

Patti Mask Elastic (Size Small-large):

Adapted from PROTOTYPE 2 from UF Health for The Free Mask Project of Vancouver



This mask is made of 2 layers of Halyard H500-650 or 3 layers of H300-400 medical fabric. The cup shape is based on the KN95 mask to hug the face for a tight seal. The raw edges are top stitched after insertion of the nose wire or nose piece and attachment of the elastics.

The mask has passed the Fit Test (FF>100) for particle filtration 0.2-10 microns

The mask has passed the Respirator Fit Test. UF Health INSTRUCTIONAL VIDEOS CAN BE VIEWED AT: <https://anest.ufl.edu/clinical-divisions/mask-alternative/>

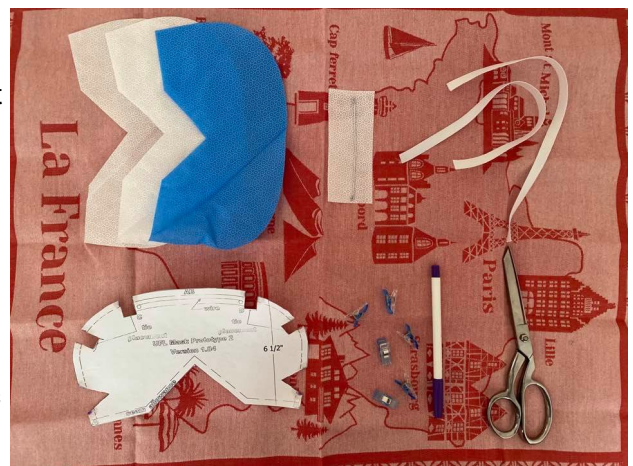
SUPPLIES NEEDED:

- **Halyard H300-600 FABRIC**
 - 3 pieces 10" × 6.5" (H300-400) or 2 pieces (H500-650)
- **MASK TEMPLATE** provided for a pattern
 - Thick cardstock or other material to make a firm template for tracing
- **16-20 GAUGE CRAFT WIRE** for the nose wire OR 3" x 1/4" **aluminum nose pieces**
 - Cut 1 piece 5" (16-18GA), 2 pieces (20GA). Make a loop at each end of the wire. All loops should face the same way. Press the loops flat with your pliers to make sure there are no sharp edges sticking up. (*Loops are needed to keep the wire from poking through the fabric.*)
- **2 elastic bands** (each 33 cm/ 13" long and 1 cm wide)

Note: If you do not have 16-18gauge wire, use 20-gauge wire, but cut two pieces and make a loop on both ends.

TOOLS:

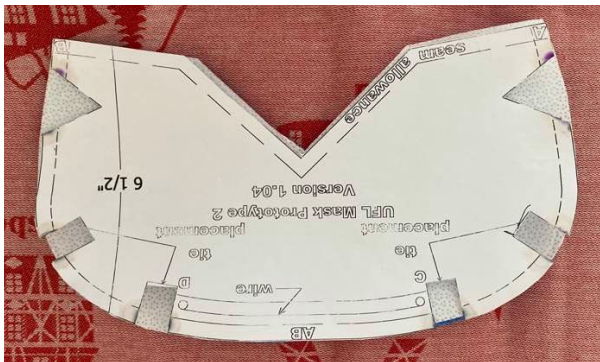
- Sewing machine that can do a straight stitch and zigzag stitch. Your presser foot needs to be able to accommodate the zigzag stitch.
- Ruler
- Scissors
- Pins or clips
- Jewelry pliers that have tapered round ends and cutter or needle-nose pliers and wire cutters
- Ink pen to trace the pattern onto the fabric
- EXTRA HELPFUL: cutting mat, long ruler and rotary cutter!



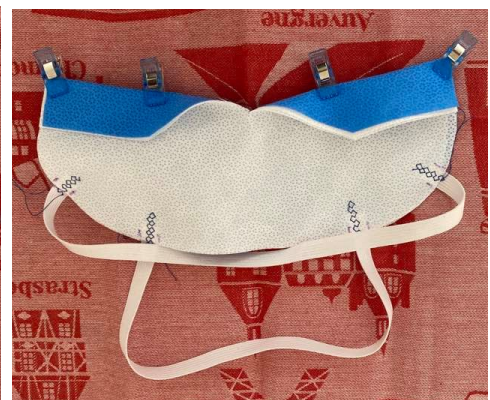
Machine setting: 2.5 stitch length or whatever the “normal” stitch is for your machine. The zigzag stitch setting used is 2.0 length and 7.0 for width. If your machine does not go to 7.0 for width, use the widest setting.

Step 1: MASK TEMPLATE. Print the template and glue to a thin cardboard such as a cereal box or cardstock or use template plastic. The thin “cutting mats” are also good template material. Trace the pattern onto a 10” × 6.5” piece of fabric. Cut out the template and the spaces for the two darts and the four tie placement markings (positions for elastic band)

Step 2: Cut out the fabric. Layer the 3 maskpieces with the blue layer on the outermost layer and the white layer on the inner layer. Press the inner layer with the template, and mark the positions for the elastic band and the darts.
DO NOT CUT OUT THE DART



Step 3: Insert the elastic band between the first layer and the second layer of the outer layers of the mask. The embedded part is about 1.2 cm. And fix it with a small clip



Step 4: Set your machine for ZIGZAG stitch to attach the elastics. We used 2.0 for the stitch length and 7.0 for the stitch width. Place the squared end of the elastic 3/4” in from the edge, between the two outer layers at the notch. LOOK at the template to make sure you place it in the correct place. Hold together and place under the presser foot. Zigzag stitch from the outside edge of the mask to the end of the elastic that’s between the layers; reverse stitch back to the starting point of the stitching. Place and zigzag stitch each elastic end.

Tip: Make a second template and only cut out the tie placement marks. Lay it on the blue side, making marks for easier placement of the elastic.

Step 5: Darts and partial top stitch of the mask. Next, sew the darts. NOTE: SEW THE DARTS ON THE BLUE SIDE! The dart seams will show on the outside of the mask. If you have cut out the dart, fold and sew each dart using a tapering seam from the narrow point of the dart to the bottom ending with 1/4" seam. Backstitch at the beginning and end.

In this example, the dart is not cut out and a straight line is stitched across the edge of the dart instead.

When the darts are completed, sew a 1/4 topstitch from one corner of the mask around to the other corner folding the darts up toward the top as you sew. (Sew from Point A through AB and to Point B). **The other seams are left until last so the nose wire or aluminum nose piece can be inserted.**



Step 6: Insert the wire. Place the nose piece between the outermost layer and the second layer of the mask and fix it with a sewing machine. Push it all the way up to the seam made when you topstitched the layers together and used clips to hold it there. Now you will CAREFULLY sew a 3/8" topstitch from Point C to Point D between where the top two ties are sewn in. Position the presser foot so right edge is on the line of the 1/4" topstitching, so you are encasing the nose wire within the 3/8" seam. You want to go slowly so you can control where the wire is. You don't want a broken needle!

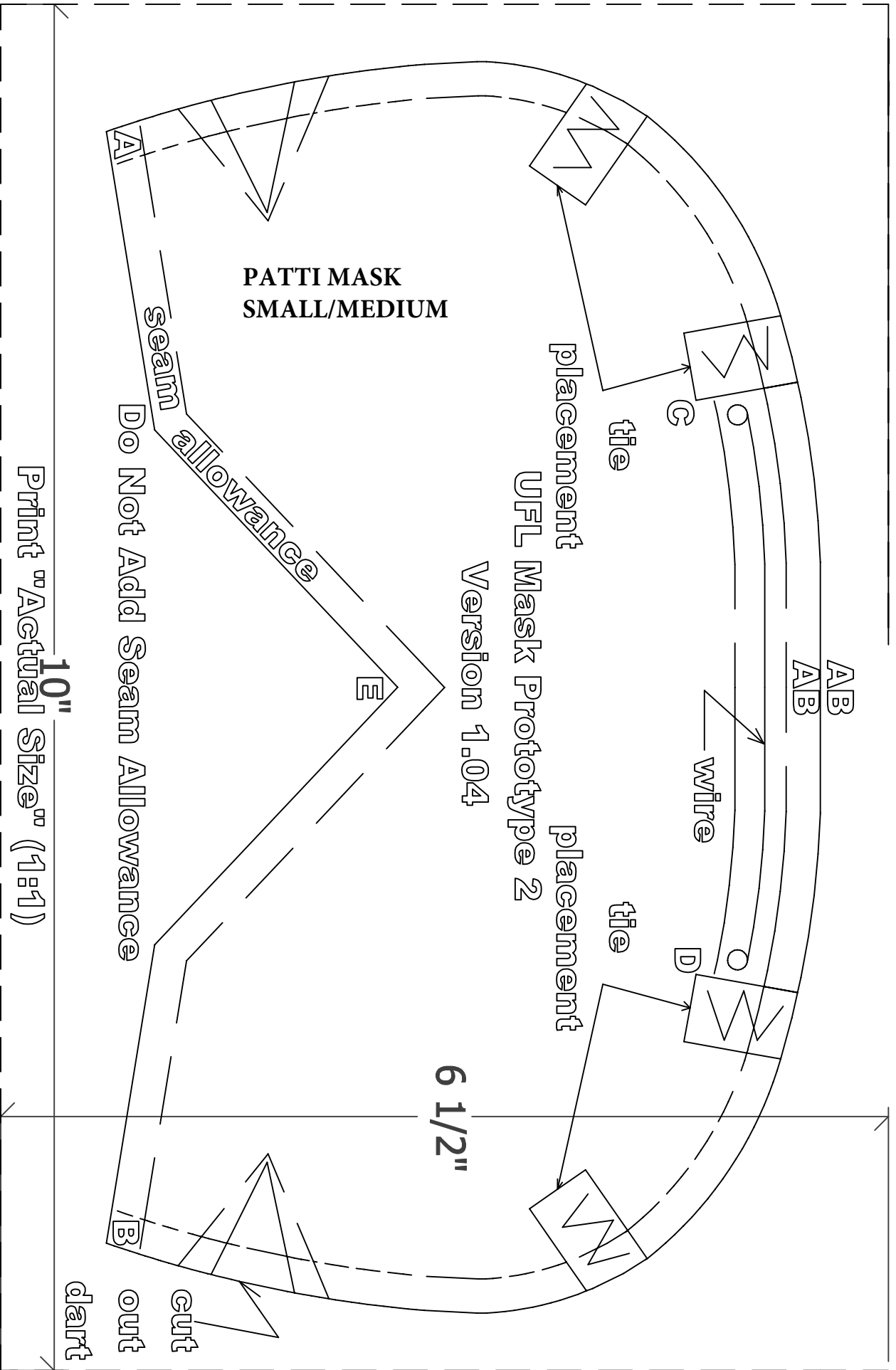


Step 7: Sew the outside seams. You are going to sew on the blue side so that the seams will be on the outside of the mask. Slightly bend the nose wire so you can line up the remaining seams and clip, blue side out. Using a 1/4" seam, backstitch at the beginning (Point E), sew to 1/4" from the corner, turn the mask and sew to the end and backstitch. Trim the seam to 1/8" inch to trim it up a little.

Now you will sew a 1/4" topstitch on the outside edge from one dart across the seam you just made and across the other dart. You are done!



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**PATTI MASK
SMALL/MEDIUM**

Version 1.04

6 1/2"

placement
tie
placement
wire
placement
tie

seam allowance
Do Not Add Seam Allowance

Print "Actual Size" (1:1)

cut
out
dart

A

E

B

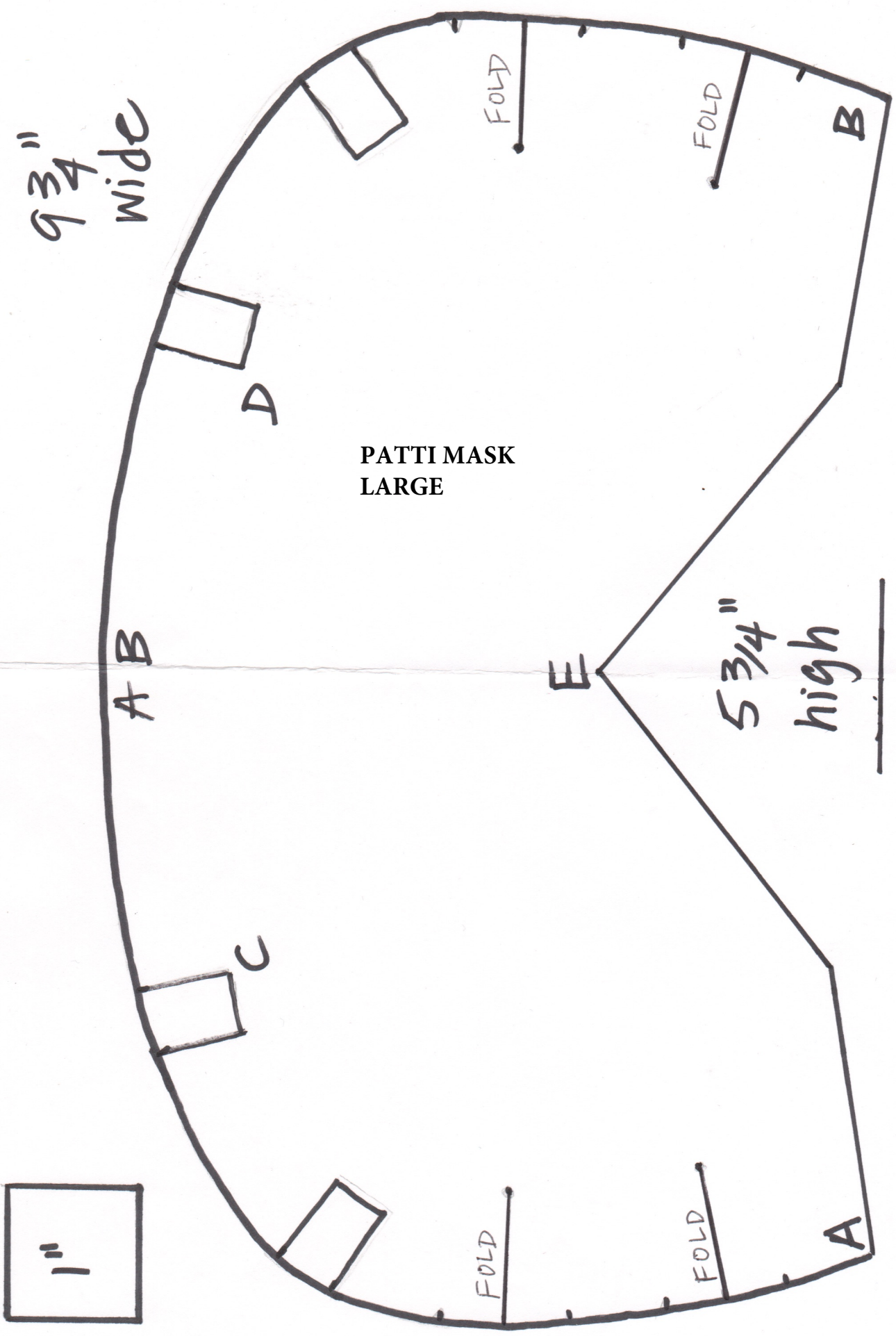
C

D

AB
AB



**PATTI MASK
LARGE**



9 3/4" wide

PATTI MASK
LARGE

5 3/4" high

1"

A B

A

B

D

E

FOLD

FOLD

FOLD

FOLD