

# 3D FACE SHIELD

## FABRICATION + ASSEMBLY INSTRUCTIONS

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# BILL OF MATERIALS

## MATERIALS

Foam Tape 3/4in wide x 1/2in thick - cut to 9.5in long

.005in thick poly sheet - cut to 12in x 9in rectangles

Material: PET-G, Acetate, or other clear impermeable material

Elastic Band - 1/2in wide - cut to 31in long

PLA Filament for 3D Printer

Super Glue

Rubbing Alcohol and other disinfectants

Polybags

Tape

## TOOLS

3D Printer

.25in hole punch

Razor blade or scissors

Vinyl Gloves

Face Mask

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## BILL OF MATERIALS



All materials, parts, and tools needed to assemble the 3D face shield.



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# ASSEMBLY INSTRUCTIONS

## STEP 1:

3D Print both the *face-shield.stl* and *strap-lock.stl*. Orient both 3D models to print flat on the build platform. We recommend printing both models with as large a layer height as possible to expedite the print time.

## SUGGESTED PRINT PARAMETERS:

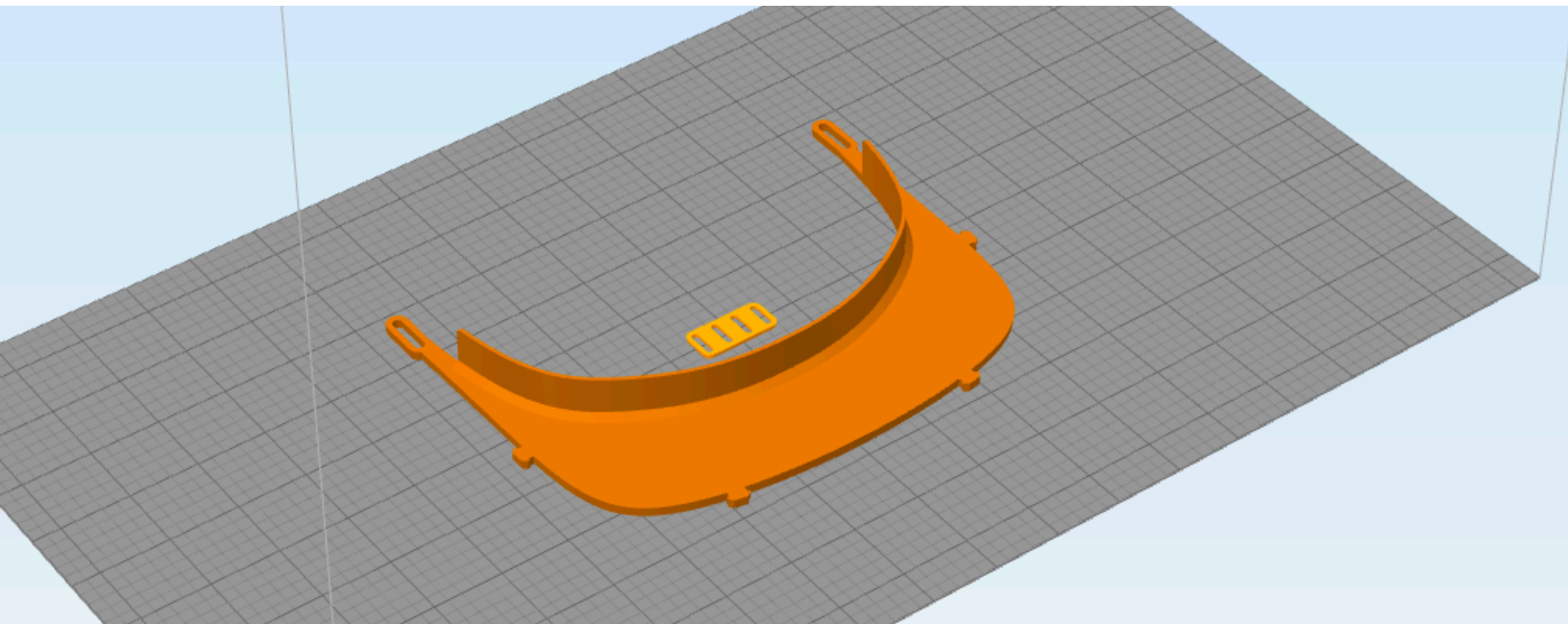
Layer Height: 0.3mm

Infill: 10%

Perimeters: 2

Bottom Solid Layers: 2

Top Solid Layers: 2



3D Models oriented flat side down on build plate in slicing software

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## STEP 2:

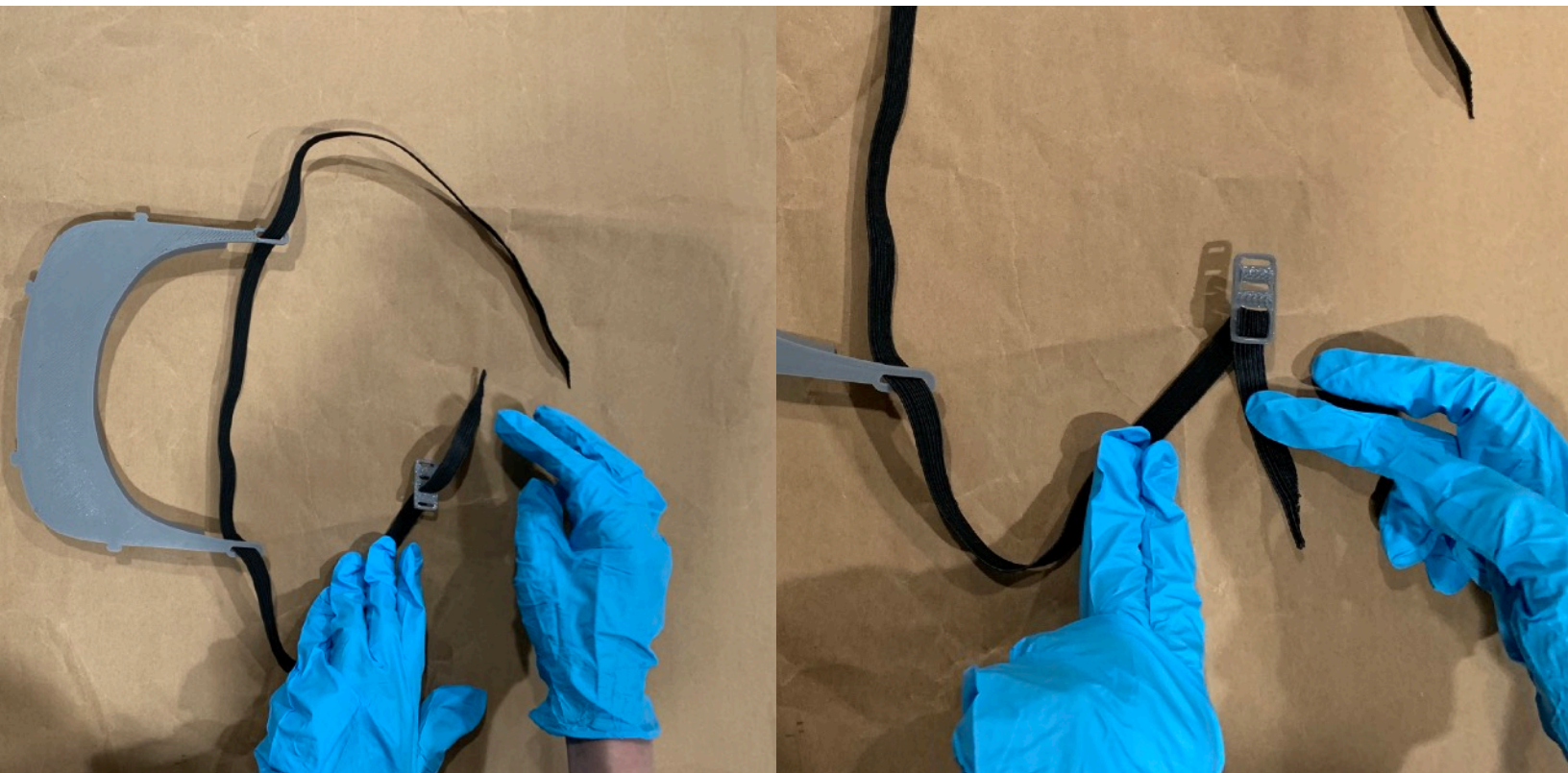
Thread the elastic band through outside loops of 3D printed visor.



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### STEP 3:

There are four holes in the strap lock. Thread the elastic up through the third hole and down through the fourth. Thread the other end of the elastic of through the second hole and down through the first.





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## STEP 4:

Put a thin strip of super glue along the inside visor panel. Attach the sticky side of the foam to the visor. Put firm pressure for ten seconds on the foam so the glue can fully adhere to the visor.



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## STEP 5:

Align the poly sheet to the edge of the hole punch template. Make four holes using the template for accurate placement.





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**STEP 6:**

Place the unassembled poly sheet and visor into a clean poly bag and seal. Photo below is the fully assembled 3D face shield.



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## **Release, Waiver of Liability, Defense, Indemnification and Hold Harmless Agreement**

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