

DATASHEET

ACRYLIC (EXTRUDED)

Extruded acrylic sheet offers excellent thickness tolerance and is extremely easy to vacuum form, making it ideal for applications where complex shapes are required. Whereas Perspex cast is produced in small batches, extruded sheet is made by extruding acrylic polymer over longer, more economical production runs. Consequently, extruded sheet is not available in the same extensive range of colours and finishes.

Applications

- Exhibition Displays
- Glass Replacement
- Machine Guards
- Model Making
- Point of Purchase Displays
- Point of Sale Displays
- Poster Framing
- Print Material
- Safety Glazing
- Shelving Systems

Availability

- Colour – Clear, Opal & Glass Look
- Type – Sheets, Rods & Tubes
- Regularly produced in a wide variety of thicknesses

Typical Properties

General Properties	Method	Unit	Test Result
Physical Properties			
Relative Density	ISO 1183	g/cm ³	1.2
Water Absorption	ISO 62	%	0.2
Mechanical Properties			
Tensile Strength at Yield (5mm/min)	ISO 527	MPa	70
Tensile Strength at Break			
Elongation at Yield			
Elongation at Break (5mm/min)	ISO 527	%	4
Tensile Modulus of Elasticity			
Flexural Modulus (2mm/min)	ISO 178	MPa	3030
Izod Impact Strength (notched)	ISO 180/1A	kJm ⁻²	N/A
Charpy Impact Strength (notched)	ISO 179		10
Charpy Impact Strength (unnotched)	ISO 179		N/A
Impact Falling Weight			
Rockwell Hardness	ISO 2039-2	M Scale	101
Thermal Properties			
Service Temperature		°C	-40 to 80
Heat Distortion Temperature			
Vicat Softening Temperature	ISO 306	°C	> 105
Coefficient of Thermal Expansion	ASTM D-696	Mm/m°C	0.078
Thermal Conductivity			
Specific Heat Capacity			
Optical Properties			
Light Transmission (3mm sheet)	ASTM D-1003	%	> 92
Refractive Index	ISO 489/A		1.49
Yellowness Index			
Electrical Properties			
Dielectric Strength	IEC 243	kV/mm-1	15
Surface Resistivity	IEC 93	Ω m-2	> 10(14)