

# RAMPF MB-0720

## Polyurethane Board for Modeling

### Typical Properties

<b>Color</b>	Brown
<b>Density (<math>\rho</math>)</b>	45 lb/ft <sup>3</sup> [0.72 g/cm <sup>3</sup> ]
<b>Hardness</b>	60 – 65 Shore D
<b>Flexural Strength</b>	3,600 – 4,400 psi [25 – 30 MPa]
<b>Compressive Strength</b>	2,900 – 3,600 psi [20 – 25 MPa]
<b>Coefficient of Thermal Expansion (CTE)</b>	(28 - 31) x 10 <sup>-6</sup> in/in°F [(50.4 – 55.8) x 10 <sup>-6</sup> m/m/°C]
<b>Deflection Temperature, HDT</b>	167 – 176°F [75 – 80°C]

### Machining

**Cutters:** *Roughing* - 1" (25.4mm) Hog Ball End Mill, 4-flute, HS Steel 8% Cobalt

*Finishing* - 5/8" (15.875mm) Ball End Mill, 2-flute carbide

**Depth:** *Roughing* - varied from ¼" (6.35mm) to 2.5" (63.5mm) with 40% stepover

*Finishing:* 1/8" (3.175mm) deep leaving 0.002" (0.05mm) scallop height

**Blades:** Use carbide offset-tooth blade for faster cutting and less binding

Roughing speed: 1,600RPM · Roughing Feed 40IPM

Finishing speed: 10,000RPM · Finishing Feed 100IPM

### Processing

The product should be machined at ambient room temperature (68–77°F (20–25°C)).

### Storage

The material should be stored flat and in a dry place. Temperature variations should be avoided during storage and transportation.

### Handling Precautions

Good workplace ventilation is to be ensured during processing. At the same time, the employer's liability insurance association's industrial hygiene safety regulations regarding the handling of reaction resins and their hardeners are to be observed.

Please take heed of the appropriate safety data sheets.

### Available Sizes

1.0" x 19.7 x 59.1 (25mm x 500mm x 1500mm)

2.0" x 19.7 x 59.1 (50mm x 500mm x 1500mm)

3.0" x 19.7 x 59.1 (75mm x 500mm x 1500mm)

3.9" x 19.7 x 59.1 (100mm x 500mm x 1500mm)

5.9" x 19.7 x 59.1 (150mm x 500mm x 1500mm)

7.9" x 19.7 x 59.1 (200mm x 500mm x 1500mm)



CMT Materials, Inc.  
107 Frank Mossberg Drive  
Attleboro, MA 02703 USA

T: +1(508)226-3901

F: +1(508)226-3902

Email: [info@cmtmaterials.com](mailto:info@cmtmaterials.com)

## Key Properties

- Fine surface structure
- Low coefficient of thermal expansion
- Good dimensional stability
- Good compressive and flexural strength

## Applications

- Master Models
- Cubing Models
- Patterns