CRYSTALITE
ARCHITECTURAL GLAZING SYSTEM

Innovative. Versatile.

Superior.

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

About Crystalite Glazing Panels...

Crystalite Glazing panels are an extruded acrylic sheeting [PMMA] product. The panels are a transparent thermoplastic and are shatter resistant 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.

Crystalite glazing provides a contemporary stylish look to most outdoor entertaining areas, adding value and is 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.

Care & Maintenance

Rinse sheet with lukewarm water only, do not add detergents or soap to the water. Using a soft, gentle cloth or sponge, lightly wash to loosen any dirt and residue but do not scrub aggressively or use brushes or harsh instruments. Dry with a soft, clean cloth to prevent water spotting. Do not clean in direct sunlight if possible.

BEWARE: no chemicals are to be used to wash Crystalite sheets as this will result in cracking or crazing of the sheet and will void the warranty.

TECHNICAL INFORMATION & WARRANTY

AVAILABILITY			
Sheet Width	620mm (maximum)		
Length	3m	4m	6m
Colour Tints	Clear	Grey	Diffused Opal
Roof Pitch	Minimum of 5°		

WARRANTY

15 Year Lifetime Warranty

TECHNICAL (GENERAL)			
Density	ISO1183	1.19 (0.0429)	g/cm^3 (lb/in^3)
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/m^2 (ft-lb/in^2)
Izod Impact Strength, Notched	ISO180/1A	1.5 (0.713)	kJ/m^2 (ft-lb/in^2)

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)

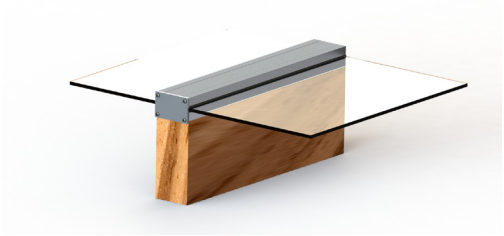
OPTICAL			
Light Transmission (3mm / 0.118')	DIN5036-3	92	%
Refractive Index	DIN5036-3	1.49	-

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 BAR

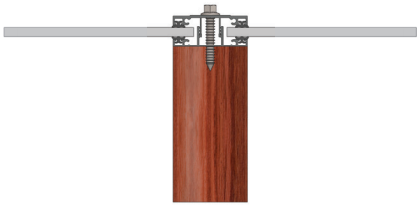
The Crystalite glazing bars/boxes are stocked and supplied in standard lengths of 4050mm and 6050mm. These come complete with aluminium extrusions including base bar, top cap, top cap infill, compression screws, rubber seals and end plates.. See overleaf for more details.



ECONOGLAZE

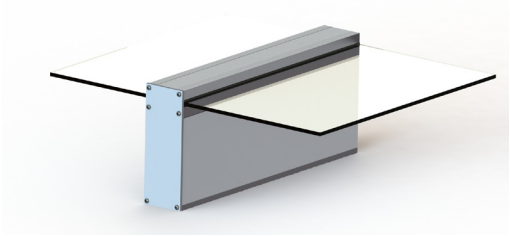
The EconoGlaze Glazing Bars are stocked and supplied in standard lengths of 4050mm and 6050mm.

These come complete with Aluminium extrusions, including Bar base, Top cap, rubber seals and end plates.



GLAZING BOX

The Crystalite glazing bars/boxes are stocked and supplied in standard lengths of 4050mm and 6050mm. These come complete with aluminium extrusions including base box, base bar, top cap, top cap infill, compression screws, rubber seals and end plates. See overleaf for more details.

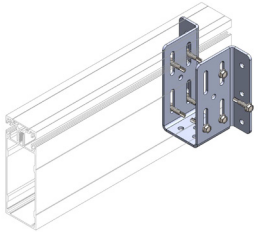


EDGE SPACERS

Use the Edge Spacer to fill the void and seal these Glazing Systems when at the edge of the structure. The Crystalite Edge Spacer can be supplied in 4050mm and 6050mm lengths, natural aluminium finish as standard or with optional powder coated finish.

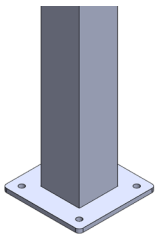
BRACKETS

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



POSTS AND BEARERS

We can supply a wide range of Aluminium Posts and Bearers to suit most building situations. These are available in natural aluminium finish and can be powder coated. Please contact us for further information



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 positive clamping pressure onto the glazing material to achieve an effective weather-tight seal by utilising the compressed double-lip TPV seal. This system is available in Box or Bar format, and can accommodate glazing sheets ranging in thickness from 4mm up to 16mm.

The unique design of the glazing bars/boxes 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; roofs and walls
- Canopies, awnings and pergolas
- Carports
- Greenhouses
- Conservatories
- Gazebos, outdoor living areas
- Pool covers

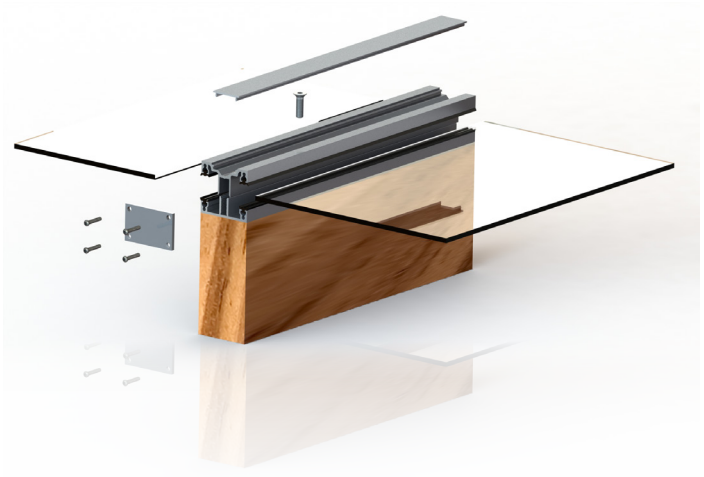
The Crystalite Structural Glazing System has been designed and manufactured in New Zealand, using quality materials. The Bars and Boxes are readily available in a natural aluminium finish (ready for powder coat application) in either 4050mm or 6050mm lengths.

The range of Crystalite structural glazing Bars and Boxes are complimented by a complete range of brackets, fasteners and other ancillary extrusions designed to support the system and deliver a seamless finish.

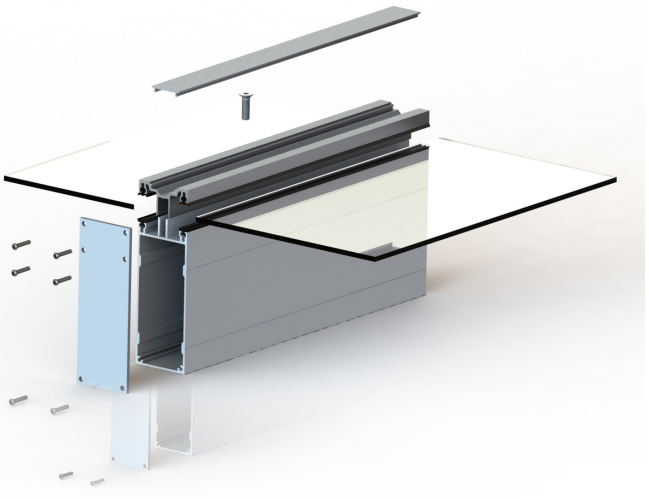
The main **benefits of the Crystalite Glazing System:**

Smart system, seamless finish and easy to install - perfect for 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

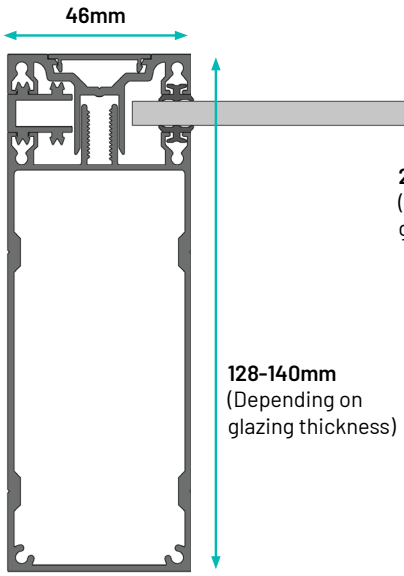
GLAZING BAR



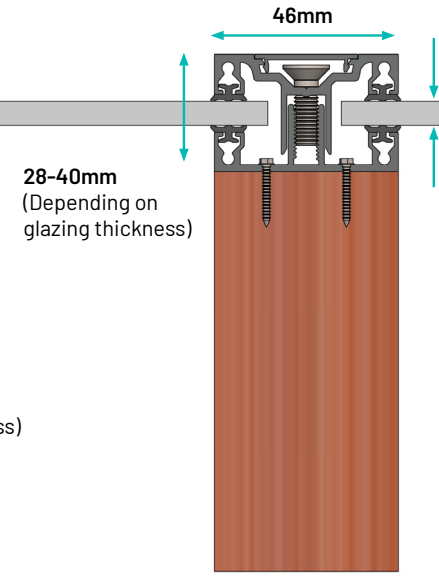
GLAZING BOX



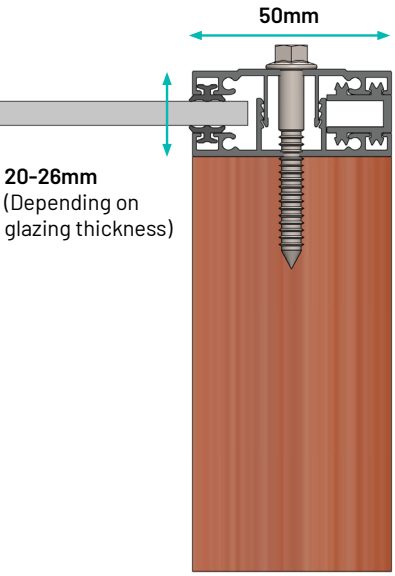
ClearSpan Box

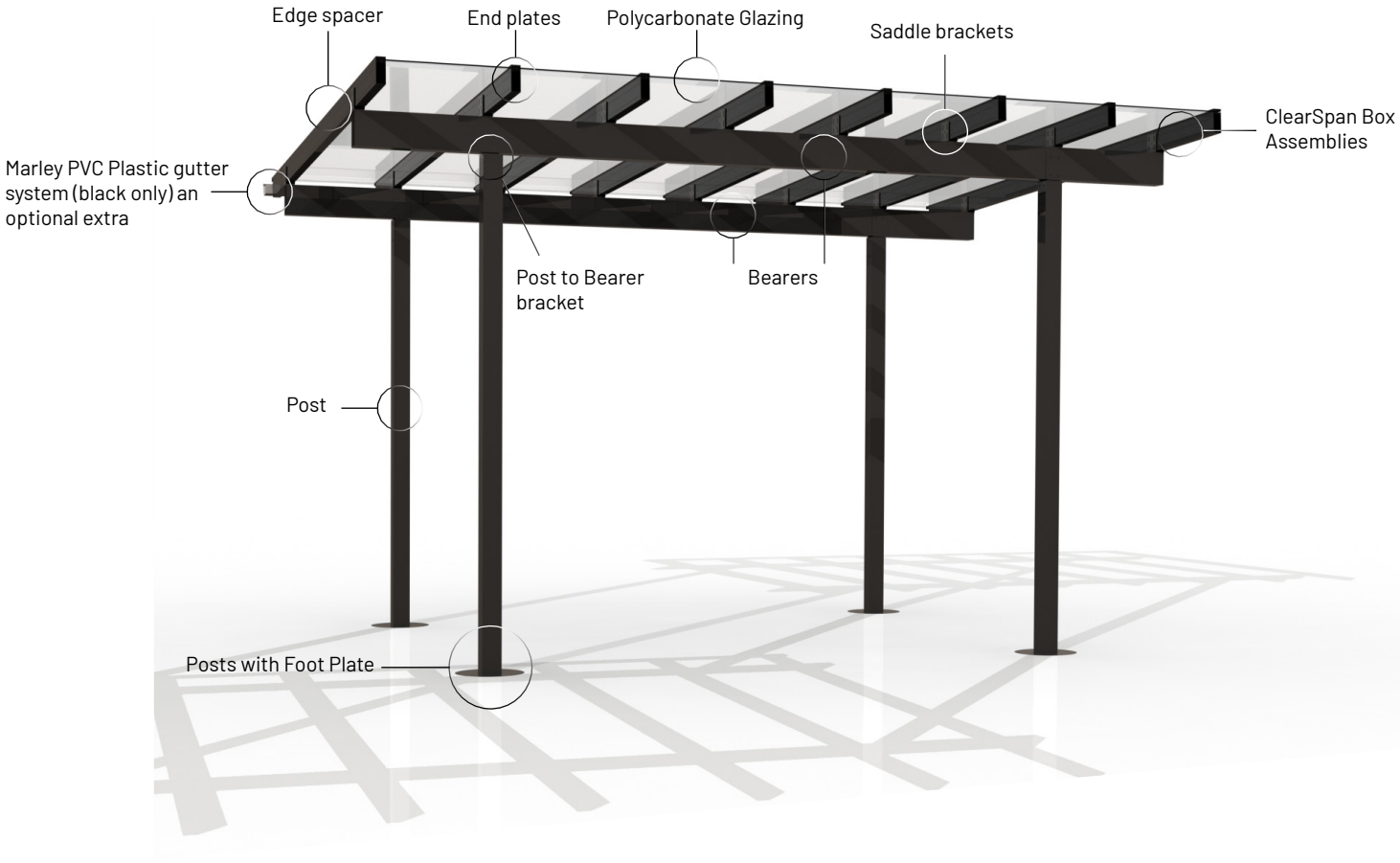


ClearSpan Bar



EconoGlaze Bar





2024.0727