

## Product Overview

### Dimensions

#### STANDARD SIZES

<b>Inches</b>	37.4"x72.8"	39.4"x78.7"	48"x72"	48.4" x 84.6"	48"x96"	50"x98"
<b>mm</b>	950x1850	1000x2000	1220x1830	1230x2150	1220x2440	1290x2480

#### LARGE SIZES

<b>Inches</b>	53.15"x78.7"	60.6" x 60.6"	64.6"x64.6"	74"x74"	62.2"x98"	74"x98"
<b>mm</b>	1350x2000	1540 x 1540	1640x1640	1880x1880	1580x2490	1880x2490

#### EXTRA LARGE SIZES

<b>Inches</b>	51.2" x 100"	50" x 120"	51.2"x122"	60"x 120"	80"x120"
<b>mm</b>	1300x2540	1270x3050	1300x3100	1525x3050	2030x3050

### Thickness

<b>Inches</b>	0.06" - 2"	<b>Mm</b>	1.5 - 50
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### Finishing

Clear, Opal, Transparent (tint), In-transparent (opaque/ matted), Fluorescent (Spotlight), Satin

### Accessories

<b>Acrylic Rod/ Square</b>	<b>Inch</b>	<b>Mm</b>
<i>Length</i>	47.25 – 78.74	1,200 – 2,000
<i>Thickness</i>	0.2 – 1.5	5 – 38
<b>Acrylic Hinge</b>		
<i>Length</i>	0.79, 1.18, 1.77	20, 30, 45
<b>Acrylic Round Tube</b>		
<i>Length</i>	78.74	2,000
<i>In-Out Diameter</i>		6x8; 8x10; 8x12; 16x20; 21x25; 26x30; 31x35; 36x40; 41x45; 46x50; 56x60
<b>Acrylic Triangle/Corner</b>		
<i>Length</i>	47.25 – 78.74	1,200 – 2,000
<i>Thickness</i>	0.12 – 0.31	3 - 8

## Cast Acrylic Sheet Thickness Tolerance

Thickness Mm	% Tolerance		
	standard size	large size	Extra large size
3	10%	14%	17%
4	8%	12%	14%
5	6%	10%	12%
6	6%	10%	12%
8	5%	8%	10%
10 - 15	4%	6%	8%
18 - 50	4%		

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

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

## Cast Acrylic Sheet Average Physical Properties

PROPERTIES	UNIT	
Specific Gravity (ASTM D792-60 T)		1.19
Hardness (ASTM D 785-62)		HNC – 96
Water Absorption (ASTM D570-63)	%	0.35
Tensile Strength: (ASTM D638-61T)		
Tensile strength at yield	Kg/cm <sup>2</sup>	709
Tensile strength of break	Kg/cm <sup>2</sup>	696
Tensile modulus	Kg/cm <sup>2</sup>	29,532
Elongation at break	%	8
Bending Strength:		
Flexural Strength	Kg/cm <sup>2</sup>	1,052
Flexural Modulus	Kg/cm <sup>2</sup>	31,264
Impact Strength (ASTM D256-56)	Kg/cm <sup>2</sup>	1.1
Shear Strength (ASTM D732-46)	Kg/cm <sup>2</sup>	600 – 650
Transmittance: (ASTM S 1003-61)		
Full rays	%	93.3
Parallel rays	%	HAZE= 0.27
Specific Heat	Cal/g/°C	0.35
Heat Distortion Temperature (4.6kg/cm) (ASTM D648-56)	°C	100
Coefficient of Heat Conductivity	Cal/s.cm <sup>2</sup>	4.5 X 10 <sup>-4</sup>
Coefficient of Linear Expansion (ASTM D696-44)	Cm/cm/°C	6.5 X 10 <sup>-5</sup>
Ultimate Temperature of Continuous Operation	°C	60 – 90
Flammability (ASTM D635-63)	Mm/ min	33
Surface Resistivity at 28°C	Ohm	> 10 <sup>16</sup>
Volume Resistivity (ASTM D257-61)	Ohm cm	> 10 <sup>15</sup>
Thermoforming Ranges	°C	140 – 180
Dielectric Strength (ASTM D149-64)	Kv/Mm	20

## 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 – (Underwriters Laboratory No. E514392)