

## Product Overview

<b>Cast Acrylic Sheet</b>	Dimension	<b>Foot</b>	<b>Inch</b>	<b>Mm</b>
		3 X 6	36.2X 72	920 X 1830
		4 X 6	48 X 72	1220 X 1830
		4 X 8	48 X 96	1220 X 2440
		4.5 X 6	54.3 X 72	1380 X 1830
		3.3 X 6.5	39.4 X 78.8	1000 X 2000
		3.6 X 7.2	42.9 X 86.2	1090 x 2190
		4.2 X 8.2	50 X 98	1290 X 2510
		6.2 X 8.2	62 X 98	1880 X 2490
		6.65 X 10	80 X 120	2030 X 3050
	Thickness	4 x 10	48 X 120	1220 X 3050
		4.3 X 8.3	51.18 X 100	1300 X 2540
	Finish	5 X 10	60 X 120	1525 X 3050
		6 X 10	72 X 120	1830 X 3050
		4.4 x 6.5	53.15 x 78.8	1350 X 2000
			0.06 – 2	1.5 – 50
		Clear, Opal, Transparent (tint), Intransparent (opaque/ matted), Fluorescent (Spotlight), Satin		
<b>Acrylic Rod/ Square</b>		<b>Inch</b>	<b>Mm</b>	
Length	47.25 – 78.74		1200 - 2000	
Thickness	0.2 – 1.5		5 – 38	
<b>Acrylic Hinge</b>		Length		
		0.79, 1.18, 1.77		20, 30, 45
<b>Acrylic Round Tube</b>		Length		78.74
		In-Out Diameter		2000 6x8; 8x10; 8x12; 16x20; 21x25; 26x30; 31x35; 36x40; 41x45; 46x50; 56x60
<b>Acrylic Triangle/Corner</b>		Length		47.25 – 78.74
		Thickness		0.12 – 0.31
		1200 - 2000		3 - 8
<b>OTHER PRODUCT</b>				
-PVC Garden Hose		-MC Bond Aluminum Composite Panel		
-PVC Corrugated Roof		-PP Twinwall Sheet		
-PVC Door		-PE Rope		

## Cast Acrylic Sheet Thickness Tolerance

Thickness Inch	% Tolerance		
	standard size	large size	Extra large size
0.08	12%		
0.98	10%		
0.118	10%	14%	17%
0.177	8%	12%	14%
0.220	6%	10%	12%
0.236	6%	10%	12%
5/16	5%	8%	10%
3/8	4%	6%	8%
1/2	4%	6%	8%
5/8	4%	6%	8%
3/4	4%		
1	4%		
above	4%		

*Note: Large size = 1880mmX2490mm, 1580mmX2490mm  
 Extra large size = 2030mmX3050mm, 2000mmX3000mm  
 Standard size = other sizes*

## Cast Acrylic Sheet Chemical Features (Resistant Properties to Chemical Agents)

Sulfuric Acid	60°C	Stabile to 60%
Hydrochloric Acid	60°C	Stabile to 30%
Nitric Acid	60°C	Stabile to 20%
Caustic Soda	60°C	Stabile to 50%
Aqueous Ammonia	60°C	Stabile to 18%
Acetic Acid	60°C	Dissolve
Ethyl Acetate		Dissolve
Toluene		Dissolve
Ethylene Dichloride		Dissolve
Benzene		Dissolve
Methyl Alcohol		Dissolve
Diemethyl Formamide		Dissolve
Acetone		Dissolve
Aniline		Dissolve

## Cast Acrylic Sheet Average Physical Properties

PROPERTIES	UNIT	
Specific Gravity		<b>1.19</b>
Hardness		<b>HNC – 96</b>
Water Absorption	%	<b>0.35</b>
<b>Tensile Strength:</b>		
Tensile strength at yield	<b>Kg/cm<sup>2</sup></b>	<b>709</b>
Tensile strength of break	<b>Kg/cm<sup>2</sup></b>	<b>696</b>
Tensile modulus	<b>Kg/cm<sup>2</sup></b>	<b>29,532</b>
Elongation at break	%	<b>8</b>
<b>Bending Strength:</b>		
Flexual Strength	<b>Kg/cm<sup>2</sup></b>	<b>1.052</b>
Flexual Modulus	<b>Kg/cm<sup>2</sup></b>	<b>31,264</b>
<b>Impact Strength</b>	<b>Kg/cm<sup>2</sup></b>	<b>1.1</b>
<b>Shear Strength</b>	<b>Kg/cm<sup>2</sup></b>	<b>600 – 650</b>
<b>Transmittancy:</b>		
Full rays	%	<b>93.3</b>
Parallel rays	%	<b>HAZE= 0.27</b>
<b>Specific Heat</b>	<b>Cal/g/°C</b>	<b>0.35</b>
<b>Heat Distortion Temperature (4.6kg/cm)</b>	°C	<b>100</b>
<b>Coefficient of Heat Conductivity</b>	<b>Cal/s.cm<sup>2</sup></b>	<b>4.5 X 10<sup>-4</sup></b>
<b>Coefficient of Linear Expansion</b>	<b>Cm/cm/°C</b>	<b>6.5 X 10<sup>-5</sup></b>
<b>Ultimate Temperature of Continuous Operation</b>	°C	<b>60 – 90</b>
<b>Flammability</b>	<b>Mm/ min</b>	<b>33</b>
<b>Surface Resistivity at 28°C</b>	<b>Ohm</b>	<b>&gt; 10<sup>16</sup></b>
<b>Volume Resistivity</b>	<b>Ohm cm</b>	<b>&gt; 10<sup>15</sup></b>
<b>Thermoforming Ranges</b>	°C	<b>140 – 180</b>
<b>Dielectric Strength</b>	<b>Kv/Mm</b>	<b>20</b>

**MC Cast Acrylic Sheet meets Federal Specifications ASTM 4802 :**

***Category A-1**—Methacrylate sheet typically manufactured by the cell-casting process. This category represents the best optical-quality sheet. It is characterized by the highest long-term design stress and the highest degree of chemical resistance found in methacrylate sheet.*

### Cast Acrylic Sheet Fire Rating

Cast Acrylic Sheet burn with little smoke generation. Its combustions gases are non toxic and non corrosive. It is classed as:

- Classification E according to Euro Norm ( DIN EN SO 11925: 2: 2002-07)
- B2, with no burning droplets, according to DIN 4102
- M4( no droplets) according to NF 92500+
- Class 3 classification according to BS476 part 7
- Category TP (b) according to BS 2782, method 508A for thermoplastics material as defined by Building Regulations
- UL 94HB