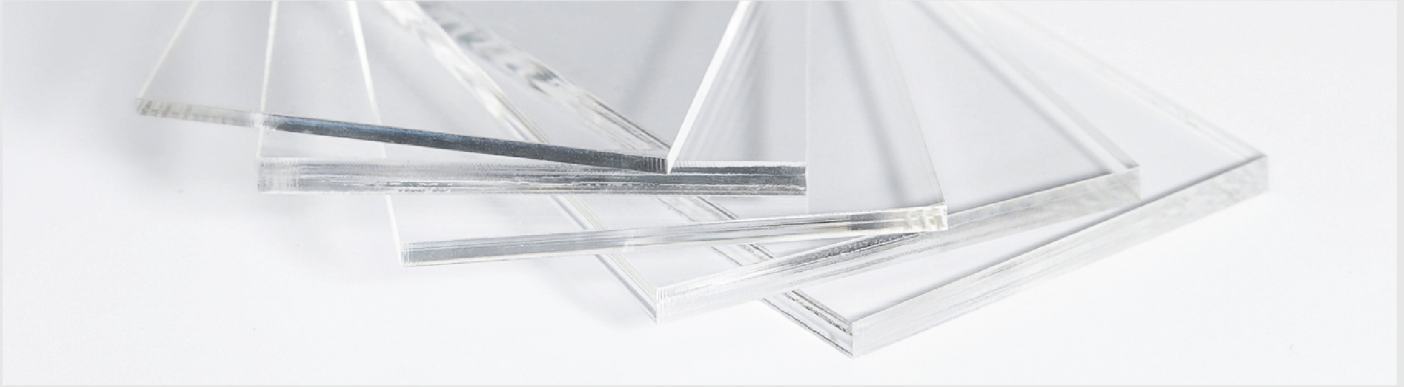


# ACRYBEST

Acrylic Sheets



## Variations

Color	Thickness (mm)	Dimensions (ft x ft)	Type
Clear	2.0	4 x 6, 4 x 8	Panel
	3.0	4 x 6, 4 x 8	
	4.0	4 x 8	
	4.5	4 x 8	
	5.0	4 x 8	
	6.0	4 x 8	
	8.0	4 x 8	
	10.0	4 x 8	
	12.0	4 x 6	
	18.0	4 x 6	
Diffuser White	2.0	4 x 6, 4 x 8	
	3.0	4 x 6, 4 x 8	



### Impact Resistance

Only half the density of glass, which could save delivery and installation cost.



### Optical Clarity & Light Transmission

Greater impact strength compared to annealed glass.



### UV Resistance

Acrylic can block UV light, providing better protection against ultraviolet radiation compared to standard glass, which blocks minimal UV light.



### Thermal Stability

Cast acrylic exhibits better thermal stability and a wider thermoforming range than extruded acrylic.



### Heat Resistance

Acrybest cast acrylic can maintain its shape and performance under elevated heat exposure as it has a Vicat softening temperature of 113 °C.

# Technical Data

Test Item	Test Method	Test Condition	Result
Charpy Notched Impact Strength	GB/T 7134-2008 Section 6.5.3 & GB/T 1043.1-2008	Specimen: GB/T 1043.1/1eU; Specimen thickness: 3.73mm; The capacity of the pendulum: 4J; Impact speed: 2.90m/s; Span: 62mm	17 kJ/m <sup>2</sup> ; C (complete break)
Deflection temperature under load	GB/T 7134-2008 Section 6.6.2 & GB/T 1634.2-2019 Method A	Precondition: 80°C, 16h-Cool down to (23±2)°C in a Desiccator; Specimen: 80mm x 10.25mm x 3.75mm; Heat-transfer media: Silicone oil; Tf: 1.8; Rate of temperature: 120°C/h; Span: 64mm	103°C
Dimensional Change After Heating (Shrinkage)	GB/T 7134-2008 Section 6.6.3, Appendix A	Precondition: 70°C, 48h-Cool down to (23±2)°C in a Desiccator; Specimen: 100mm×100mm×3.6mm; Testing Condition: 160°C, 1h→Cool down to (23±2)°C in a Desiccator	2.0%
Flexural Strength	GB/T 7134-2008 Section 6.5.1 & GB/T 9341-2008	Specimen: 80mmx10.01mmx3.76mm; Testing speed: 2mm/min; Span: 60mm	121 MPa
Tensile Strength	GB/T 7134-2008 Section 6.5.2 & GB/T 1040.1-2018 & GB/T 1040.2-2006	Specimen: Type 1B; Specimen thickness: 3.66mm; Testing speed: 10mm/min; Gauge length: 50mm; Initial distance between grips: 115 mm	70.2 MPa
Tensile strain at break			3.4%
Tensile Modulus			3220 MPa
Rockwell Hardness	GB/T 7134-2008 Section 6.5.4 & GB/T 3398.2-2008	Specimen thickness: 7.85mm (2 layers plied up)	114L
Vicat Softening Temperature	GB/T 7134-2008 Section 6.6.1 & GB/T 1633-2000 Method B50	Precondition: 80°C, 16h-Cool down to (23±2)°C in a Desiccator; Specimen thickness: 3.94mm; Heat-transfer media: Silicone oil; Rate of temperature: 50°C/h; Load: 50N	113°C
Total Luminous Transmittance	GB/T 7134-2008 Section 6.8.1 & GB/T 2410-2008 Method A	Specimen thickness: 3.99mm; Light source: C	92.5%
Water Absorption	GB/T 7134-2008 Section 6.9.2 & GB/T 1034-2008 Method 1	Specimen: 60mmx60mmx3.62mm; Drying condition: 502°C, 24h; Immersion condition: 23±2°C, 24h	0.25%
Mean coefficient of linear thermal expansion	GB/T 36800.2-2018 Method A	Specimen: 9.00 mm x 5.60 mm x 3.94 mm; Rate of temperature: 5 °C/min; Load: 4kPa; Flow rate(N <sub>2</sub> ): 50 ml/min; Test temperature: -40 °C-80 °C; Test mode: Compression; Test direction: Length; Number of specimens tested: 3	60 x E-06 1/K

Disclaimer Notice: This information is given in good faith and to the best of our knowledge, but without any warranty. Users of our materials should determine the suitability for a specific application. It is always advisable to do preliminary testing.