





Innovative. Versatile. Superior.

Create and enhance your outdoor entertainment area with contemporary, beautifully stylish Crystalite Glazing Panels











WARRANTY

With a Fifteen Year
Limited Lifetime
warranty, you can be
sure that your Crystalite
Glazing Panels will not
only look good, they
will also last.

TECHNICAL INFORMATION

Sheet Width:

Maximum 620mm

Length: 3m, 4m & 6m

Thickness: 6mm

Colour Tints:

Clear or Grey

Roof Pitch:

Crystalite can be installed on structures with a minimum roof pitch of 5°





THE PRODUCT

Crystalite Glazing panels are an extruded acrylic sheeting [PMMA] product. The panels are a transparent thermoplastic and being shatter resistant the product is 250 times stronger than glass and with a density of less than half that of glass. Crystalite glazing panels have good impact strength and clear panels provide up to 92% of visible light.

APPLICATIONS

Crystalite glazing provides a contemporary stylish look to most outdoor entertaining areas, Adding value and aesthetically pleasing on the eye.

Crystalite is available in a range of lengths and colours to please the most discerning home owner.

INSTALLATION

Crystalite is available from specialty plastic distributors who can supply and install the product. However, Crystalite installation should also be considered by competent DIYers, as the glazing system is relatively straightforward.



TECHNICAL INFORMATION

GENERAL

Density	ISO1183	1.19 (0.0429)	g/cm³ (lb/in³)
Water Absorption	ISO62	0.3	%

MECHANICAL

Tensile Strength	ISO527-2	70 (10152)	MPa (psi)
Elongation at Break	ISO527-2	4	%
Tensile Modulus	ISO527-2	3000 (435097)	MPa (psi)
Flexural Strength	ISO178	110 (15956)	MPa (psi)
Flexural Modulus	ISO178	3000 (435097)	MPa (psi)
Charpy Impact Strength, Notched	ISO179-1	1.8 (0.856)	kJ/m² (ft-lb/in²)
Izod Impact Strength, Notched	ISO180/1A	1.5 (0.713)	kJ/m² (ft-lb/in²)

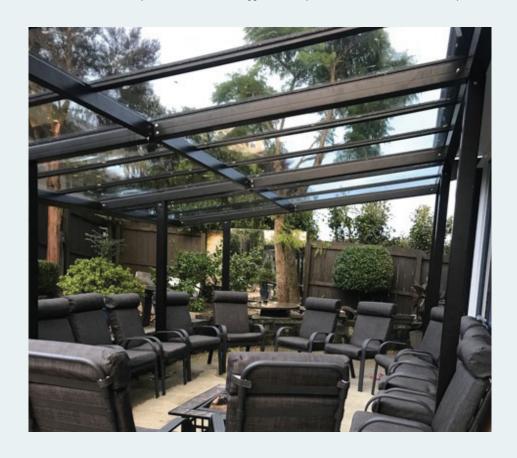
THERMAL

Vicat Softening Temperature, B50, Annealed	ISO306	102 (215)	°C (°F)
Heat Distortion Temperature, 1.8MPa	ISO75	92 (197)	°C (°F)
Linear Thermal Expansion	DIN53752	7	/°K x 10⁻⁵
Continuous Service Temperature	-	70 (158)	°C (°F)
Maximum Short Term Temperature	-	80 (176)	°C (°F)
Degradation Temperature	-	>280 (>536)	°C (°F)

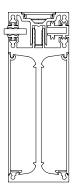
OPTICAL

Light Transmission (3mm / 0.118')	DIN5036-3	92	%
Refractive Index	DIN5036-3	1.49	-

This specification provides typical data to the best of our knowledge at the time of publishing. Due to our inability to control conditions of use and application, we are unable to make any recommendations or suggestions. Alsynite One NZ Ltd assumes no liability for use of information presented herein.



SUPPLY & ACCESSORIES



GLAZING BARS & BEAMS

The Crystalite glazing bars/beams are stocked and supplied in standard lengths of 4050mm and 6050mm. These come complete with aluminium extrusions including main bar/beam, top cap, top cap infill and 2x side infills for beam, compression fasteners and rubber seals.

See overleaf for more details.



GLAZING END PLATES

Designed to cover the end of the glazing bar/beam assembly, and also prevent the glazing and rubber seals from creeping.

The Glazing Bar End Plates are made from aluminium and supplied natural finish but can be powder coated.



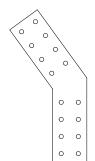
FDGE SPACER BAR

Used to fill the void and seal the glazing bar when at the edge of the structure. The Crystalite Edge Spacer Bar can be supplied in 4050 lengths, natural aluminium finish as standard or with optional powder coated finish.



GLAZING SHEET END CAP

Designed to slip over the edge of the glazing to provide protection to the edge of the sheet and also prevent the ingress of dirt and moisture inside structured/multi-wall glazing sheets.



BRACKETS

We have a wide range of stainless steel and galvanised brackets to suit most applications and connections. Please contact us for further information.

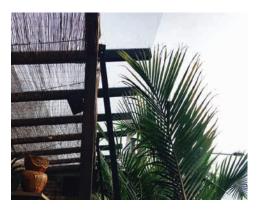


FASTENERS

- Glazing Bar Compression Screws
- Glazing End Plate Screws
- Bracket Bolts, Nuts & Washers







CRYSTALITE STRUCTURAL GLAZING SYSTEM

The Crystalite Structural
Glazing system is a unique
patented system that is
designed to provide a
simple and effective universal
mounting and sealing method
for various glazing materials,
such as glass, polycarbonate
(solid sheet or structured/
twinwall/tri-wall), or acrylic.

This system utilises a top-cap compression clamping method to provide a positive clamping pressure onto the glazing material to achieve an effective whether tight seal by utilising the compressed double-lip TPV seal. This system is available in 2x series (F150 and F250) and will accommodate glazing sheets ranging in thickness from 4mm up to 24mm.

The unique design of the glazing bars/beams accommodate a bracket locating/connection system that not only ensures perfect alignment of brackets and connections, but also superior load carrying capacity while delivering a seamless, clean finish that conceals not only the fasteners and brackets, but also other services such as electrical cabling, sprinkler/water pipes, etc...

The Crystalite Structural Glazing System is perfect for;

- Structural glazing including roofs & walls
- Canopies, awnings & pergolas
- Carports
- Gazebos
- Greenhouses
- Outdoor living areas
- Covered walkways
- Pool covers
- Conservatories

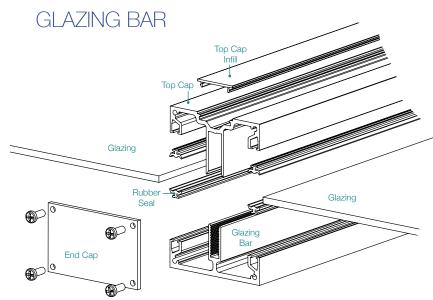
The Crystalite Structural Glazing System has been designed and manufactured in New Zealand, using quality materials. The bars and beams are readily available in a natural aluminium finish (ready for powder coat application) in either 4050mm or 6050mm lengths.

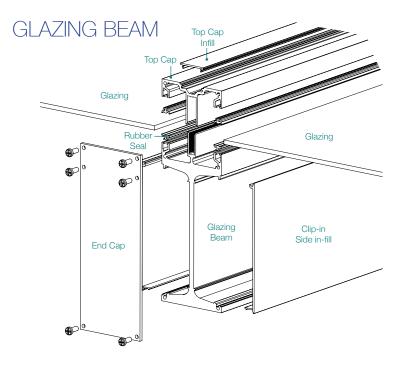
Custom lengths and powder coated finishes are available however minimum order quantities apply. The range of Crystalite structural glazing bars and beams are complimented by a complete range of brackets, fasteners and other ancillary extrusions designed to support the system and deliver a seamless finish.



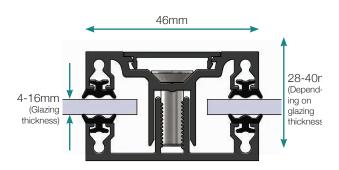
The main benefits of the Crystalite Glazing System:

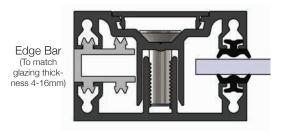
- Smart system, seamless finish and easy to install perfect for the DIY.
- Superior strength and design means you can span further.
- Concealed bracket/fastener connections and services such as electrical cabling, water pipes, etc...
- Made from quality materials. Designed and engineered for New Zealand conditions

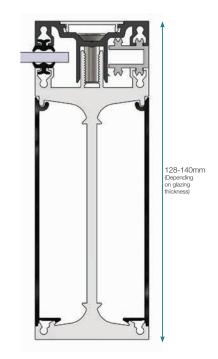




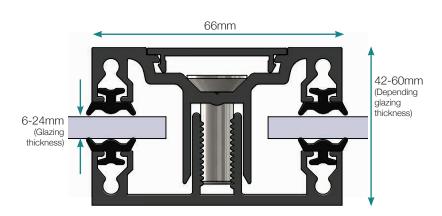
F150 SERIES Glazing Bar + Beam

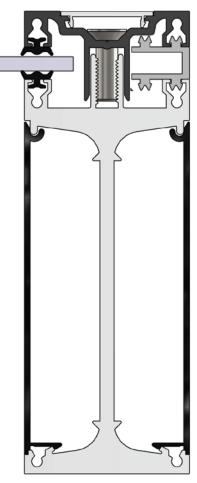






F250 SERIES Glazing Bar + Beam





172-190mm (Depending on glazing thickness)