

Product Overview

Dimensions

STANDARD SIZES

Inches	37.4"x72.8"	39.4"x78.7"	48"x72"	48.4" x 84.6"	48"x96"
mm	950x1850	1000x2000	1220x1830	1230x2150	1220x2440

Inches	53.2"x78.7"	50" x 98"	60.6" x 60.6"	64.6"x64.6"
mm	1350x2000	1290x2480	1540 x1540	1640x1640

LARGE SIZES

Inches	74"x74"	62"x98"	74"x98"	51.2" x 100"	50" x 120"
mm	1880x1880	1580x2490	1880x2490	1300x2540	1270x3050

EXTRA-LARGE SIZES

Inches	51.2"x122"		60"x 120"	8
mm	1300x3100		1525x3050	203

Thickness

Inches: 0.06" - 2" **Mm:** 1.5 – 50

Finishing

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

Accessories

Acrylic Rod/ Square	Inch	Mm	
	<i>Length</i>	47.25 – 78.74	1,200 – 2,000
	<i>Thickness</i>	0.2 – 1.5	5 – 38
Acrylic Hinge	Inch	Mm	
	<i>Length</i>	0.79, 1.18, 1.77	20, 30, 45
Acrylic Round Tube	Inch	Mm	
	<i>Length</i>	78.74	2,000
	<i>In-Out Diameter</i>		6x8; 8x10; 8x12; 16x20; 21x25; 26x30; 31x35; 36x40; 41x45; 46x50; 56x60
Acrylic Triangle/Corner	Inch	Mm	
	<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		1.19
Hardness (ASTM D 785-23)		HNC-96*
Water Absorption (ASTM D570-22)	%	0.35
Tensile Strength (ASTM D-638)	MPa	57.7
Bending Strength:		
Flexural Strength (ASTM D-790)	MPa	90.5
Flexural Modulus (ASTM D-790)	MPa	2,620
Impact Strength (ASTM D6110)	Kgf-cm/cm	31.6
Shear Strength (ASTM D732-17)	Kg/cm ²	600 – 650
Transmittance: (ASTM D1003-21)		
Full rays	%	92.4
Parallel rays	%	HAZE= 0.20
Specific Heat	Cal/g/°C	0.35
Heat Distortion Temperature (4.6kg/cm) (ASTM D648-18)	°C	100
Coefficient of Heat Conductivity	Cal/s.cm ²	4.5 X 10 ⁻⁴
Coefficient of Linear Expansion (ASTM D696-24)	Cm/cm/°C	6.5 X 10 ⁻⁵
Ultimate Temperature of Continuous Operation	°C	60 – 90
Flammability UL E514392 (IEC60695-11-10)		HB40*
Surface Resistivity at 28°C	Ohm	> 10 ¹⁶
Volume Resistivity (ASTM D257-14)	Ohm cm	> 10 ¹⁵
Thermoforming Ranges	°C	140 – 180
Dielectric Strength (ASTM D149-25)	Kv/Mm	20

* This value will change with thickness. The value given is for a 3mm sample.

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)