

now performs to
GROUP 3
 Internal
 Surface
 Linings



PERMA-GLAS XL

INDUSTRIAL GRADE FIBREGLASS

Perma-Glas XL industrial fibreglass sheeting has set the standard for industrial skylights in New Zealand for many years, providing high levels of light transmission, excellent spanning, and low thermal expansion. The highest-quality materials available are used in the manufacturing process, making it a durable and cost-effective sky lighting option. Perma-Glas XL industrial sheeting is available in a range of commonly sold roofing profiles in New Zealand and is suitable for light industrial buildings, workshops, carport, sheds, garages, and farm buildings. Perma-Glas XL carries a 20-year warranty for water transmission and 10 years for light transmission and is manufactured in strict accordance with the New Zealand standard AS/NZS 4256, Parts 1 & 3: 1994.6.



- Good levels of light transmission over a longer period of time.
- Improved durability as surface erosion is reduced.
- Resistance to yellowing and discolouration.
- 20 year warranty protection, for water penetration. 10 year warranty for light transmission.

Surface Finish Properties have been tested to ISO 5660 and achieved a group number 3 performance in accordance with NZBC Verification Method C/VM2 Appendix.



Perma-Glas XL manufactured in New Zealand after the 15 October 2020 will now use Ampelite's proprietary Group 3 Bromine Free fire retardant resin system that is currently used to manufacture our SL sheeting products.



PERMAGLAS XL

INDUSTRIAL GRADE FIBREGLASS

Suitable for the following profiles

Perma-Glas XL is available to suit the commonly manufactured profiles in New Zealand and is manufactured to comply with AS/NZ54356.3.1994, part 2. Perma-Glas XL is suitable for curved roof applications. Curved roof radius to suit 1800g/m² corrugated and 5 Rib minimum radius 3.8 metres. 2400g/m² corrugated and 5 Rib minimum radius 4.0 metres.

Specification

The Translucent Sheeting shall be Ampelite Perma-Glas XL industrial quality sheeting, manufactured by Ampelite New Zealand Ltd, to comply with AS/NZ54256.3.1994, part 2. The gauge/weight of the sheet shall be _____ mm/gsm and shall be manufactured to conform with the nominated profile and colour. The sheeting shall be installed in accordance with Ampelite's fixing instruction or comply with the design loading requirements of NZ4703-1992 and NZ36041-1990.

Accessories

Ampelite have a large range of accessories available to help make the installation of Perma-Glas XL fast and professional. These accessories include a range of self-drilling screws that oversize the fastener holes as they pass through the sheet, self-adhesive tapes, and profiled from filler strips for protection from vermin.

Correct installation is important

Ampelite sheeting shall be installed in accordance with Ampelite fixing instructions and with AS/NZS 1562.3:1996, Design and installation of sheet roof and wall cladding, Part 3: Plastic, the requirements of the NZ building code and the NZ Metal Roofing Manufacturers' Association Code of Practice.

PLEASE NOTE THESE IMPORTANT REQUIREMENTS;

1. Ampelite translucent sheeting matching positive fixed profiles shall be installed using the fastening length applicable to the main cladding, together with a metal profile washer and EDPM seal. This combination creates a secure and weather-tight finish. The fixing screws should not be over-tightened to the extent

that the sheet buckles, allowing water penetration at the seal or sheet overlap.

2. Fixing should be made at every crest at both ends of the sheet and at every second crest at intermediate purlins.
3. Where Ampelite fiberglass sheeting is in contact with safety mesh, an Ampelite purlin protection strip must be installed over the safety mesh to avoid fracturing of the underside of the sheet.
4. Where end-lapping of the sheet is required, a minimum of 300 mm overlap is essential. Ampelite recommends the use of 25 mm Lap Seal Tape at the top and bottom edges of the purlin. This ensures the strips are concealed. For Decking profiles, two continuous beads of a clear non-hardening sealer (i.e. silicone), must be applied across the full width of the decking within the overlap.

IMPORTANT: Ampelite sheeting should be installed by pre-drilling oversize holes to allow for expansion and contraction. The basic calculation is 0.75 mm per lin./m, plus shank diameter of screw. Do not over-tighten screws.

EXAMPLE: 10 m sheet - 10 (m) x 0.75 (mm) + 4 mm (fastener) = 11.5 mm pre-drilled hole.

CLIP-FIXED DECKING: Ampelite sheeting matching clip-fixed deck profiles shall be installed in conjunction with the main cladding and should be side lapped with overlaps on both sides (Ampelite sheets have two female laps). Fixing of sheets should be carried out in the same manner and practice as those stated for positive fixed profile roofing.

WALL CLADDING: Pan fixing is required at each girt, and the use of Ampelite grey dome 22 mm weather seals ensures a weather-tight seal. Over-tightening or flattening the weather seal must be avoided. Fixing shall occur in every pan at both ends of the sheeting, and at every other pan at intermediate girts.

CYCLONE ZONE INSTALLATION: Installation in cyclone prone areas follows the recommendations and code for normal fixing, but further specific requirements must be met. Please contact your local Ampelite office for the latest information.

For full installation details, please download a copy of our installation guide from ampelite.co.nz

PHYSICAL PROPERTIES

TENSILE STRENGTH	80MPA (min requirements 55 MPA)	SPECIFIC GRAVITY	1.45
IMPACT STRENGTH	8 Joules	THERMAL EXPANSION	3.0 X 10 ⁻⁶ cm/C
SHEAR STRENGTH	90 MPA	THERMAL CONDUCTIVITY	0.158 watt/mC
MODULES OF ELASTICITY	5500 MPA	WATER ABSORPTION	0.2% in 24 hrs/26C
COMPRESSIVE STRENGTH	135 MPA	SERVICE TEMPERATURE	RANGE 20C to 95C
FLEXURAL STRENGTH	150 MPA		

SPANNING CAPACITY

SERIES	1800/1.1mm	2400/1.4mm	3050/1.7mm	3660/2.0mm
CORRUGATED	1000	1200	1300	1400
5 RIB	1200	1500	1700	1900
6 RIB	1000	1200	1300	1400
400 DECKING	1200	1400	1600	1800
SUPERSIX	1600	1800	2100	2400

SHEET COLOUR / LIGHT TRANSMISSION

CLEAR	80%
OPAL	60%
GREY	33%

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