

CHEMCAST®

The all purpose cell-cast acrylic sheet

What makes CHEMCAST® acrylic sheet notably different is:

CHEMCAST® is the only high quality acrylic sheet that can provide you with short runs capability and color selection to fit your specific needs.

CHEMCAST® is the product of a vertically integrated industry that has been manufacturing cell-cast acrylic sheets for over 30 years in Mexico; this includes full control of raw material and distribution each step of the way.

Quality control and product reliability are also an integrated process. Both are scientifically applied and carefully monitored throughout the entire process under the direction of highly competent employee group.



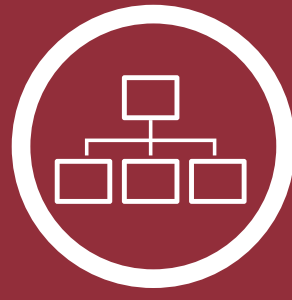
Benefits

- Excellent optical clarity.
- High gloss finish.
- Hard wearing.
- Weather resistant.
- Easy to work for fabricators.
- Lightweight.

CLEAR

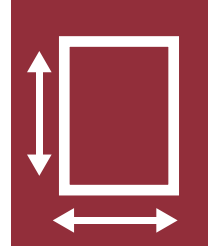
0.118" - 0.177" light transmission 92%
0.220" - 0.354" light transmission 89%

Color



Applications

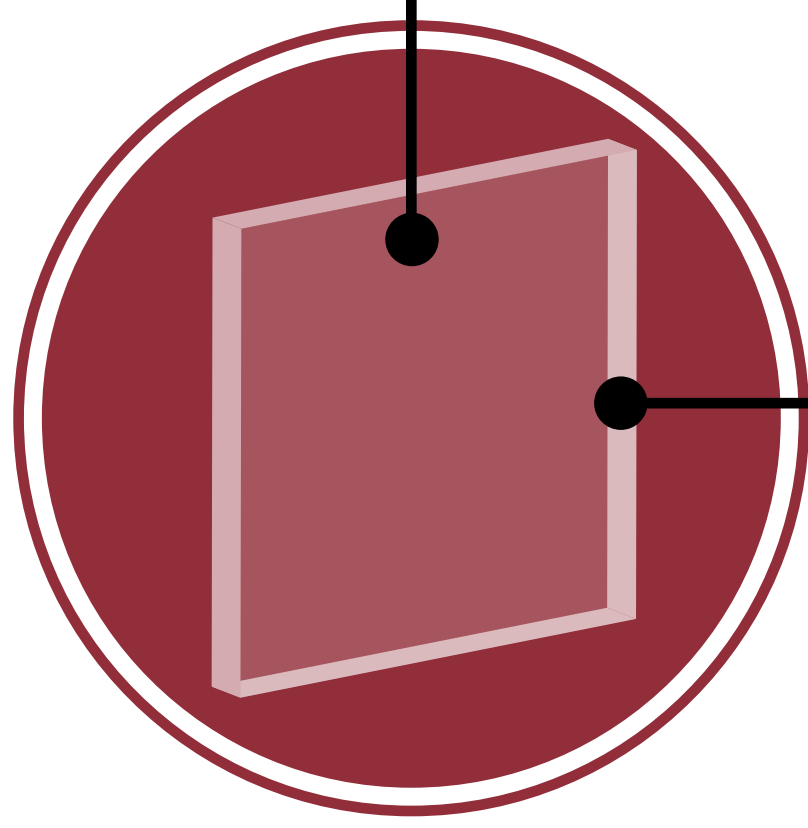
- Glazing.
- Signage.
- Display cases.
- Retail display.
- Point of purchase.
- UV printing sing flatbed.
- Sneeze guards and sanitary barriers.



Size

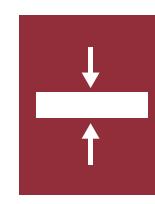
48" X 96"

*Available custom request-applies minimum quantity order.



Thickness

0.080"
0.100"
0.118"
0.157"
0.177"
0.197"
0.220"
0.236"
0.354"
0.472"



Sheets Per pallets

170
150
125
80
70
65
60
60
35
28



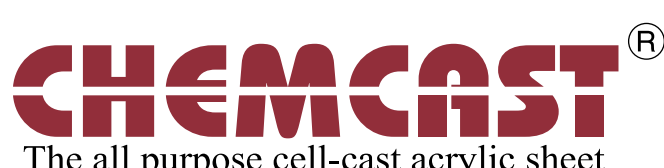
Technical data

Property	Units	Typical Value	Method
OPTICAL			
Light Transmission			ASTM D 1003
0.118" - 0.177"	%	92	
0.220" - 0.354"	%	89	
Haze	%	< 2.0	ASTM D 542
PHYSICAL - MECHANICAL			
Specific Weight	-	1.19	ASTM D 792
Tensile strength	psi	9017	ASTM D 638
Elongation at Rupture	%	4	ASTM D 638
Modulus of Elasticity	psi	413000	ASTM D 798
Impact Strength IZOD	Pending	Pending	ASTM D 256
Rockwell Hardness		M 90 -95	ASTM D 785
Shrinkage	%		
Longitudinal		0.60	ASTM D 4802
Cross		0.45	
THERMAL			
Maximum recommended continuous service temperature	C	75	
	F	167	
Deflection Temperature Under Load (264 psi)	C	90	ASTM D 648
	F	194	
Forming Temperature	C	175 - 180	Plastiglas
	F	347 - 356	
PERFORMANCE			
Flammability	-	HB certificate	UL 94
Flammability (burning speed)	mm/min (in/min)	31	ASTM D 635
Water absorption (24 hrs.)	%	+/- 5	ASTM D 570
Thickness tolerance	%		Plastiglas

(*) All values referred to 0.118" (3.0 mm) CHEMCAST - XT acrylic sheet.

Fabrication tech brief

- Cutting on table or panel saws, tungsten carbide saw blade up 10" diameter with 60 to 80 tooth maximum, to prevent melting edge.
- Cut and engraving CO2 laser, power machines 60w to 150w brings good results, for thicker sheet or faster feed rates, a larger laser is needed. A 180-watt laser will provide fast economical cutting of most thicknesses of acrylic sheet and cutting with 65%-75% heads. Laser machines with higher wattage, 500 to 1000 watts, permit higher feed rates and cutting with multiple heads at one time.
- Cut Chemcast XT with CNC (Computer Numerical Controlled) Routers, Light duty routers made for engraving or routing thin (.118") single sheet, are commonly fitted with one to three horsepower spindle motors, use carbide router bits 2 or 3 flutes.
- Cementing Chemcast XT, can be cement with series Weld-On #16, #4 y #32, solvent cements applied by capillarity or soak techniques.
- Line Bending can be done, using tubular rod heaters and radiant quartz tube heaters for better efficiently and quick bending.
- Polishing Edges for Chemcast XT, start sanding is desired for finishing acrylics. Normally 180-320 grit "wet-or dry" paper is used along with plenty of water and use polish cream on Edge polishing is best done on a stationary polishing head. Use 8" to 14" (200-300 mm) diameter bleached muslin wheels designed with bias strips which give the buffing wheel a pleated appearance. This design will do a faster job.
- Flame Polishing for Chemcast XT, should be done with an oxygen-hydrogen (2:1 ratio) welding torch. The flame should be bluish, nearly invisible, approximately 3" (75 mm) long and narrow. Hold the torch at the angle 45° the flame along the edge of the acrylic sheet.



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