HEPA Filter Face Mask

(These instructions were sent to us from our friends at Baby Lock. They were created by a retailer in Washington.)

These instructions were created from a project using Simplicity Freedom Bags. If you're using other bags, you will need to adjust your measurements accordingly.

You will need 1 vacuum bag, 10-12 inches of 1/2" braided elastic, sewing machine, and basic sewing supplies.

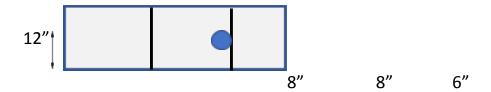
Start by prepping the bags.

You will need to remove the cardboard, or in some cases the plastic bag dock. Trim top, bottom, and side seams off the bag, this will leave you with two

12 x 24" pieces. One will have hole in it (that's okay we work around the hole as best we can. You may lose a mask or two from each bad depending on where the cuts land.

1 bag will give you roughly 8 adult size and 4 child size masks. Or roughly 40-48 adult size masks and 24 child size masks. If you want to cut only adult size masks, please see cutting directions at the end.

Lay the bag out horizontally, both halves stacked, with the hole on top. Start at the left end and make two, 8" cuts. The 8 x 12-inch rectangle with the hole can be discarded or cut down to a smaller size.



This will give you three, 12" wide cuts. You will have four 8 x 12 pieces and two 6 x 12 pieces.

Turn and sub-cut the 8 x 12 rectangles to 6-inches. You will have a total of eight, 6 x 8 rectangles and four 6x6 squares (child size).

Zig-zag around the outer edge to seal. This keeps them from fraying and falling apart.

Find one of the 8" sides, find the center and mark with a marking pen. Measure and mark 1 ½" to the left and right of the center mark. These will be used for the nose elastic and to denote the top.





From the bottom edge of the mask, measure up 2"and place a mark on each edge of the mask. From the top edge of the mask, measure down 2" and mark on each edge.



Using both hands, pinch the bottom 2" mark and pleat fabric bring 2" mark even with bottom edge of mask, pin in place on each side. (photo 1) Flip mask and repeat with the top 2" mark, bringing the fold of the pleat ½" up from the top edge. (photo 2) This will allow room to sew the nose cup.





Photo 1
Set the mask aside for the moment.

Photo 2

Using ½ inch braided elastic, cut a 12" piece (XL), or a 10" piece (L/M), or an 8" inch piece (S/child) of elastic. This will be used to form the nose cup and ear flaps.

Pin the left edge of the elastic to the left mark on the top edge of the mask (photo 3). The elastic will be entirely covered by the mask material, photo illustrates where to place END of elastic, make top edges flush before sewing.



Use a zig-zag stitch to tack the elastic in place, remove the pin. This next part can be tricky, you need to hold your elastic taught without preventing your machine from stitching forward. Stitch from the first mark to the third. This will cause the mask to bunch when you relax the elastic. Stop at the third mark (The right most mark) and back stitch firmly. Trim remaining elastic.



From the remaining elastic, split the elastic lengthwise down the middle. (photo 1) This will give you two 1/4" strips. Pin elastic, one end at the top pleat, the other at your bottom pleat. Do this on both sides. (photo 2)



Photo 1

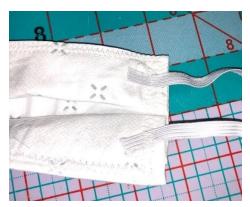


Photo 2 (from the back of the mask, we found after this one, it was easier to sew the ear flaps on the OUTSIDE of the mask. We recommend using that method.)

Zig-zag down each side, sewing in the pleats, back stitch aggressively over the elastic, this area takes the most stress.

To cut adult only masks, on the last cut, the 6" cut, after you make the 6" cut and turn to sub cut, instead of cutting the rectangle in the middle to make 6" squared, simple cut 2 inches over to make a 6 x 8 rectangle, you will end up with 2 more adult masks (to replace the two that were not usable due to the bag dock hole.)

You will have about 4 inches of waste.

Good luck and please call if you have any questions.

For informational purposes. The masks are disposable, they cannot be washed and reused. But they are the closer in filtration to surgical masks than anything else available that we have found.

Please make and use these at your own risk, and you may not hold Discount Vac and Sew or any of its employees responsible for any illness you might catch, carry or pass on. In other words, make and use at your own risk.