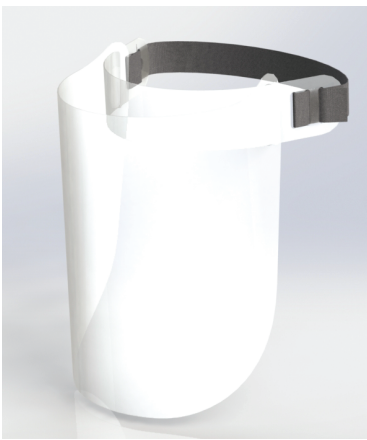


COVID-19 Response Flat Pack Face Shield



A co-development by:



Because of the Covid-19 pandemic, resources used to support health care workers are scarce, including the Polyethylene terephthalate glycol (PETG) that has been used for these face shields. For that reason, we at Camosun Innovates are committed to using materials that can be cleaned and chemically sanitized for multiple uses. Please do not dispose of these shields after a single use as they can be used more than once after proper cleaning and sanitization.

Due to the wide range of different processes and material processing envelopes, a single vector pattern for both visor and strap are provided. Each production facility will need to plan for and pack the patterns at an appropriate spacing to maximize yield for their material size.

Plastic	Suitable Processes			UV Sterilization
	Laser Cutting	CNC Routing	Waterjet	
PETG 0.020" - 0.030"	✓	✓	✗	✓
Polycarbonate (Lexan, Plexiglass) 0.010" - 0.030"	✗	✓	✗	✗

Please note: PETG is not a commonly pre-profiled material type for most laser cutters. Recommended settings are approximately 75 watts of power, 2,700-3,000 Hz pulse frequency, and a feed rate of approximately 25 inches per minute. In our experience, cutting 2 sheets of PETG stacked at a time is the recommended maximum.

Exposure of polycarbonate to UV light will result in a gradual loss in transparency. Chemical sterilization is recommended.

This design supports a wide range of strapping materials up to 1" (2.54cm) wide. Length requirements will vary according to material elasticity and user anatomy.

We recommend using latex-free elastic materials, however availability via current supply chains may require seeking alternatives, including a range of fabrics, shock cords, or tube strapping.

Flat banding materials are recommended to start a weave from the outside of the band (shown below), non-flat banding materials can also be tied to the extra mid-point loop in the first slot.

