

Materials List:

- 1 yard coated Tyvek, Tychem or similar material
- 1 yard of 1/8" round, up to 3/8" flat elastic
- Avery 16741 or similar PETG file dividers for shield
- 1 Hard-hat. I use both Americana and 3M, Twist adjust are best. Different brands may involve slight deviations
- A few small and medium zip ties
- 1 Inlet connector, 3M or preferred brand. 3M Versaflo compatible 3D STL file is hosted here:
<https://open-mask.org/instructions/head-gear-instructions/>

Directions:

1. Cut out main pattern, doffing loop, double Inlet reinforcement patch and double retainer strap tabs from your material
2. Progressively wrestle stitch a 3/4" folded hem around the perimeter, creating a 1/2" hem tunnel for your elastic to be fished. We won't fish the elastic through until the end.
3. Stitch your 4" crown loop at 3" points so it stays puckered open
4. Double layer zigzag your inlet reinforcement patch, inside
5. Zigzag 2 double layer retainer strap tabs to each side, inside
6. Stitch 6"-8" of 3/8" flat elastic or similar to retainer tabs. Length varies due to elastic strength. 6" is typical.
7. Rotary cut your screen material as noted on the pattern
8. Carefully position screen inside hood and zigzag stitch to material.
9. Carefully stitch the 2 chin darts together, starting at the screen end, softly fold the screen corner for ease, then stitch towards the hem, stopping at the hem stitch. Do not stitch past your hem stitch.
10. Flip to outside up and slowly and carefully rotary cut the Tyvek covering the screen just inside your zig stitch using very little pressure so as not to damage the screen. Do this once, properly and carefully.
11. Feed a fishtape/ coat hanger gauge wire all the way through the hem tunnel, then duct tape the end of 24 inches of 1/8" round, up to 3/8" flat elastic and slowly pull through perimeter hem, pulling tails out rear and tie a knot. Tie second knot to adjust tension as needed.
12. Remove the hard-hat internal 4 point crown suspension and insert into the hood right side up, and forward front. Loop the elastic retainer strap over and through the front brim section of the headgear. Double zip-tie to affix and insert inside the hood
13. Cut the 1+'' inlet hole, and affix your required fitting
14. Test fit on your head. Adjust rear twister to size then pull shield over face and push/pull side retainer tab elastic to adjust fit everywhere including around ears. You can easily lift the faceshield up and over the brim for easy on and off test fitting

Open-Mask.org PAPR Respirator Hood - Release v2.3

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