Strap construction – the goal is to get the raw edges encased within the strap itself.

Method A.  – press and crease and press and press

1. On an ironing surface, press the strip so it is flat on the surface. Be careful not to place the hot iron and add downward pressure at the same time as this may warp and pull the straps out of proportion. We want the fibers to relax.
2. With the strap flat on the surface, press in half lengthwise to get a center crease, then open.
3. Fold each raw edge lengthwise into the center crease and press. S
4. Fold again at the center crease and press. This method encases the unfinished edges in itself.
5. On the side where the opening is, top stitch as close to the edge as possible. Decide which end of the strap is the start point and which end is the finish point. Stitch from start to finish points.
6. Repeat on the other side (the center seam side) and top stitch as close to the edge as possible from the SAME start to finish points. Stitching in the same direction will lessen warping and pulling across the diagonal, length and width of the strap.
7. For the ends, turn ends inward or fold over twice. Stitch and back stitch in an enclosed box X pattern to reinforce and finish the strap ends. If you cannot use your machine, you can stitch these closed by hand. Whichever method you choose to use, please be sure the ends are secure and will not fray with repeated use and laundering.

Method B.  Loop turner and stainless steel straw

1. Lay fabric flat on an ironing surface, add heat to relax fibers. Fold in half lengthwise and press to form a crease.
2. Stitch closed at 1/8 inch seam allowance from start to finish points. Be sure to catch both layers of the fabric.
3. Invert tube using loop turner and stainless steel straw.
4. Add heat to relax fibers and press so the seamed edge is on one side lengthwise. Manipulate the fabric without warping to get the piece to lay flat and with uniform width through the entire length.
5. Top stitch using the same start and finish points, repeat on other side going in the same direction.
6. Turn unfinished strap ends inward or fold over twice, stitch and back stitch in an enclosed box X pattern to reinforce the finished ends. If you cannot use your machine, you can stitch these closed by hand. Whichever method you choose to use, please be sure the ends are secure and will not fray with repeated use and laundering.

Method C.

1. Apply heat to relax fibers on ironing surface. Determine which end is the start point and which is the end point.
2. On one end, mark seam allowance at 1/4 total width, baste at 1/4 the total width through the length of the entire piece.
3. Mark seam allowance for half total width, baste through the length.
4. And at 3/4 the total width, baste through the length of the piece. Be sure to sew in the same direction.
5. Add heat to relax fibers, press at the center/halfway basting mark through the length of the piece, wrong sides together.

6. Turn the raw edges at the basting marks toward the center, pin at increments if necessary through the length of the strap to maintain the shape.

7. Turn, fold, and manipulate the fabric as you top stitch along the length of the strap, using the basting marks, and the pins to help maintain the shape.

8. Turn unfinished strap ends inward or fold over twice. Stitch back and back stitch in an enclosed box X pattern to reinforce the finished ends. Or if you cannot use your machine to reinforce the ends, you can stitch by hand. Whichever method you choose, be sure that the ends are secure and will not fray with repeated use and laundering.

Yes - the straps are time-consuming. But straps are the long-term low-cost solution to the elastic shortage problem. At present for mask closures, health care workers appear to prefer straps over elastic for extended wear as rubbing from the elastic may cause blisters.

**Attaching straps to the masks: OLSON**

Stop at Step 8.

- **With the fronts of the fabric facing each other, sew along the entire perimeter of the mask.**

Do not sew the entire perimeter of the mask. Leave side 4 open on both sides.
Invert the mask right side out.

Fold raw edges (side 4) on itself so the raw edges are tucked inside the mask. Pin to keep in place.

Insert unfinished edge of one strap into one corner between the front and back layers. Repeat for all corners.

Stitch straps in place at yellow line, 1/4 inch, 1/2 inch S.A. and as close to the edge as possible. Be sure it is secure and the straps will not fall out.

Construction Complete!