

# CRYSTALITE

ARCHITECTURAL GLAZING SYSTEM



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



**SUPREME**  
PLASTIC ROOFING



## 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°

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## 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.



# TECHNICAL INFORMATION

## GENERAL

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

## 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 <sup>-5</sup>
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" )	CLEAR	DIN5036-3	60 (+/-5)	%
	GREY	DIN5036-3	60 (+/-5)	%
Refractive Index	CLEAR	DIN5036-3	1.49	-
	GREY	N/A	N/A	N/A

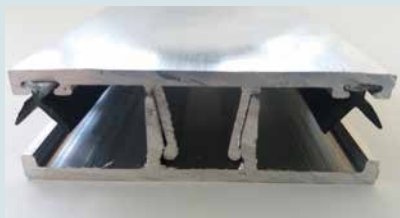
*This specification provides typical data to the best of our knowledge at the time of publishing. Due to our inability to control conditions of use and application, we are unable to make any recommendations or suggestions. Supreme Plastic Roofing assumes no liability for use of information presented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



# INSTALLATION GUIDE

1. Measure the distance (length) for the 2 piece joiner. Then cut them to the required size. With the fixings screw, attach the bottom joiner to the rafter or purlin running in the direction of the sheet length. Please note that you will need to allow for the Aluminium joiner gain which is 35mm on the outside and 20mm on the inside joiner. To fix in place, drill through the bottom joiner at 400mm intervals (300mm high wind areas) and screw to rafter.

2. On the rafters or purlins that do not have a joiner run the anti-noise tape along the centre to keep the sheet flat. Please ensure the sticky side goes against the rafter and the smooth side facing up.



3. Measure and cut (if required) the Crystalite to length and width. If you must cut the width of the sheet, use a saw blade that has lots of teeth per inch. Let the blade do all the work do not force the saw as this could result in a stress fracture. If you know the sizes required at time of ordering, the factory can cut these for you at no extra cost. These must be straight cuts.

4. Slide the Butterfly Rubber into the two side channels on the top aluminium joiner. If you are using a joiner for an outside edge you do not need a Butterfly Rubber on the outside edge. This will be replaced with a Butt Rubber.
5. Before placing the sheets into position, remove 100mm of the top and bottom film on the sides which will be going into the joiner. Place the sheets into position and place the top joiner onto the base. Please note that you must place sheets on both sides of the joiner (or Butt rubber for outside edges) before placing the top joiner down. The Aluminium top may require a tap down with a rubber mallet to secure. We would recommend for high wind areas that a fixing at the top, middle and bottom of the joiner be fixed all the way through both top and bottom joiners for added security.
6. Pop rivet your L Cap on the end of your joiner.
7. Once all your sheet is installed remove the protection plastic film on both sides if not already done so. Please note that you should not leave this protection film on the sheet sitting in the sun for too long otherwise it may be difficult to remove.
8. Now sit back and enjoy the great outdoors.

## Special Instruction Notes:

- Ensure that the roof has a minimum pitch of 5 degrees (87 mm per metre)
- All glazing systems, sealants, gaskets and other materials must be fully compatible with Acrylic
- A frame of 15mm is normally required when glazing. It is also important to add extra space for thermal expansion
- When drilling holes, thermal expansion must be taken into account (ensure holes are 2mm larger than shaft of screws)
- When installing the sheets allow 2mm thermal expansion gap between the side of the joiner and side of sheets
- Do not remove the protection film from the sheet prior to installation, as this may result in unnecessary scratching. The protection film comes in a plastic film and should not be left sitting in the direct sunlight for too long. Otherwise this may become difficult to remove. Remove as soon as possible.
- Do not walk on the Crystalite
- Prior to construction, building regulations should be checked and followed where applicable
- Sheets must not be fixed or clamped too tightly as this will prevent thermal expansion and contraction and will adversely affect the installation

## Cleaning Guide

We recommend that the Crystalite sheets be cleaned twice a year. To clean the sheets, we recommend using a solution of lukewarm soapy water or an ordinary household detergent. A soft sponge should be used to remove any dirt and grime from the sheet. Do not scrub the sheet with brushes or sharp instruments and avoid abrasive cleaners of a high alkaline composition.