

# Instructions for sewing a HELIX.iso™ mask body

1. Wash your hands with soap and water or use hand sanitiser before handling any materials used to make a HELIX.iso™ mask body.
2. Print two copies of the template.
  - a. Cut one template following the “shell” outline and the other template following the “lining” outline.

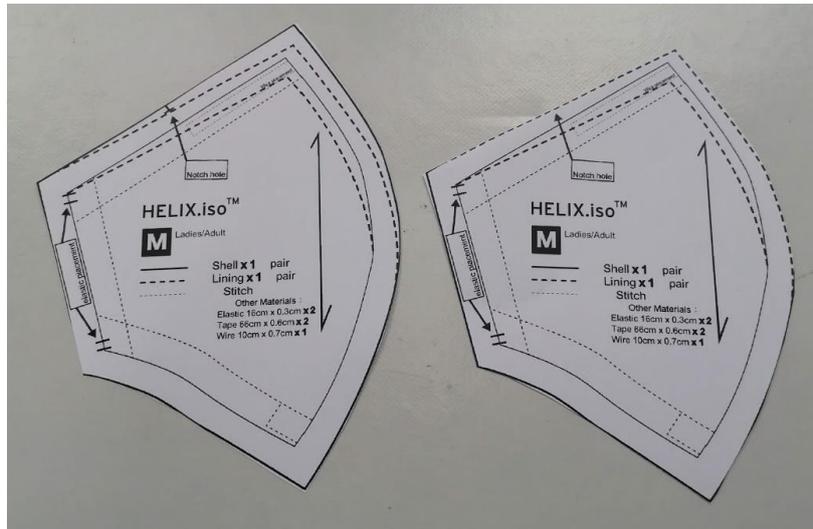


Figure 1: Mask body templates. Shell template (left) and lining template (right)

3. Prepare the individual components. This includes:
  - a. Cutting two fabric pieces following the “shell” template (this will be used as the *outer* fabric). It is recommended that a lightweight, non-stretch fabric is used.
  - b. Cutting two fabric pieces following the “lining” template (this will be used as the *inner* fabric). It is recommended that a lightweight, non-stretch fabric is used.
  - c. Cutting two pieces of elastic to a length of 16 cm. It is recommended that the elastic is 3 – 5 mm wide.
  - d. Take one aluminium nose piece that is provided.

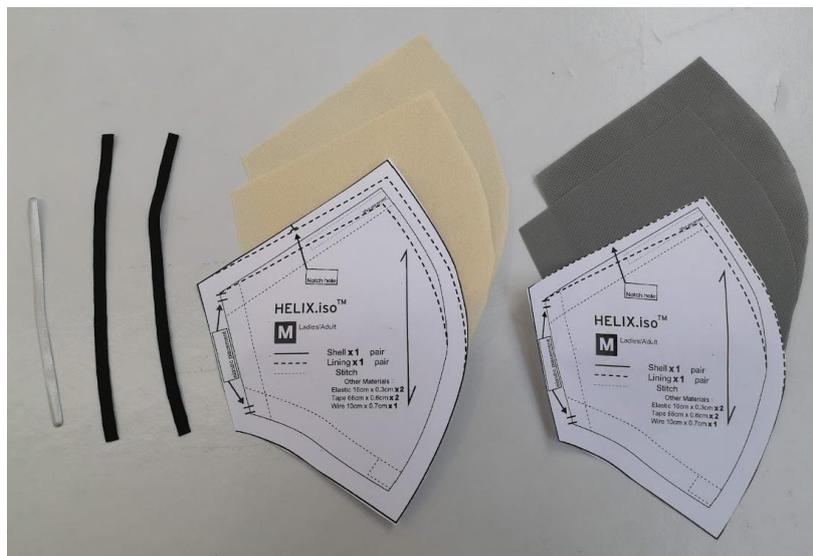
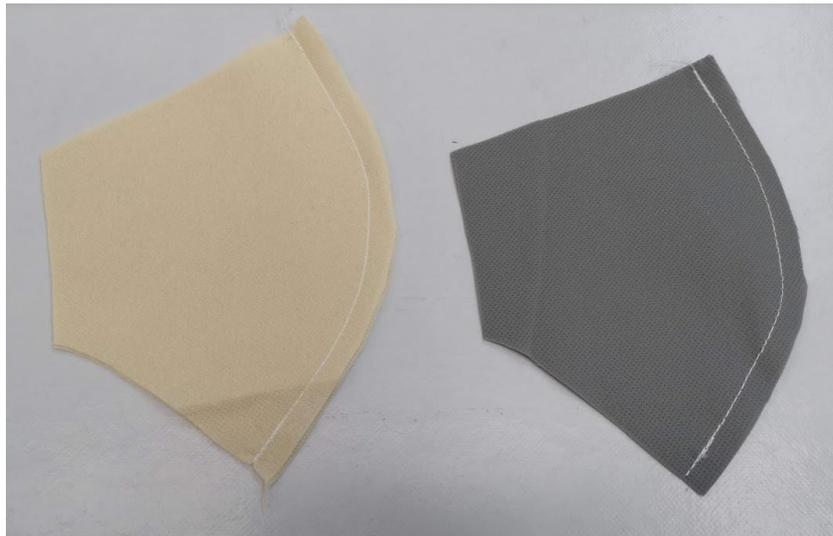


Figure 2: All mask components. From left, aluminium nose piece, two pieces of elastic, two pieces of shell fabric, two pieces of lining fabric.

4. Sew centre lines for the shell and lining fabric pairs. Stitch lines should be 1 cm from edge.



*Figure 3: Shell fabric (left), lining fabric (right) sewn with centre lines*

5. Overlap and sew the top and bottom edges for the shell and lining fabrics. **Be sure to include the aluminium nose piece under the fold on the top edge for the shell fabric.**



*Figure 4: Shell fabric with aluminium nose piece inserted (left), lining fabric (right)*

6. Sew the elastic ear straps onto the corners of the shell fabric.



*Figure 5: Shell fabric with elastic ear straps attached*

7. Sew the shell fabric and lining fabric together along the short edges.



*Figure 6: Shell and lining fabric sewn together along edges*

8. Invert the mask body so the shell fabric is positioned on the outside, and the lining fabric positioned on the inside.



*Figure 7: Mask body inverted*

9. Sew the final stitches on the mask body. This includes:
  - a. Sewing either side of the aluminium nose piece **only on the shell fabric** to secure it in the channel.
  - b. Sewing the shell fabric to the lining fabric along the two short edges of the mask body.
  - c. Sewing the shell fabric to the lining fabric at the bottom of the mask so a filter can be inserted and secured. This should be approximately 3 cm long.



*Figure 8: Mask body with final stitches added*