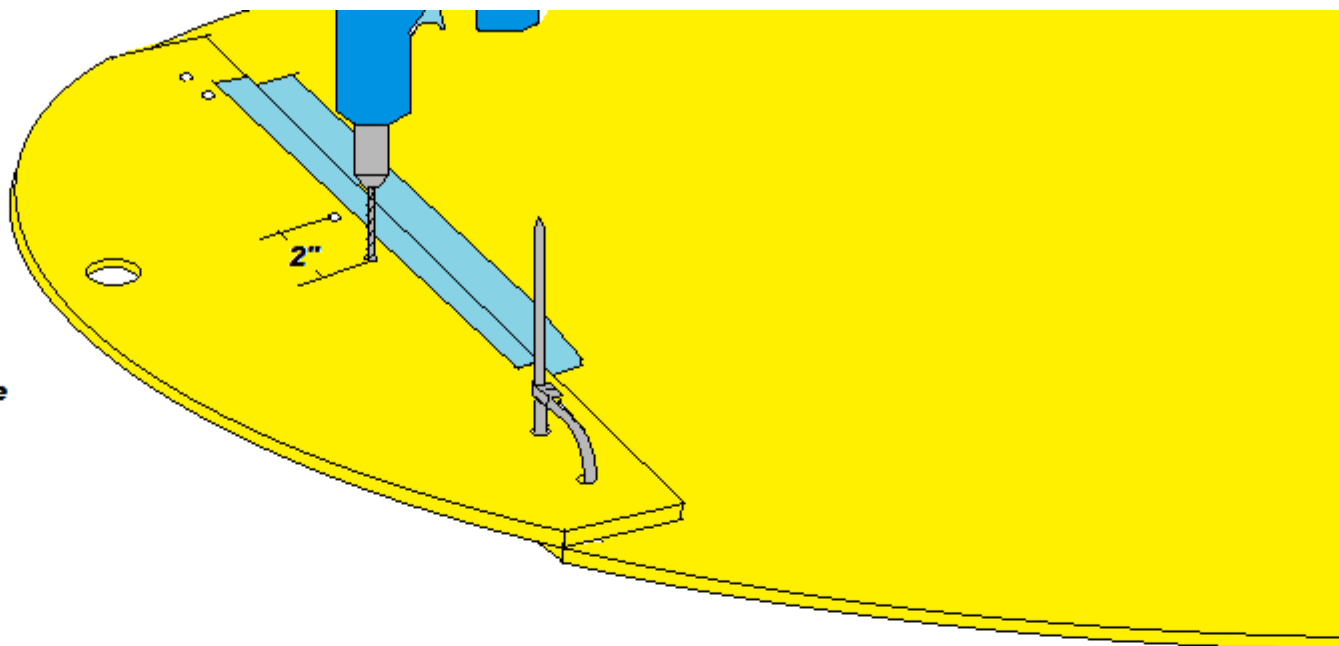
Match up the vent curve to the curve on the panel.

Tape in place.

Drill holes as illustrated 2" apart.

Add zip ties.

Crease the four lines as illustrated,



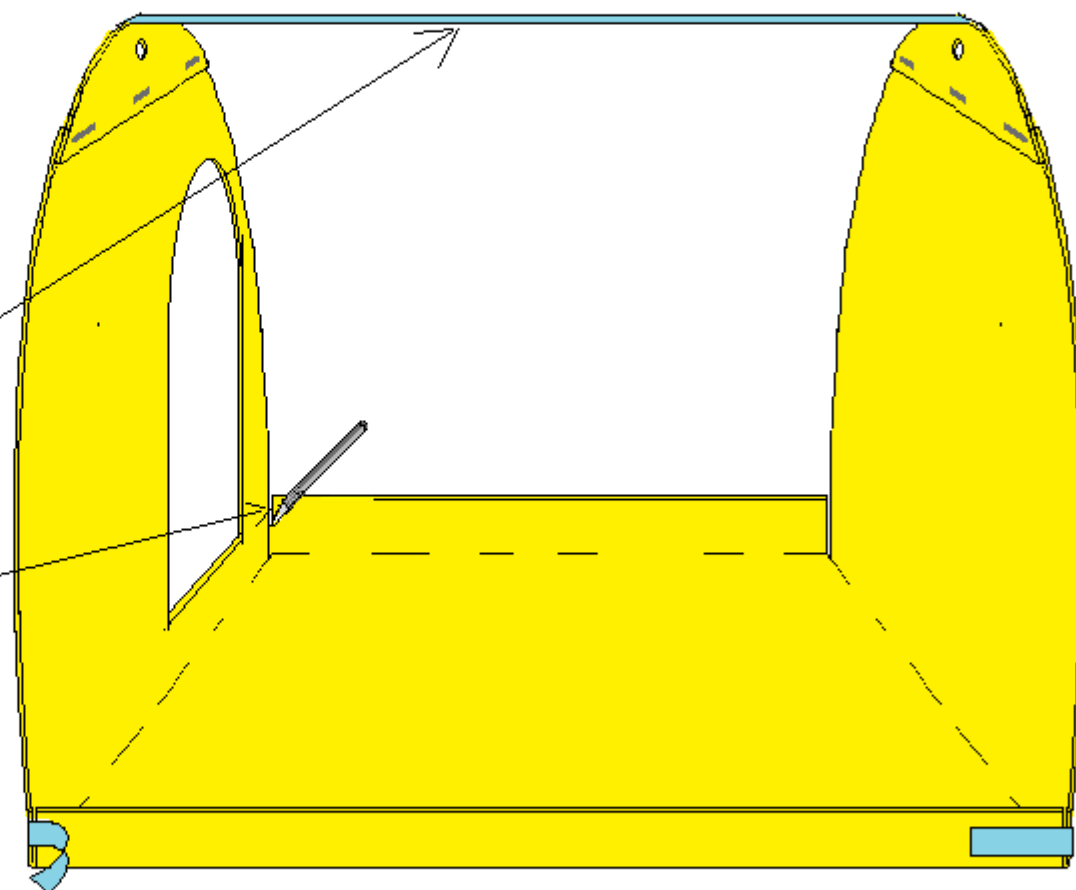
Assembling the Dog House

Fold the sidewalls and flaps in the upright position.

Join the large side walls together with a strip of tape on top.

If the 3" flap ends interfere with the sidewalls, trim the flap ends.

Bring up the small flaps and tape them to the large side walls.



Joining roof to floor pan

(Option #1)

There are several ways to join the roof panel to the floor pan. If you're attempting to do this alone clamp the folds down as best as you can.

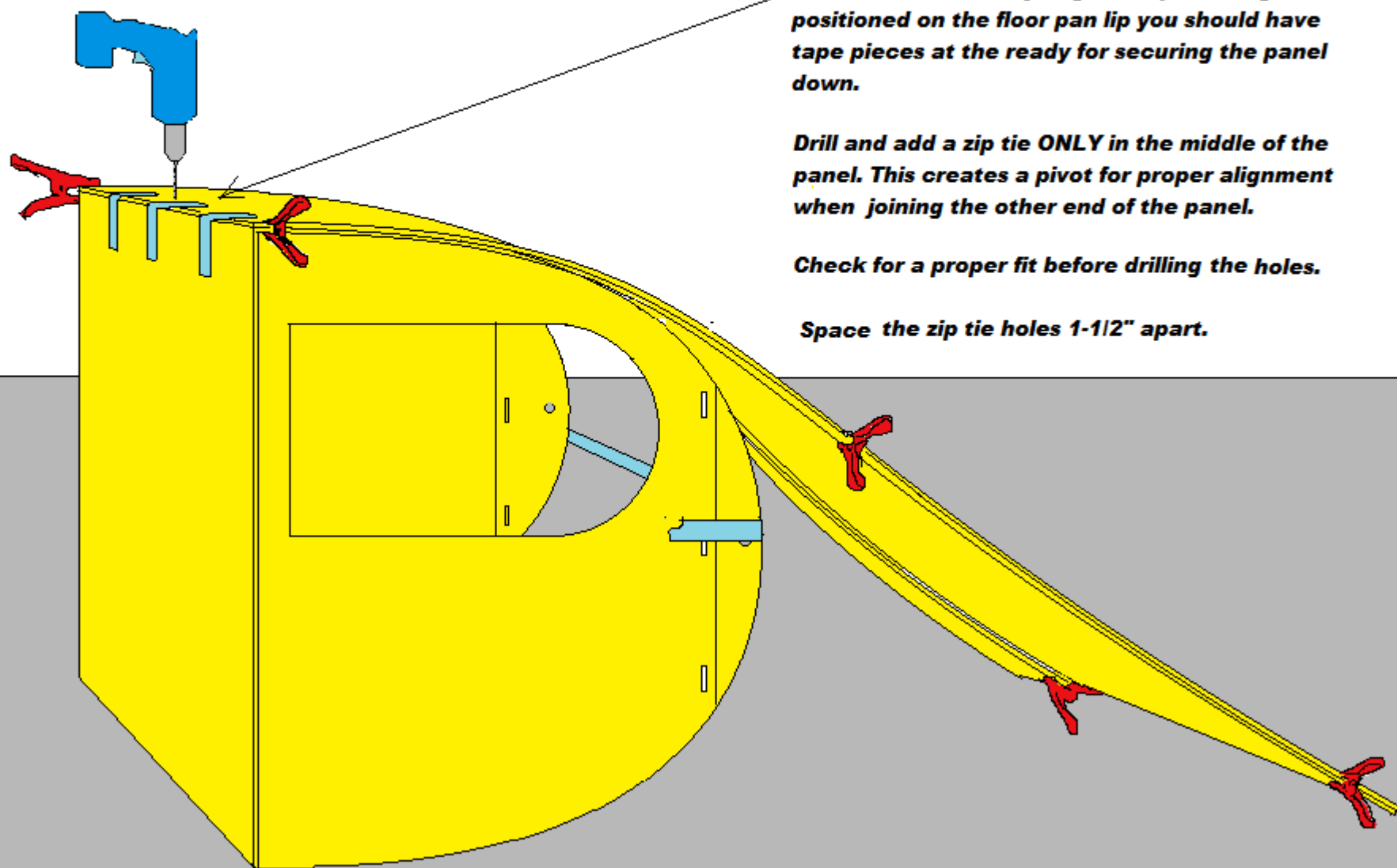
Once the sheet is arced it will force the folds to stay together.

In this method once you get the panel edge positioned on the floor pan lip you should have tape pieces at the ready for securing the panel down.

Drill and add a zip tie ONLY in the middle of the panel. This creates a pivot for proper alignment when joining the other end of the panel.

Check for a proper fit before drilling the holes.

Space the zip tie holes 1-1/2" apart.



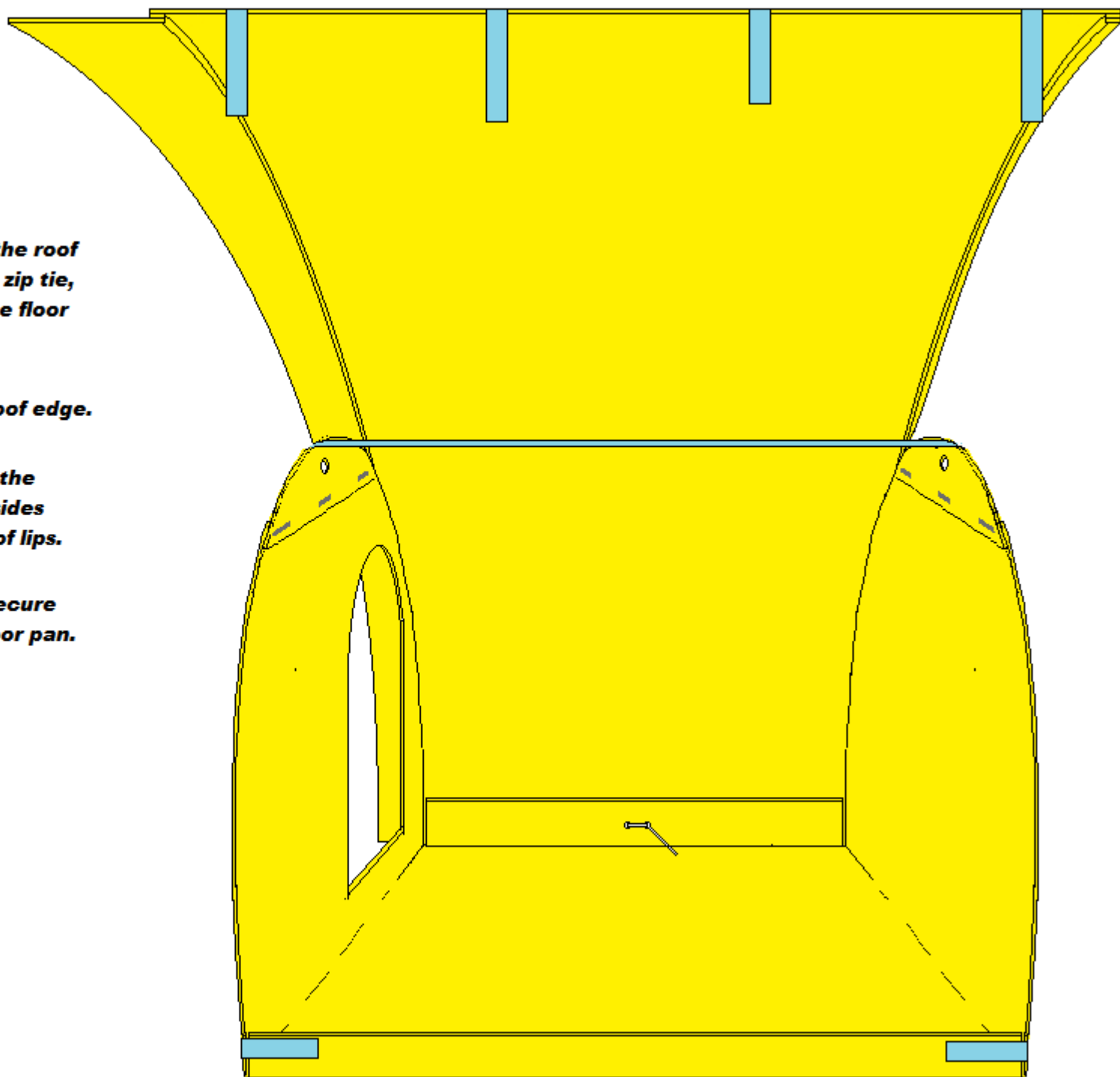
Arcing the roof

Once you've attached the roof using a single centered zip tie, turn the structure so the floor pan is on the ground.

Add some tape to the roof edge.

Arc the roof panel over the sides, making sure the sides bump up against the roof lips.

Use the tape strips to secure the roof panel to the floor pan.



Joining roof to floor pan

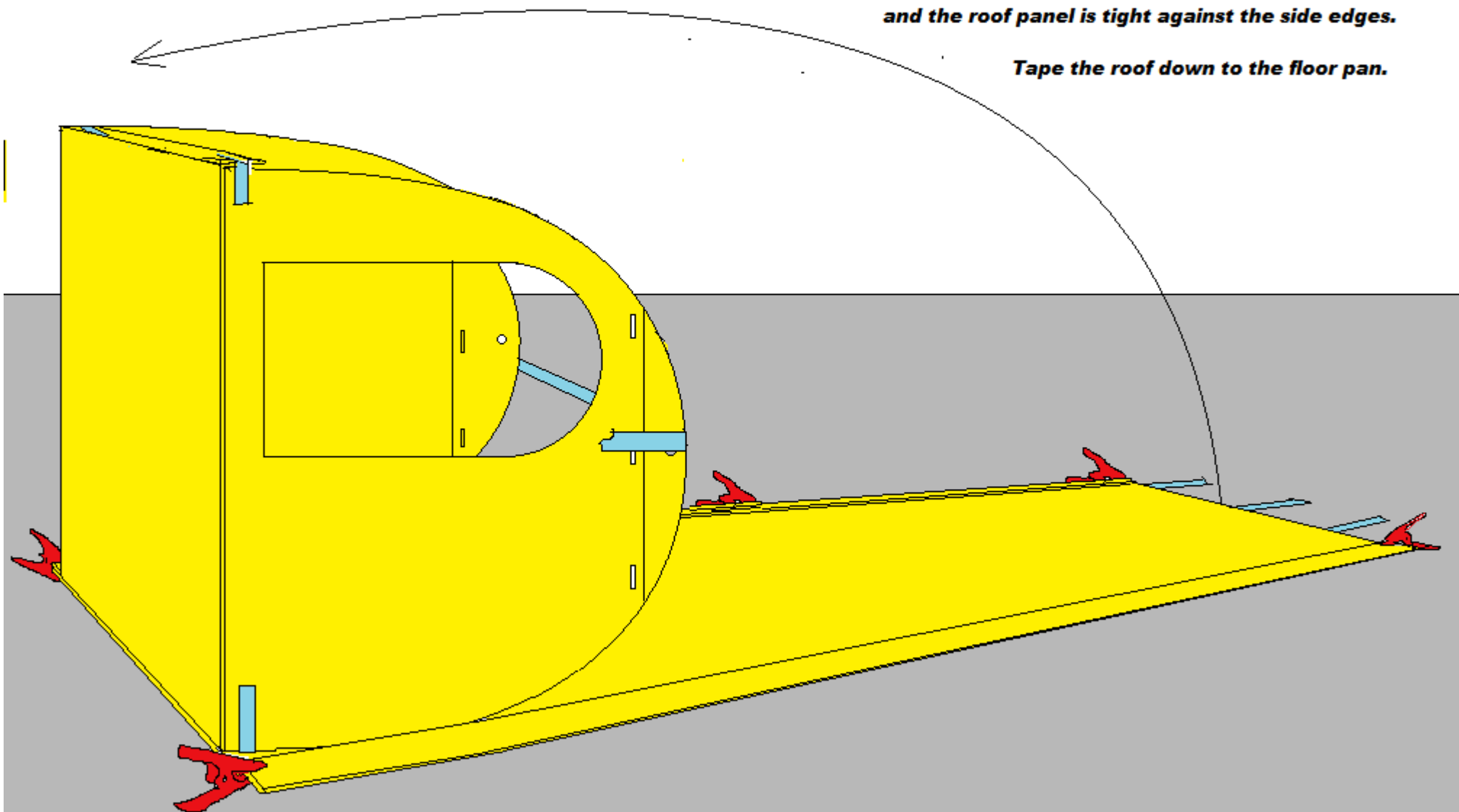
(Option #2)

After zip tying the roof with one zip tie to the floor pan, lay out the structure as shown.

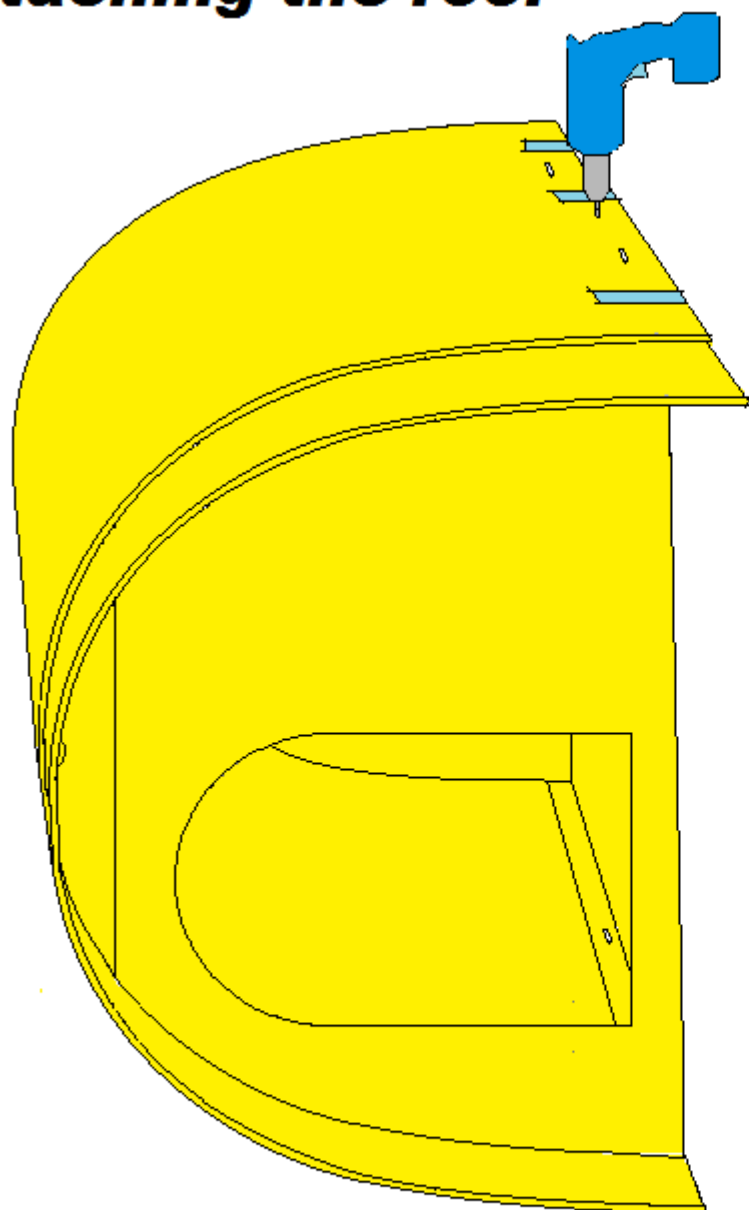
Add some tape to the roof end.

Arc the roof to join the other side of the floor pan making sure the sides are tight against the roof lips and the roof panel is tight against the side edges.

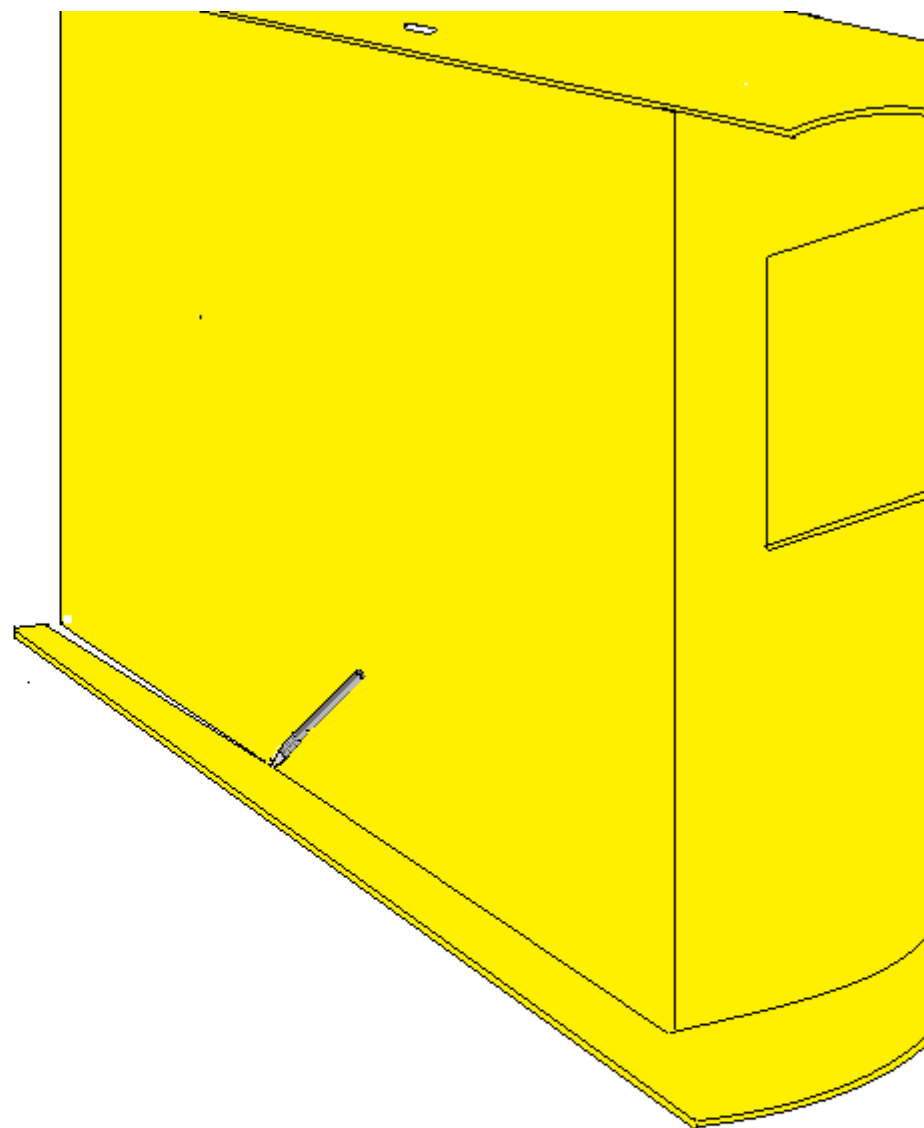
Tape the roof down to the floor pan.



Attaching the roof



If the roof is too long, first zip tie the long end to the floor pan.

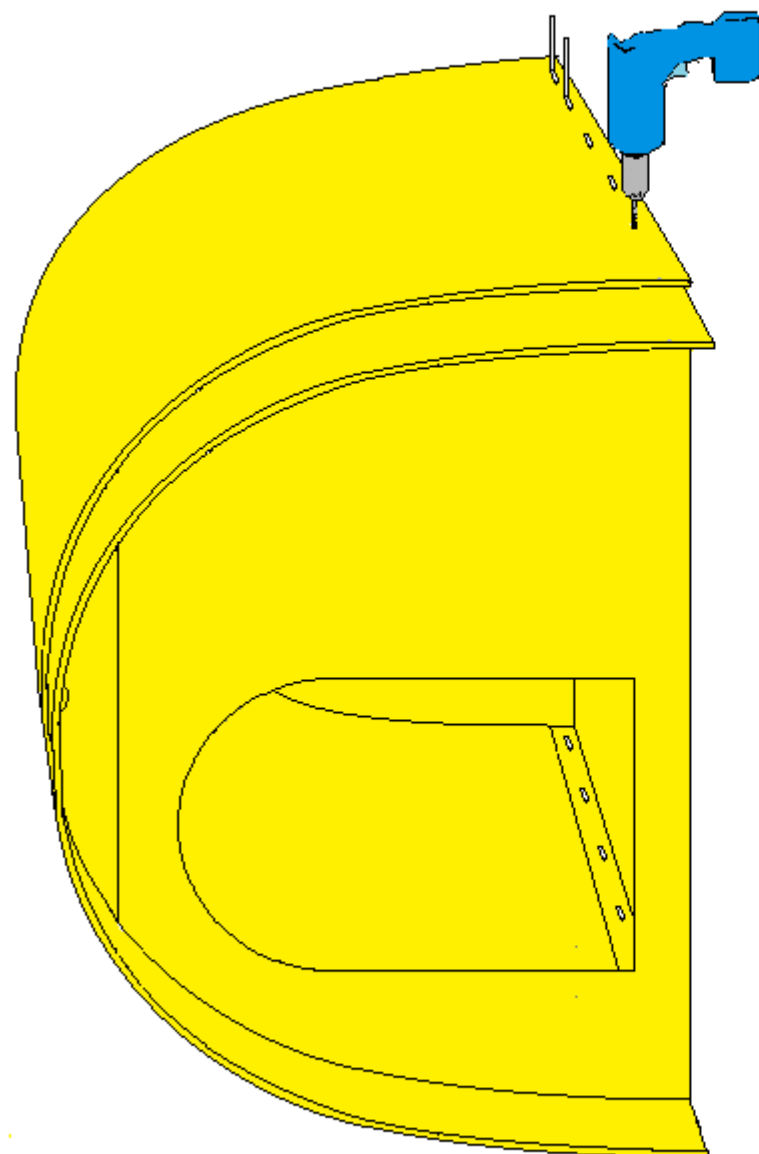


Flip the shelter over so the overhang is on the ground or table.

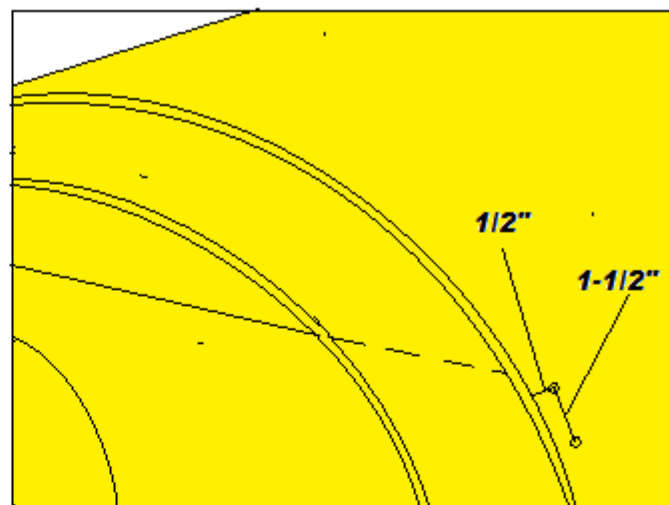
To trim the excess, run your knife along the floor pan.

Attaching the roof

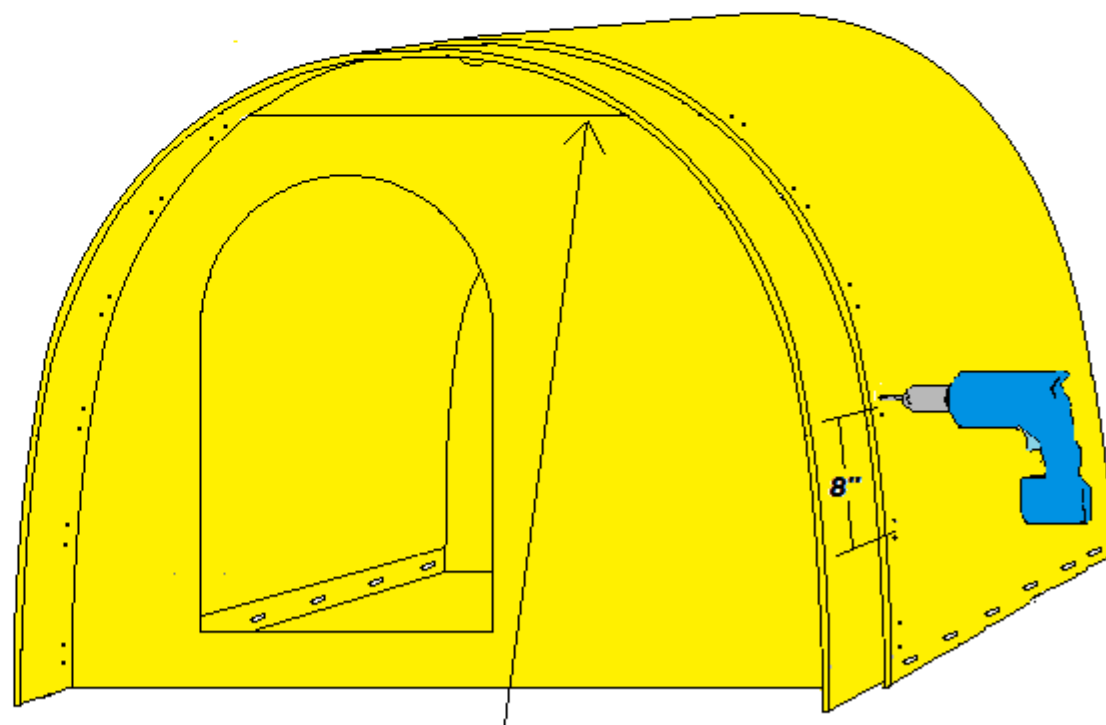
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Drill and install the zip ties on both ends of the roof panel spacing the ties 8" apart.



Drill holes 1/2" from the edge and 1-1/2" apart.

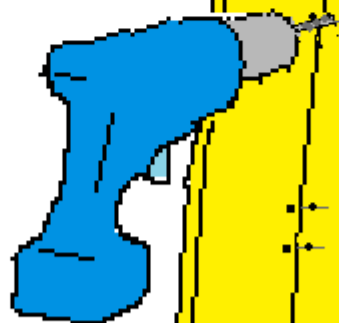


DO NOT drill holes above the bottom of the vent flaps.

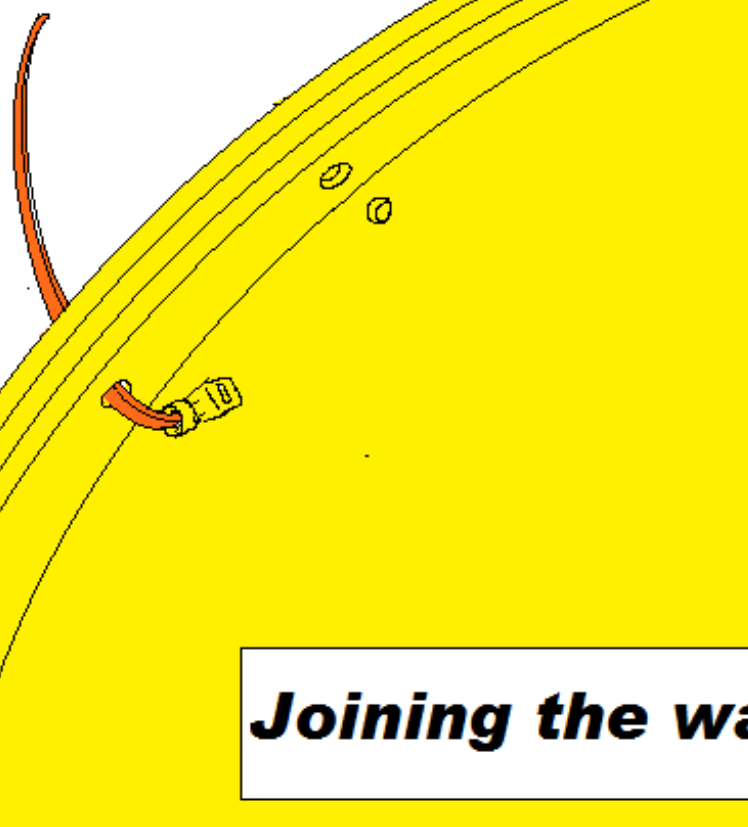
Zip tie hole location

On the walls, make pencil reference marks across from the roof holes.

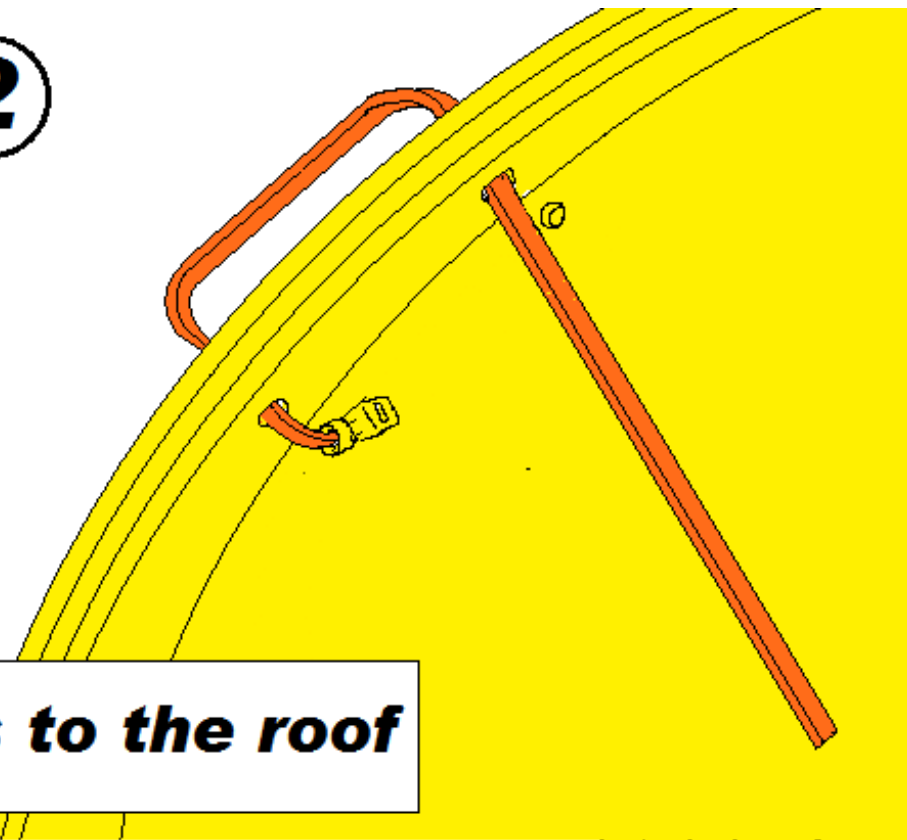
Drill the holes in the wall starting the holes about 3/8" from the corner.



1

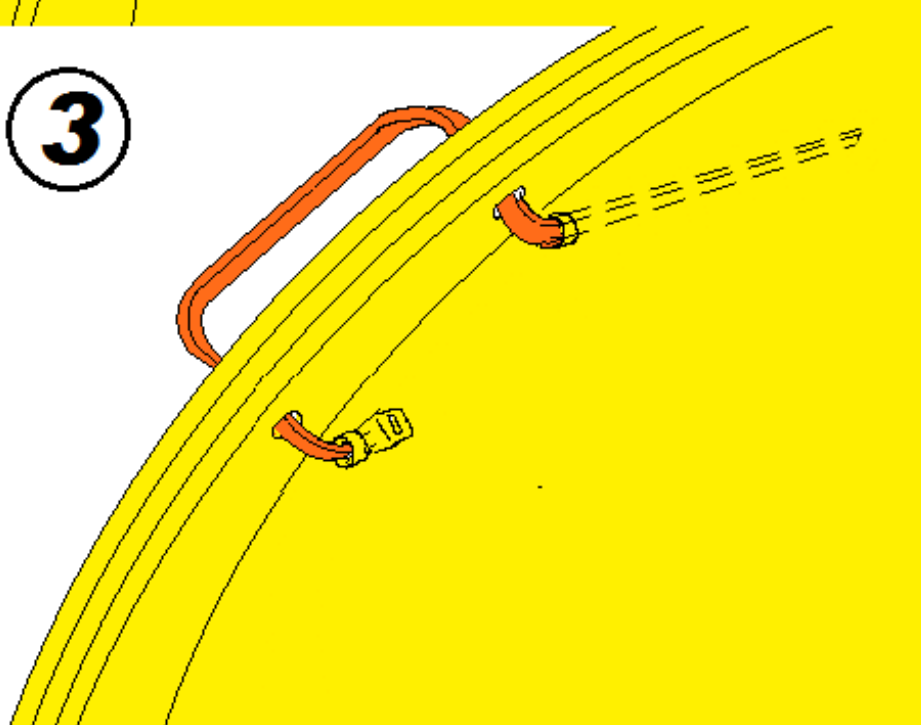


2

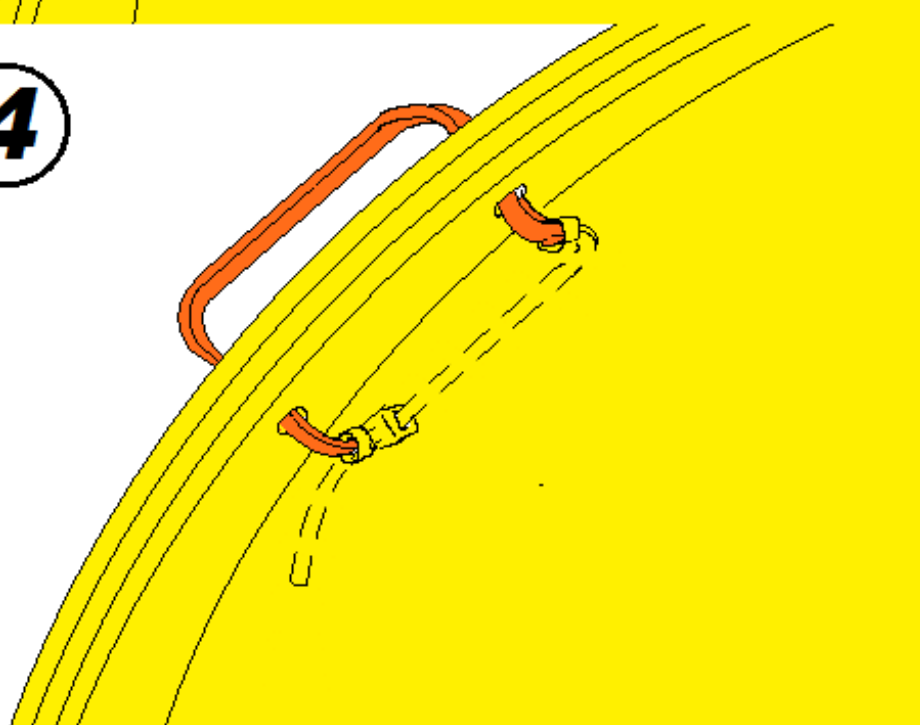


Joining the walls to the roof

3



4



Cutting the vent hinge

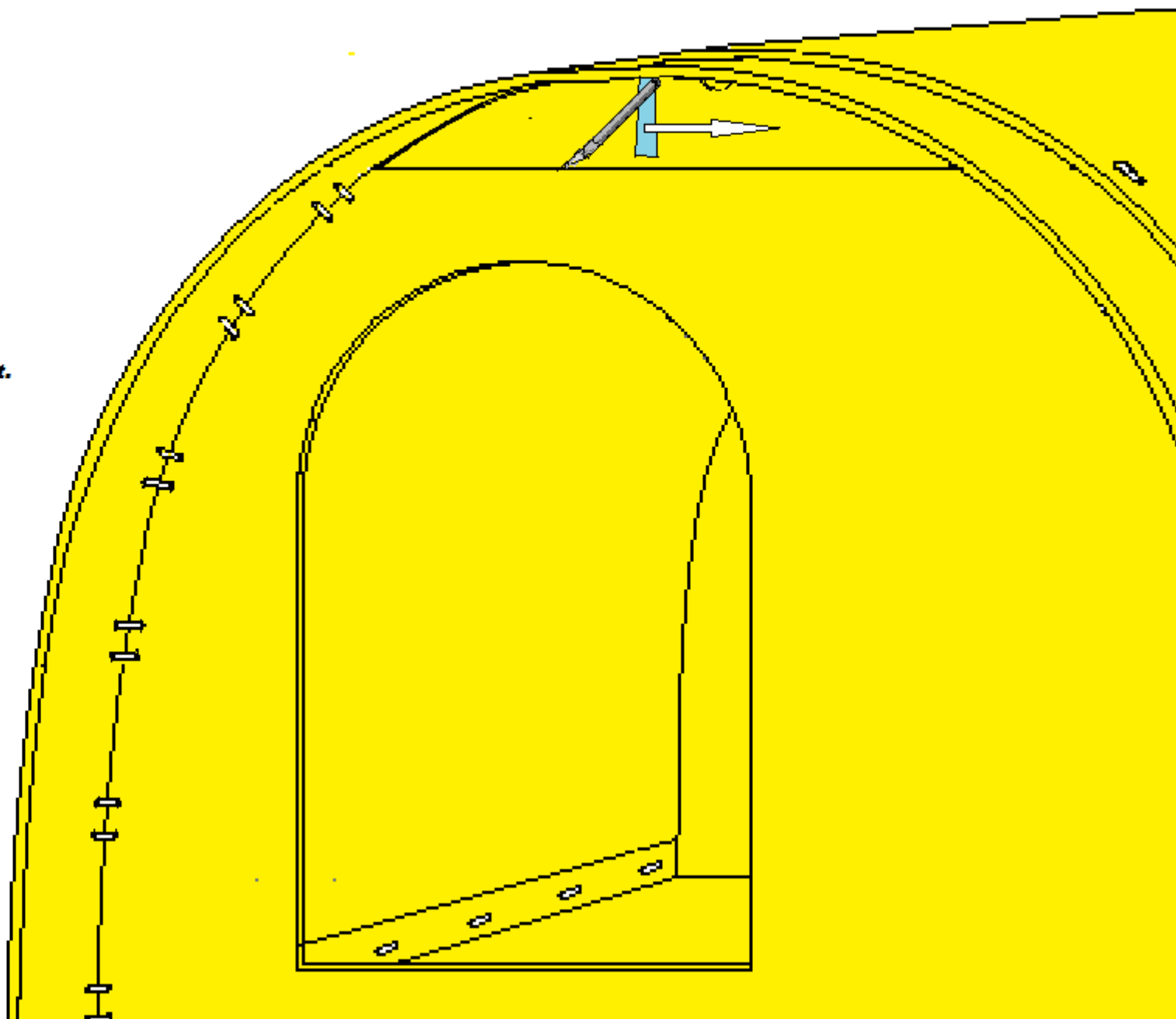
To cut the vent hinge run your knife along the flute that runs above the wall lip.

Only cutting through the outer layer.

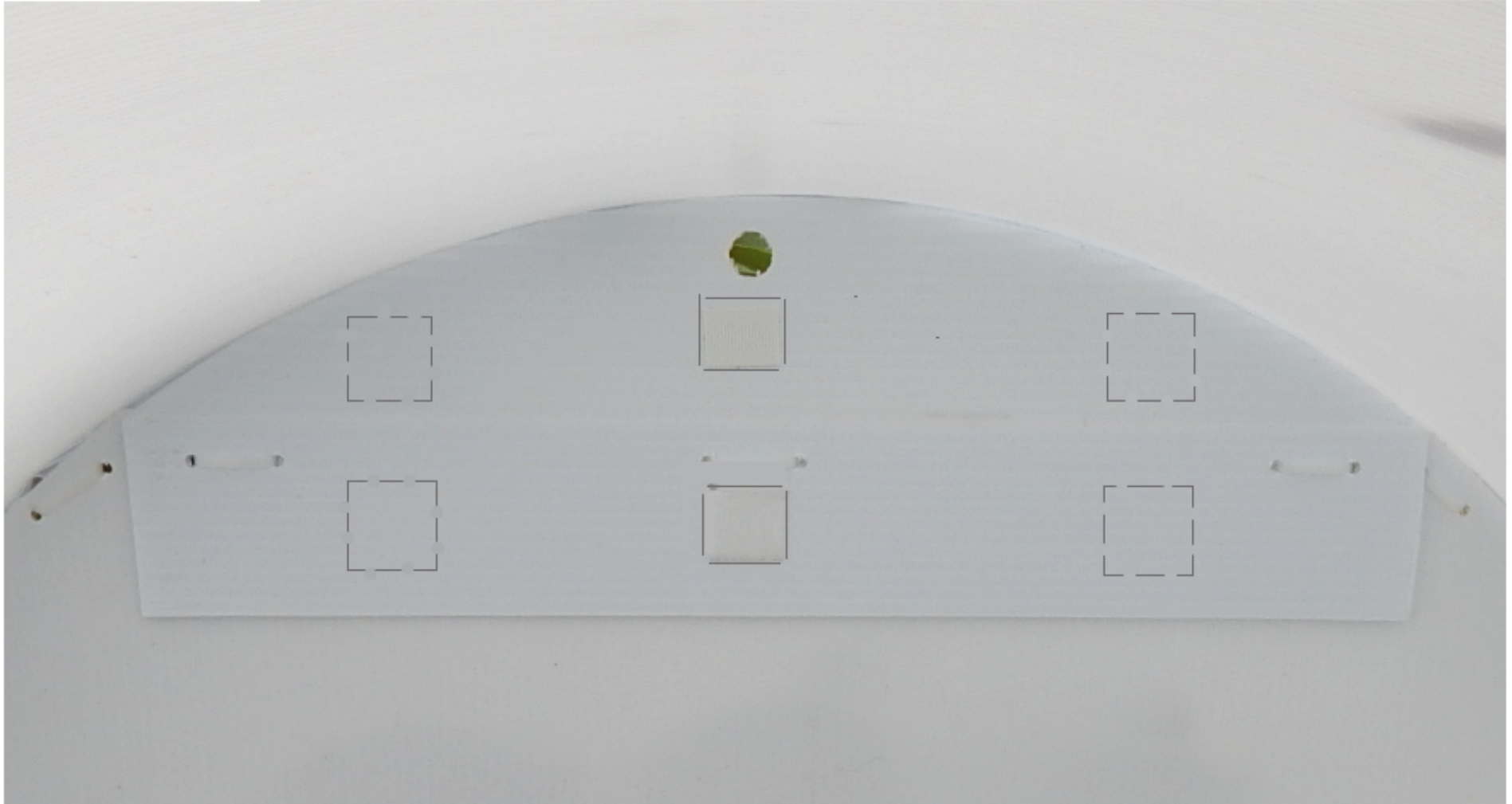
Once cut, bend inward.

Do the same to the rear vent.

Remove the tape.



Velcro location



Here you can see my peel and stick velcro tabs to keep the vent door open.

One tab on each side would be better.





MAX

A white, arched pet house, possibly for a dog or cat, is shown. It has a black door with a black frame. The word 'MAX' is printed in black on the white surface above the door. The house is set against a background of green foliage and grass.