No-Sew Tyvek Face Mask Directions
By Donna Erwin, Columbia River Gallery

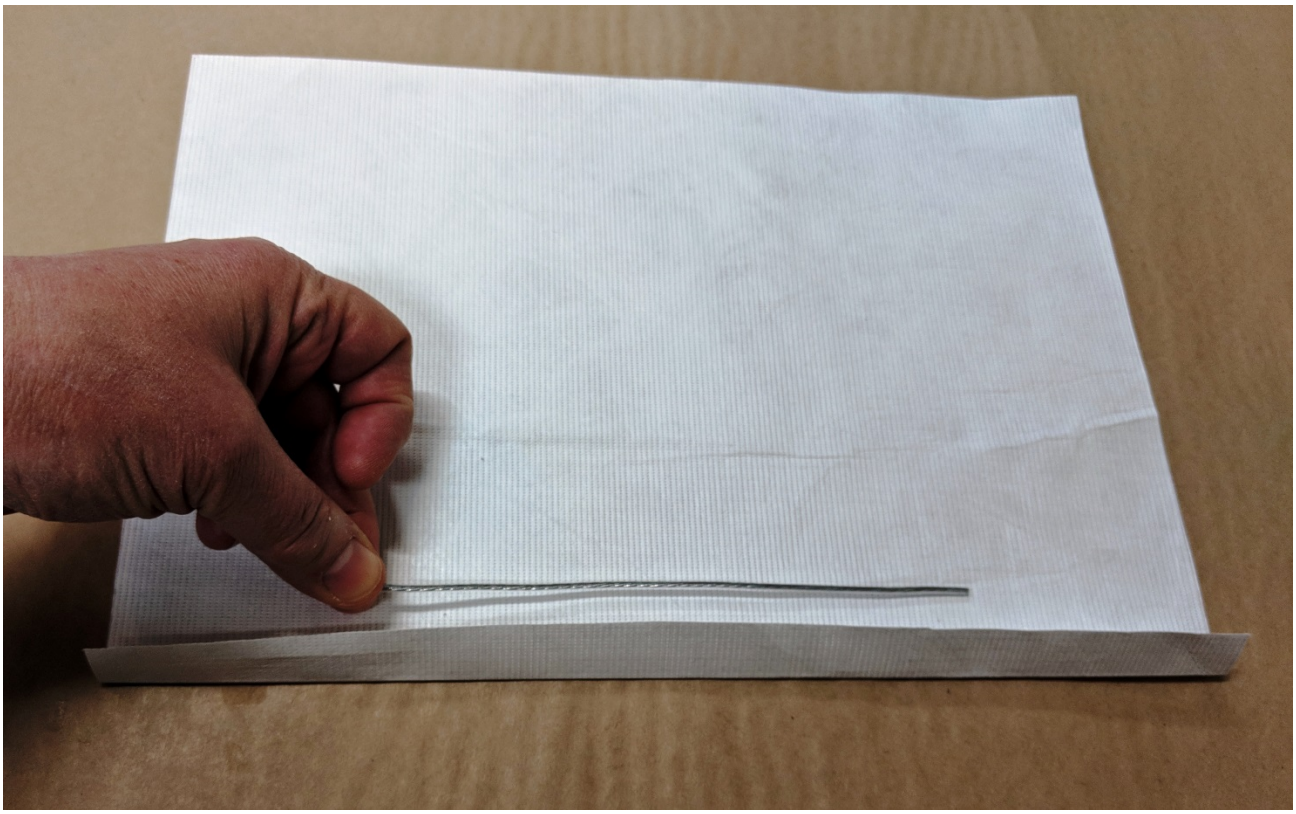
For those who don't know, Tyvek is a non-woven fabric used as a vapor barrier in the building construction trade. It is also used as a moisture resistant backing material for frames by picture framers. It has a plastic-like outside surface and a soft fabric-like inside surface.

Tyvek is also the material used to make hazmat suits. My hope is that using it to make much needed face masks might be a safer alternative to DIY fabric masks for use by medical professionals when no N95 masks are available. The wire makes for a fitted seal around the nose and there's enough fabric in this design to tuck under the chin. These are strong, washable and the ties (as opposed to elastic) ensure a customizable tighter fit.

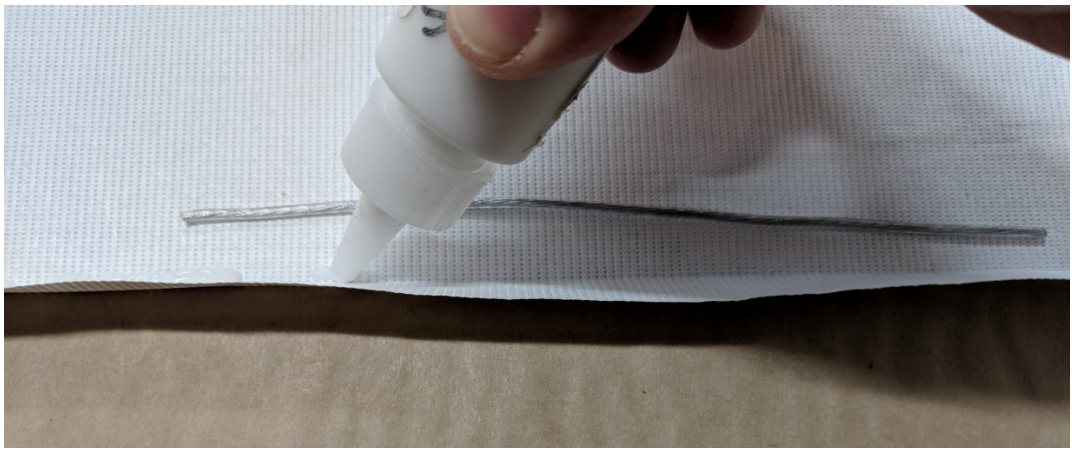
Supplies:

- Tyvek Non-Woven Fabric
- 12” x 9” Template (I used mat board)
- Straight Edge
- 4 Tyvek Strips at 18” x 1” each
- #6 Plastic Coated Picture Framing Wire (You can substitute any easily bendable wire that holds its shape.)
- Wire Cutters
- Frank’s Fabric Glue
- Fillet Tape (super strong double-sided tape used by picture framers)
- Tacking Iron
- Release Paper (any non-printed paper will do)

1. Using your 12” x 9” template, mark out the back side of the Tyvek, then cut along the lines.



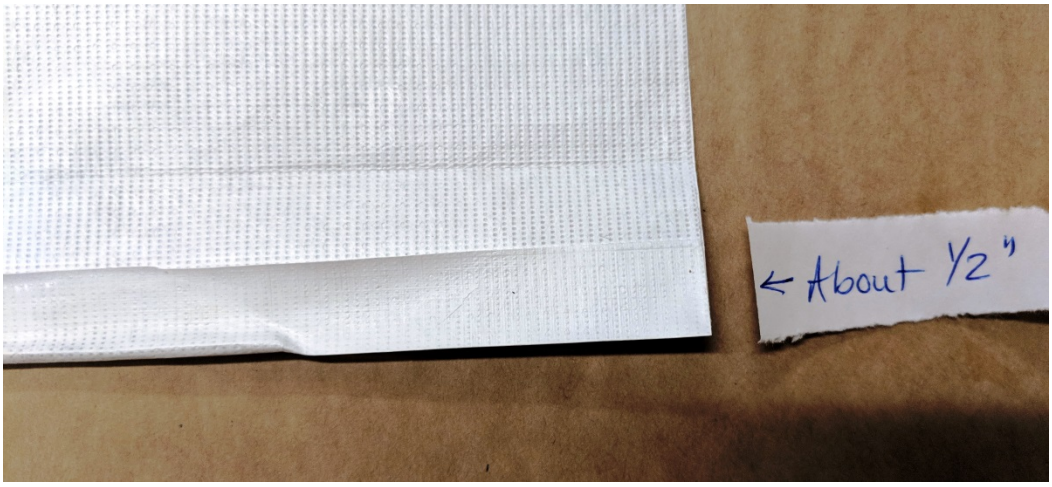
2. Working from the back (soft side vs. plastic side) fold over a long side edge by about 1/2" inch. Cut a 5” or 6” piece of wire with wire cutters.



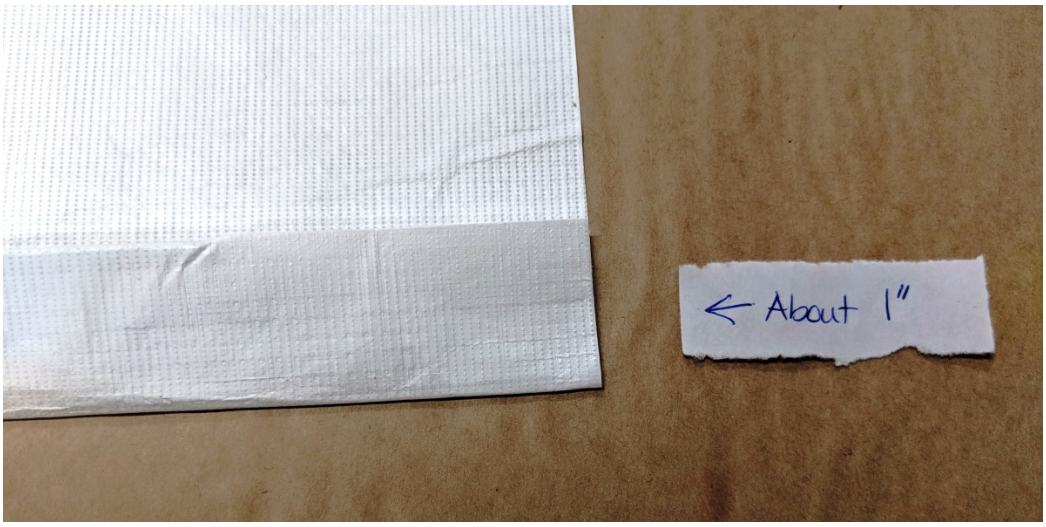
3. Run a bead of fabric glue along the crease.

4. Center the wire in the line of glue.

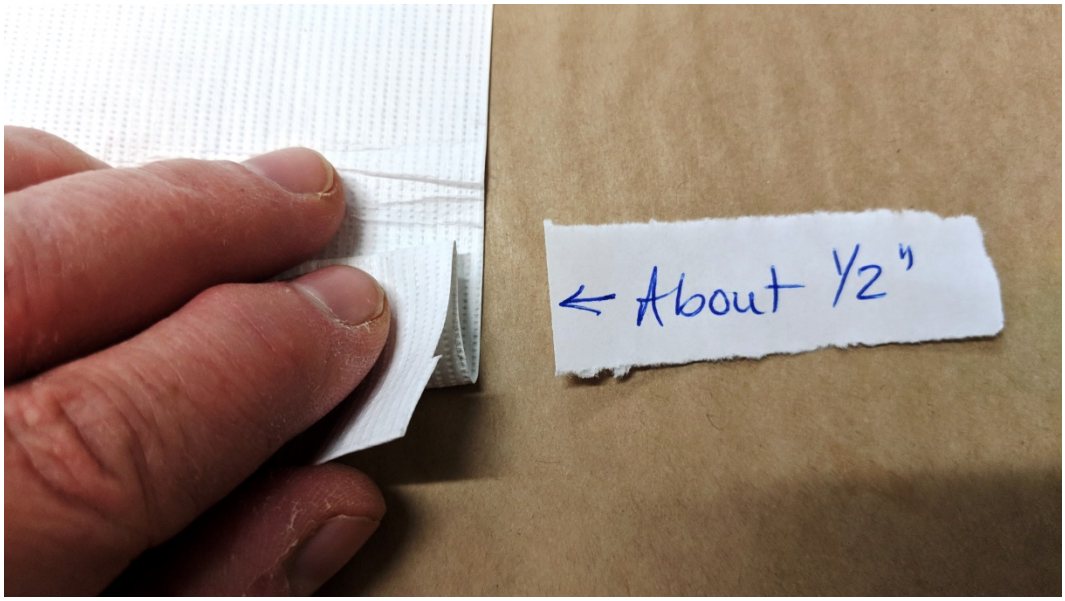
5. Tack in place front and back, using the release paper. This sets the glue for a permanent bond when cool. (Caution! The iron will melt the Tyvek if directly applied.)



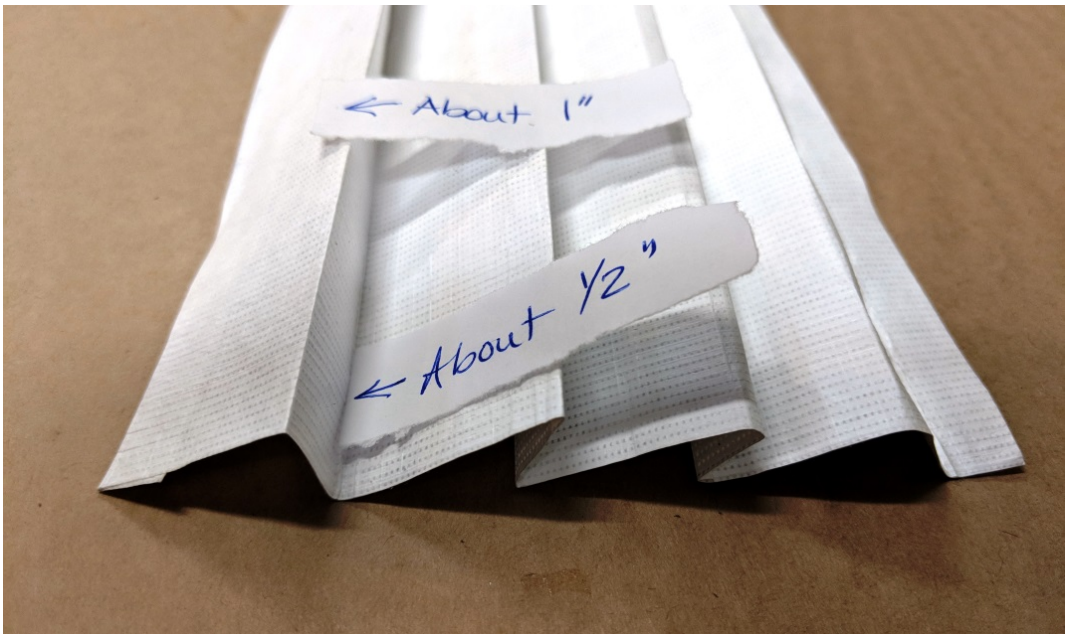
Now the wire is permanently held in place.



6. Fold this same, finished wired edge up, towards the back (soft side).



7. Working from the front for this step, fold the creased edge up about ½”. Hand press.



8. Continue folding accordion style as shown, hand pressing and making sure all the folds go in the same direction, facing towards the chin. (Think “Two steps forward, one step back”.)

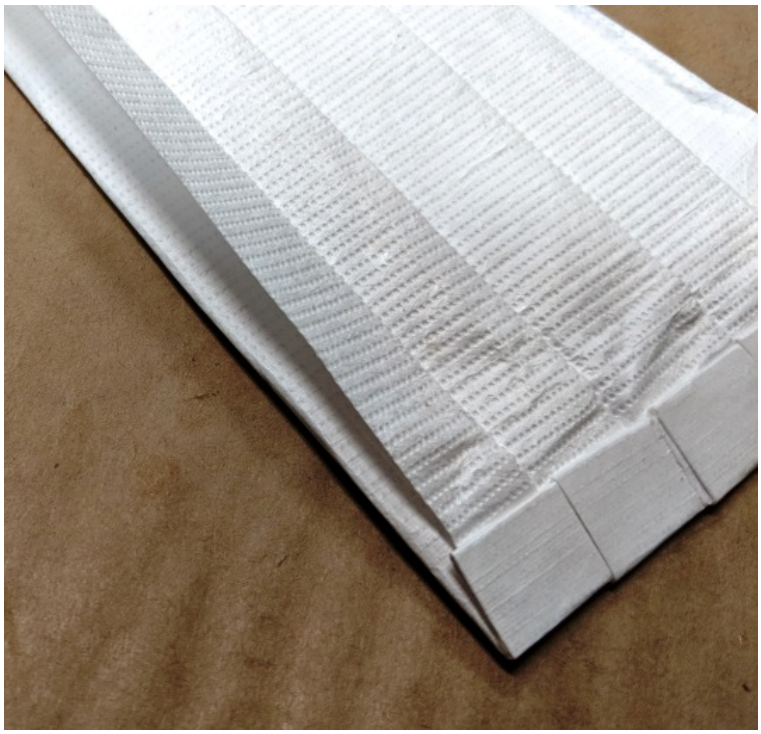
I also add a drop of glue about ¼” in from the edge on the back side of the ½” sections.)

9. Place a line of fillet tape across each far end of the face-facing (soft) side of the mask.

10. Remove the release paper on the tape, fold over and hand press in place.

I've switched to using another line of fillet tape on top of the folded edge for this step in the interest of time and less mess (instead of the glue line shown here).

11. Fold over again and tack in place, front and back.



All tacked down.

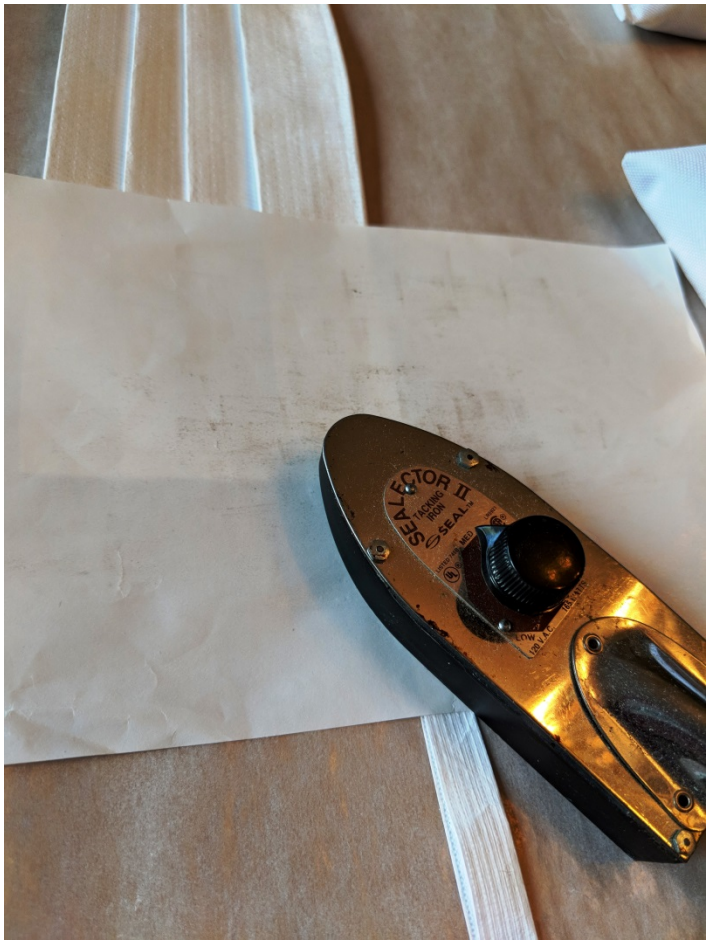
12. Measure another new strip of fabric at 18” wide and cut from the roll. Draw lines approximately 1 inch apart (seriously, you can eyeball this) on the back side. Add a generous 1” to 1 ¼” of fabric glue on one side and then a line of glue just in from the edge of each drawn line. LET DRY COMPLETELY. Tip: Make these ahead!

13. When fully dry, cut into strips along the lines and next to the dried glue lines.

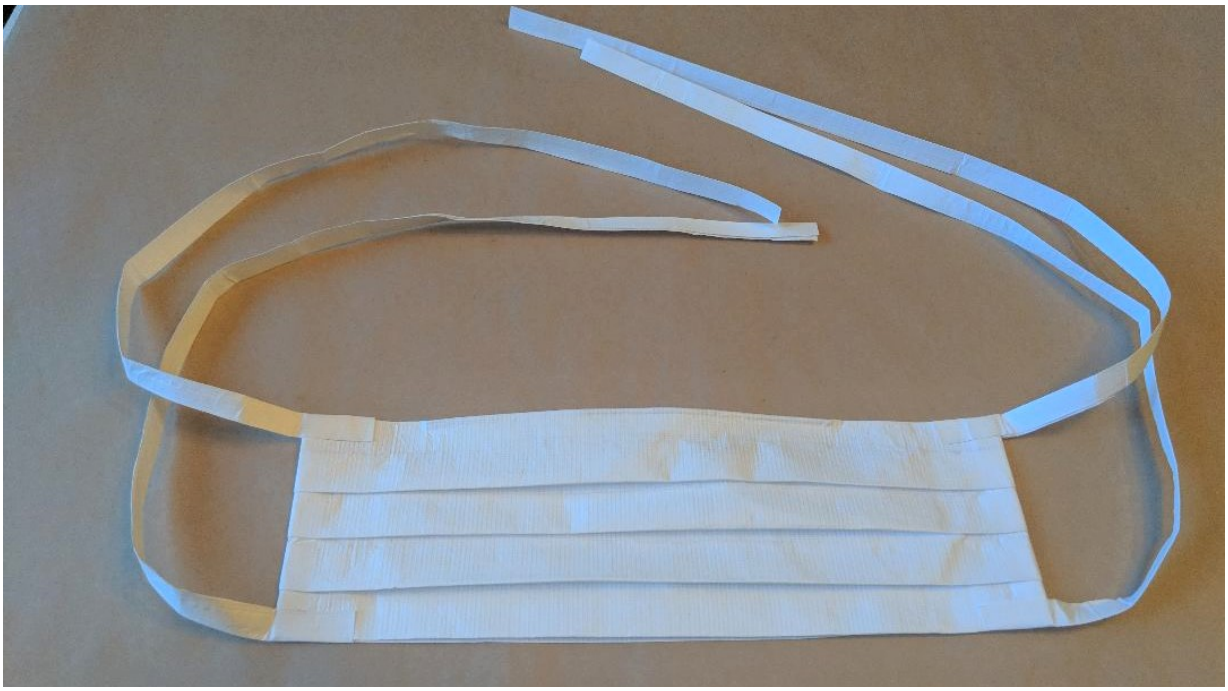
14. Fold the glued edge around both sides of each corner, coming in at least an inch.

Tip: Leaving a little bit of the glued edge extending beyond the corner will help seal the strap to the mask once heat is applied.

15. The dried glue will have a low tack that helps to hold it in place with pressure until it's tacked. (Check out those dry, cracked hands! Ugh! This is what happens when you're told to wash your hands a 1000 times a day!)



16. Tack in place front and back. Fold the strap in half lengthwise and tack front and back to form a strong tie.



Voila! A finished No-Sew Tyvek Mask!