# PERMAGLAS STD INDUSTRIAL GRADE FIBREGLASS

A cost effective way of allowing the natural day light into your home and work areas.

- Excellent light and heat transmission.
- Incorporates a tough polyester film that prevents reinforcing fibres becoming exposed on the surface.
- A maximum 30% light transmission loss.
- I5 year warranty protection, for water penetration.
  5 year warranty on light transmission.







10-15

# PERNAGLAS STD

The very best raw materials and latest resin technology are used in the manufacture of Ampelite Perma-Glas STD fibreglass sheeting. Automatic processing is used to ensure that each phase of manufacture is absolutely consistent from batch to batch. Ampelite Perma-Glas STD is covered with a tough polyester surface protection film which increases its life as it prevents reinforcing fibres becoming exposed to the surface of the sheet for a minimum of 5 years. The sheeting travels through the profile formers and into the curing ovens, approximately 40 metres in length, to emerge ready to be trimmed and cut to length. With its low expansion and contraction rates, Ampelite Perma-Glas STD is compatible with all steel roofing and cladding, making it a durable, cost effective alternative which filters out 99% of harmful UV rays, giving excellent protection from the elements while still letting the sunlight trough.

# Suitable for the following profiles

Perma-Glas STD 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 STD is suitable for curved roof applications. Curved roof radius to suite 1800g/m<sup>2</sup> corrugated and 5 Rib minimum radius 3.8 metres. 2400 g/m<sup>2</sup> corrugated and 5 Rib minimum radius 4.0 metres.

### Specification

The Translucent Sheeting shall be Ampelite Perma-Glas STD industrial quality sheeting, manufactured by Ampelite New Zealand Ltd, to comply with AS/NZ54256.319947, 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.

### Installation

- I. Pre-drill oversize holes to allow for expansion and contraction of sheet.
- 2. Use appropriate fixing assembly including a 32mm Weatherlock seal to ensure a firm, watertight sheet.
- 3. Apply a protective foam or fibreglass strip between mesh and fibreglass sheet at each purlin.

#### Spanning Capacity

- 4. For endlaps, apply a self adhesive closed cell foam strip directly over the purlin between the overlapping sheets.
- 5. Store sheets in a dry and fire safe area. Do not store heavy materials on sheets as they may fracture.
- 6. Pan fixing is recommended for cladding. Fixing shall occur in every pan at ends and every other at intermediate.

Ampelite sheeting matching clip-fixed deck profiles should be side lapped with overlaps on both sides. Sheet should be installed the same as positive fixed profiled roofing.

**IMPORTANT:** Ampelite sheeting should be installed by pre-drilling over size holes to allow for contraction. The basic calculation shall be 0.75mm per lineal metre, plus the shank diameter of the fastener.

**EXAMPLE:** 10 mtr sheet - 10 x 0.75 + 4mm (fastener) = 11.5mm per drilled hole.

**NOTE:** All installation should comply with the design loading requirements of NZ4203-1992 and NZ3604-1990.

# **Physical Properties**

Tensile strength	80MPA (min requirements 55 MPA)	
Impact strength	8 Joules	
Shear strength	90 MPA	
Modules of elasticity	5500 MPA	
Compressive strength	135 MPA	
Flexural strength	I 50 MPA	
Specific gravity	1.45	
Thermal expansion	3.0 x 10-5 cm/C	
Thermal conductivity	0158 watt/mC	
Water adsorption	.2% in 24 hrs/26C	
Service temperature	Range 20C to 95C	

#### Typical transmission levels (for series 1800/1.1mm)

Light Transmission		
84%		
78%		
70%		
45%		
74%		
60%		
35%		

Series	1800/1.1mm	2400/1.4mm	3000/1.7mm
Corrugated	1000	1200	1300
6 Rib	1000	1200	1300
5 Rib	1200	1500	1700
Trimline	1200	1500	1700
SS900/Topspan	1600	1800	2000
LT7	1400	1700	1800
BB900	1400	1700	1900
DD400/BB400	1200	1400	1600

#### Available from

