

# Mastercast™ Pro Thermoplastics

## CIVCO Technical Data Sheet



Mastercast Pro is a drape-style mask requiring less stretching, therefore resulting in minimal shrinkage after cooling. These thermoplastics are compatible with the Posifix® Patient Positioning Systems. For a full list of available thermoplastic part numbers, please visit [www.civco.com](http://www.civco.com).

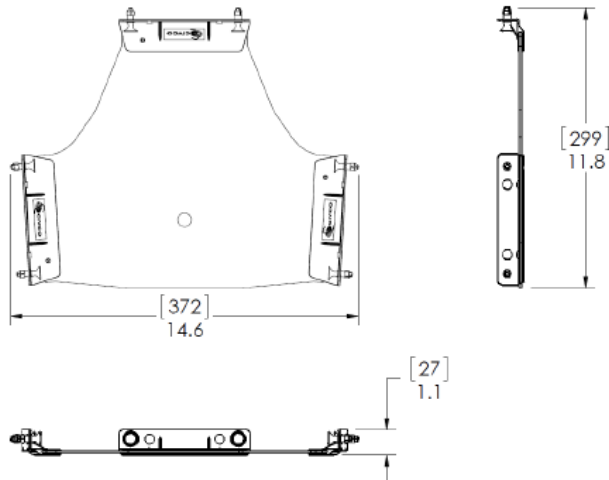
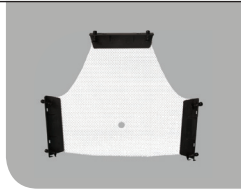
### Product Configuration

#### Mastercast Pro PR3

Head Only (3 pt)  
0.5 lbs (0.23 kg)  
299 L x 372 W x 27 H (mm)

**990030**

2.3 mm thickness

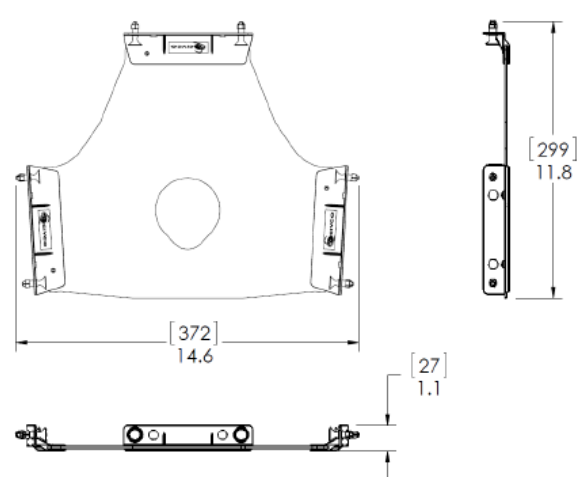
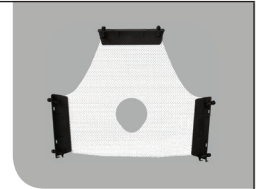


#### Mastercast Pro PR31

Head Only (3 pt)  
0.5 lbs (0.23 kg)  
299 L x 372 W x 27 H (mm)

**990031**

2.3 mm thickness

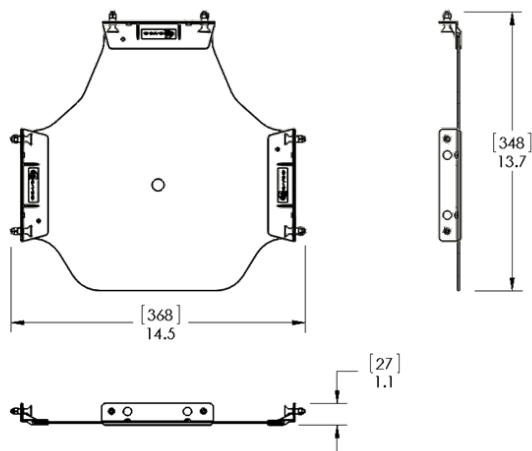


#### Mastercast Pro PR44

Head Only w/ Larynx Extension (5 pt)  
0.56 lbs (0.25 kg)  
348 L x 368 W x 27 H (mm)

**990044**

2.3 mm thickness

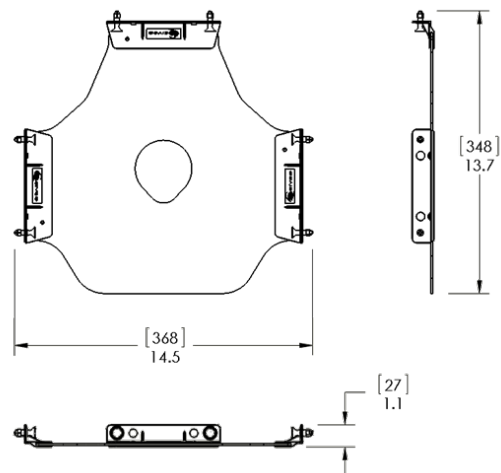


#### Mastercast Pro PR45

Head Only w/ Open-face (3 pt) & Larynx Extension  
0.53 lbs (0.24 kg)  
348 L x 368 W x 27 H (mm)

**990045**

2.3 mm thickness

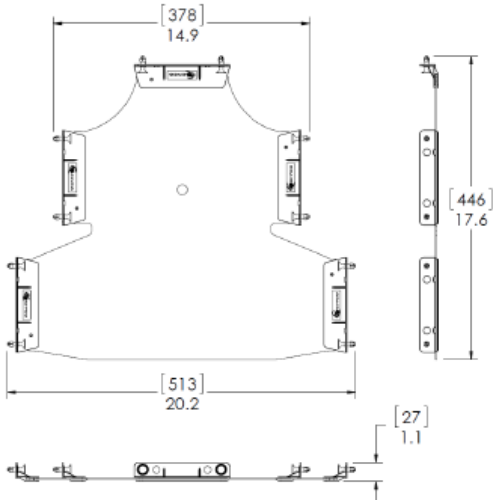


**Mastercast Pro PR5**

Head, Neck & Shoulders (5 pt)  
 0.86 lbs (0.39 kg)  
 446 L x 513 W x 27 H

**990145**

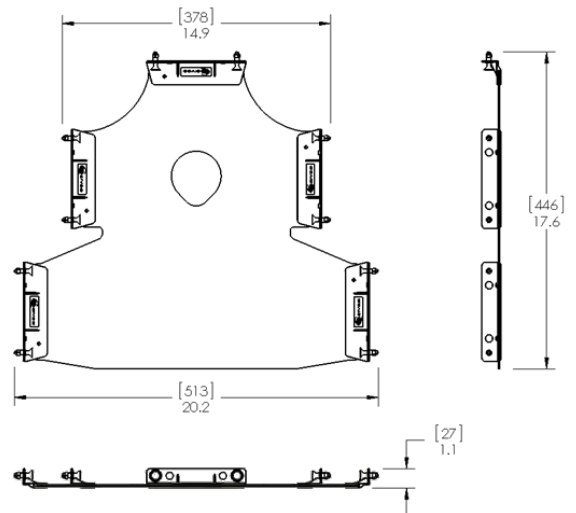
2.3 mm thickness

**Mastercast Pro PR51**

Head, Neck & Shoulders w/ Open-face (5 pt)  
 0.86 lbs (0.39 kg)  
 446 L x 513 W x 27 H (mm)

**991145**

2.3 mm thickness



## Technical Details

**Primary Materials**

Polycaprolactone  
 Black ABS  
 Black Nylon  
 Black Polycarbonate

**Activation temperature (water bath)**

70° C / 158° F

**Activation time (water bath)**

1 min

**Attenuation (Unstretched Mask)\*\*****6MV:** 0.7%**18MV:** 0.1%**Thickness**

2.3 mm (.090)

**Perforation**

5%

**Density**1.145 g/cm<sup>3</sup>**Surface feeling**

Smooth

**Color**

White

**Odor**

None

**Biocompatible**

Yes

## Technical Details (cont'd)

<b>Transparent when activated</b>	Yes
<b>Molding time (maximum)*<sup>a</sup></b>	1 min
<b>Hardening time*<sup>b</sup></b>	9 min
<b>Time to completion (minimum)*<sup>c</sup></b>	10 min

## Product Details

<b>Indications for use</b>	Head & Neck Immobilization
<b>Contraindications</b>	None
<b>MRI Compatible</b>	MR Safe
<b>Integration</b>	Connects to Universal Couchtop™ and Baseplates with Posifix® connection
<b>FDA Clearance</b>	Yes
<b>CE Marked (EU DOC)</b>	Yes
<b>Other Country Registrations</b>	Available upon request
<b>Country of Manufacture</b>	USA

## Packaging Details

<b>Unit Pack</b>	1 Piece
<b>Units / Box</b>	10 Pieces
<b>Shelf Life</b>	Not Applicable
<b>Warranty</b>	<a href="#">See CIVCORT website for Product Warranty Statement</a>
<b>Sterilization</b>	Non-Sterile

# Test Procedures used to Acquire Data

## Definitions\*

- a. **Molding Time** - the time frame available from when the mask is removed from the waterbath to the time that the mask can no longer be molded or formed.
- b. **Hardening Time** - the time between the molding and completion time where the mask should be cooling and hardening on its own without being manipulated or molded.
- c. **Time to Completion** - the total time from when the mask is taken out of the waterbath to when the mask can be removed from the patient.

## Attenuation Test Conditions\*\*

- a. 100 cm SAD
- b. 10 x 10 cm Field Size
- c. 6 MV Dmax = 1.5 cm  
18 MV Dmax = 3.0 cm