Pattern and Tutorial for a Homemade Mask with Coffee Filter Insert

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If you are making masks to donate: Please check with the hospital, nursing home, grocery store, etc. before making the masks as they may have specific instructions or requests. For example, this pattern is based on the masks requested by the University of Mississippi Medical Center, only I altered the steps significantly in order to make a side opening to insert a coffee filter, vacuum bag, or other material that increases the effectiveness of the mask.

If you are making the mask for yourself and your loved ones: Many mask tutorials have been circulated on social media since the outbreak. I preferred this one because (1) I had not come across any patterns that accommodated a removable paper filter and (2) other than the UMMC pattern, I had not seen any with tie-straps. Compared to elastic bands, the tie straps can accommodate a wider range of head sizes (including child size) and a wider range of hairstyles.

1. Gather materials. You will need
   • A sewing machine
   • An iron
   • Tightly-woven cotton fabric, similar to bandanna fabric or basic cotton bedsheets
   • Thread
   • Scissors
   • Measuring tape or ruler
   • Flannel is optional, for a more comfortable lining
   • A coffee filter or vacuum bag
The following are optional. If you intend to make many masks to donate, these materials will speed up the process:

- A surger
- Pinking shears
- Rotary mat and rotary cutter

2. Cut your fabric pieces. For one mask, you need:
   - Two rectangles 9 inches by 6 inches, one cotton and one flannel, or both cotton.
   - Two strips that are 2 inches by 35 inches or longer. If you have a surger, cut these strips 1 inch by 35 inches instead.

3. Iron the long strips in half lengthwise, wrong sides together.

4. If using a surger, surge this raw open edge with the cutter on. Then skip to step 8. If you don’t have a surger, you will iron the strips similar to bias tape. Start by opening the ironed strip back up.

5. Fold the top and bottom edges to meet on the middle line and iron in place.

6. Fold the strip back in half again and iron.
7. Top-stitch the open edge with a ¼ inch seam allowance.

8. If using pinking shears, trim the ends so they do not fray. If you don’t have pinking shears, tie a knot near the end or sew the end shut and backstitch.

9. Iron the mask material if needed, then lay it flat on your ironing board, face up, with a “landscape” orientation.

10. Fold the top down so that 1 inch of the bottom fabric is still showing. Iron the crease.
11. Open the fabric back up, but leave ½ inch overlapping. Iron the crease.

12. Fold the bottom edge up to meet the top. Iron the crease.

13. Unfold the fabric and re-fold it so that both creases meet at the middle line. Iron the crease. Your fabric should now be approximately 9 inches by 3 to 4 inches. The dimensions don’t have to be exact, as long as the corners and edges of the lining and outer piece match up.

14. Iron down one of the short sides by about ¼ to ½ inch so that it can be hemmed more easily later. This will be the open side for slipping the filter in.

15. Repeat steps 9 to 14 with the flannel or lining piece. For this tutorial, the brown flannel is the lining and cotton sheet music print is the outer fabric.
16. Pin one strap into the outer piece, with the surged or hemmed side tucked into the fold. Center the outer piece and the strap so that there is an equal length of strap extending from each end of the mask piece. Topstitch ¼ inch from the edge, starting and finishing just beyond the mask (where the arrows are in the picture). To reinforce the corners where the straps will be pulled, backstitch once or twice on both ends.

17. With the right side of the mask facing up, fold the straps away from the mask. Iron them at the corners at a 45-degree angle.

18. On the raw, unhemmed side, place the other strap, centered so that the same length hangs off each end. The surged or hemmed edge of the strap should line up with the edge of the mask piece and the clean edge should be inside. The surged or hemmed edge should be about ¼ inch off the edge of the mask. Fold these straps INWARD onto the mask and again iron them at a 45-degree angle (I just pinned them to take a picture. You do not need to pin at this step).
19. Lay the lining on top so that the mask pieces are right sides together. Make sure the hemmed sides match up (right in the picture) and the raw sides match up (left in the picture). Two straps should be running through the middle and out the hemmed side. The other two straps should be outside the mask. I pinned at least once on the long edges of the mask to help me make sure not to sew over the straps running through the middle.

20. Sew around the three sides of the mask with a $\frac{1}{4}$ to $\frac{3}{8}$ inch seam allowance. Backstitch at the beginning and end.

21. Either as you go or when you finish, reinforce the corners where the straps are by backstitching over these once or twice at a 45-degree angle. When you finish sewing, it should look like the picture to the far right.
22. Turn the mask right side out. You can pull on the straps inside to help you do this. Iron all seams and the creases through the middle of the mask.

23. Now you can add a coffee filter or vacuum bag. For the kind of coffee filter I had, it worked best to fold it in half and make sure the wider side is on the bottom, covering my mouth, with the rounded top over my nose. You can use a spoon or other long, blunt object to push the filter in and spread it out.

24. As of 4/4/2020, I recommend you use a new coffee filter each time you use this mask in public. You should remove the filter before washing the mask. Alternatively, you can spray it with Lysol disinfectant each time you use it in public. I have been spraying mine, then leaving it outside on my porch in between uses.