

3DQue Comfort Shield

Version 1.1 Last Updated: Aug 18, 2020

3DQue Medical Inc.



Figure 1. 3DQue Comfort Shield assembled in portrait orientation.

Overview & Intended Use

Intended to be used with a clear sheet clasped to the front of a Face Shield Frame to create a Face Shield. Face shields are meant for protecting the face from sprays or aerosols. 3DQue Comfort Face Shield Frames are 3D printed with PLA filament, suitable for cleaning with liquid disinfectants.

The Comfort Shield Frames are available in three sizes, small, medium and large, and in different color options, making PPE customization ready for different customer needs.

Formal Intended Use Date: August 2020

Directions for Use & Assembly Instructions

([See video here](#) or visit www.3dque.com)

Components Needed

1. 3DQue Comfort Shield Frame (3DQM_04F)
2. Clear Plastic Sheet (3DQM_04S)

Directions

1. To assemble, **separate the rim and protruding overhang of the Frame** (3DQM_04F) so that they are slightly offset, this will create a small opening.
2. **Slide the clear plastic sheet** (3DQM_04S) through the small opening, you can adjust the length of the shield by sliding the sheet further up or further down.
3. **Lock in the plastic sheet by leveling the two offset parts of the frame.**
4. **Place the assembled face shield comfortably against the forehead, above the ears.** The clear, plastic sheet should be in front of the face, the disconnected end of the face shield frame should be at the back of the head.
5. If desired, an elastic can be hooked through the two loops at the back of the head for a snugger fit.



Figure 2. Plastic Sheet assembled in portrait Orientation.



Figure 3. Plastic Sheet in landscape orientation.

Clear Plastic Sheets¹

- Comes with 1 clear plastic sheet cut to 8.5" by 11" as shown in *Figure 2 and Figure 3* below.
- Plastic sheets can be assembled in portrait or landscape orientation.
- 3DQue Face Shield Frames can accommodate a range of thicknesses from 0.20mm-0.35mm, preferred sheet thickness must be requested at time of order.

¹ See Government of Canada Guidelines on [Specifications](#)

Product Features

- Easy, no fuss assembly.
- Hooks at the end of the frame allow for adjustable fit with optional elastics for smaller heads or for desired snugger fit as pictured in *Figure 4a* and *Figure 4b*.
- Design serves enough clearance from the face to prevent fog.
- Tested to withstand over 50+ rounds of disinfection with the recommended method.



Figure 4a. Model wearing headband with elastics on the hooks for a tighter fit.



Figure 4b. Back of Model's head without additional elastics.

Technical Specifications

3DQue Medical Product Reference

Frame: 3DQM_04F

Clear Plastic Sheet: 3DQM_04S

Dimensions

Frame: 20cm x 16cm x 1cm

Clear Sheet: 21.6 cm x 28 cm (8.5" x 11")

Weight

Frame: 30g

Clear Plastic Sheet: 20 g

Manufacturing Method

Additive Manufacturing - Fused Filament Fabrication

Materials used for Fabrication

Frame: PLA Filament

Clear Plastic Sheet: PET

Recommended Disinfecting Guidelines²

BLEACH SOLUTION

- Follow manufacturer's instructions on disinfecting, contact time typically measured in minutes.
- Otherwise, prepare a household bleach solution by mixing:
 - 5 tablespoons (1/3 cup) of bleach per gallon (~4.5L) of water **or** 4 teaspoons of bleach per quart (~1.1L) of water.
 - Allow to soak for a minimum of 2 minutes, ensuring the product is fully immersed in solution.
- Allow the product to air dry in a well ventilated room if possible. If not, use a new sheet of paper towel each time to wipe down.
- **NOTE:** Diluted bleach is not stable and should be prepared each time from concentrated stock.

Manufacturer's Information

Manufactured by:

3DQue Medical Inc.

Manufacturer's Address:

45- 1146 Pacific Blvd, Vancouver, BC, V6Z 2X7

Manufactured at:

Facility Shared with ChopValue, 358 East Kent Ave S, Unit 102, Vancouver, BC, V5X 4N6

Contact:

For any inquiries contact support@3dque.com or visit www.3dque.com.

² See CDC Guidelines on [Cleaning and Disinfecting](#)