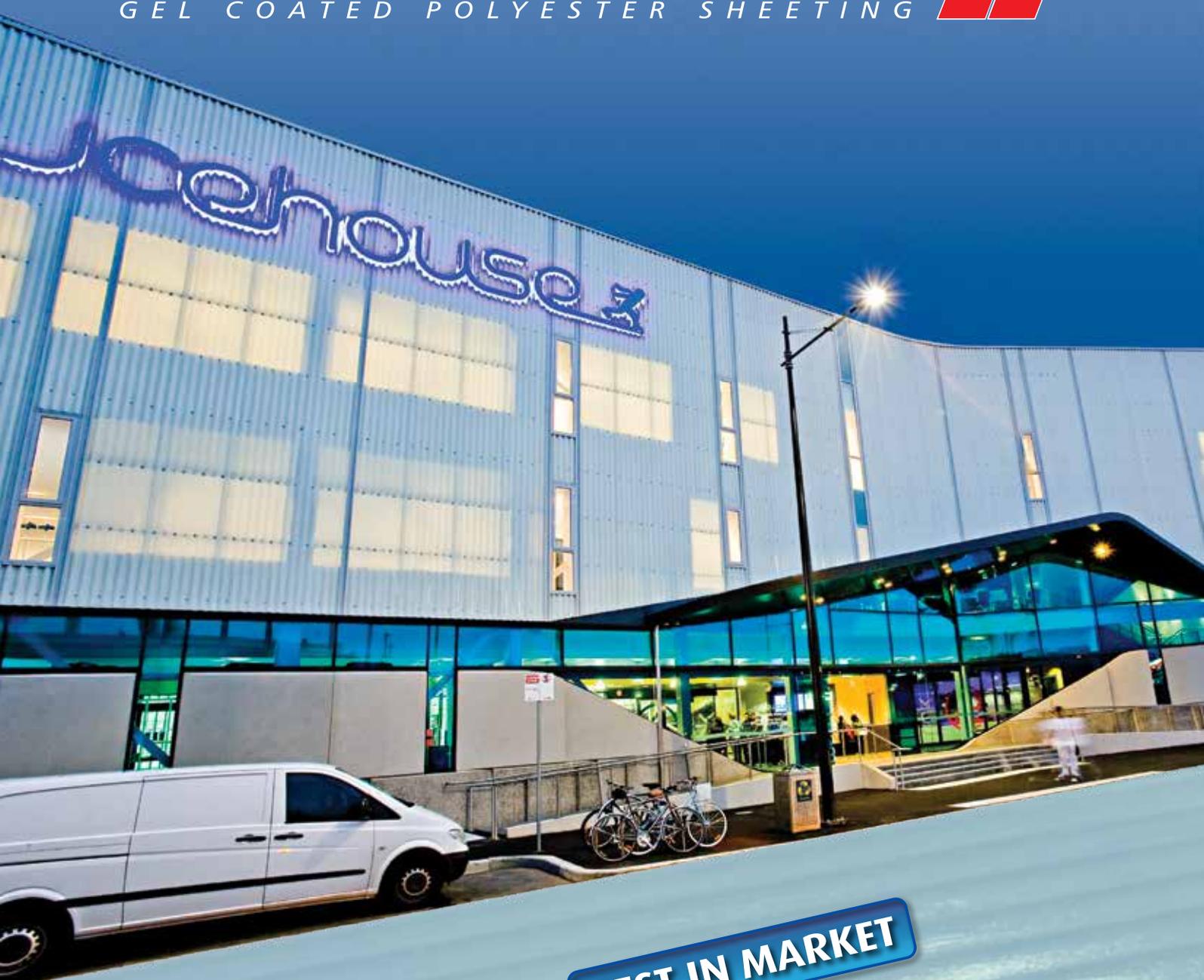




**AMPELITE**  
World Class Fibreglass technology

# WONDERGLAS<sup>GC</sup>

GEL COATED POLYESTER SHEETING



**BEST IN MARKET**

**UNSURPASSED  
PROVEN  
PERFORMANCE**



# WonderGlas GC

GEL COATED POLYESTER SHEETING

Ampelite, Australia's most experienced and largest manufacturer of fibreglass roofing introduced 'Wonderglas GC' gel coated sheeting to Australia in 1994, adapting the process originally developed by BP chemicals in the United States, to expressly combat Australia's very harsh environment.

## Wonderglas GC Retains Light Transmission Strength And Flexibility

Over the life of the sheet strength and flexibility is retained, it does not lose its tensile strength or become brittle as happens with film surface coated and polycarbonate materials. Generally speaking, film coated fibreglass reinforced polyester sheeting has a history of failure under Australian conditions. While it has been a means of delivering natural light, the shortcomings of erosion, combined with loss of light transmission, discolouration and water penetration, have called for a decided improvement. Wonderglas GC, with a UV resistant Gel Coat of 100 microns in thickness, replacing surface film of just 20 microns, has provided this improvement.

Since its introduction Wonderglas GC has been proven in many thousands of installations throughout Australia and New Zealand, and in many Asian regions. Ampelite's policy of continual product improvement, as new technology and materials are available, ensures product leadership. The highly UV resistant resins used in the manufacture of Wonderglas GC provide the ultimate in protection – ahead of even the latest surface film technology.

The 100 micron thick gel coat is integral with the sheet, (chemically cross bonded), and no delamination is possible. The gel coated sheet surface becomes an almost impenetrable barrier that reduces surface erosion and loss of light transmission to negligible proportions. The proven performance of Wonderglas GC remains unsurpassed and puts this Australian made product at the cutting edge of world resin technology.

Wonderglas GC has also been tested at Allunga Qld, through the Allunga Exposure Laboratory. Allunga is an independent laboratory that specialises in natural weather testing, and is well known in Australia and overseas. All methods of testing are performed to strict Australian Standards. The Altrac system (in which the sample tracks the sun), is generally accepted to have a 5:1 weathering value. The Wonderglas GC result was a light loss of 22% over a period equivalent to 20 years exposure. The test product still displays a very smooth, glossy surface with no fibreshow at all.

The Wonderglas GC technology was developed in the United States through BP Chemicals, and has been widely used by Ampelite Australia since 1994.





## Wonderglas GC has excellent stability

Materials Expansion Comparison. 0°C to 40°C temperature variation. Sheet length 12 metres.

	Fibreglass	Polycarbonate	Steel	Aluminium
Thermal expansion	14.4 mm	32.4 mm	5.8 mm	11.5 mm
Thermal co-efficient	3.0 x 10 <sup>-5</sup> cm/cm °C	6.75 x 10 <sup>-5</sup> cm/cm °C	1.2 x 10 <sup>-5</sup> cm/cm °C	2.4 x 10 <sup>-5</sup> cm/cm °C

## Spanning / Grades

Series - gsm	2400	3050	3660	4270	4880
Grades - kg/m <sup>2</sup>	2.4	3.05	3.66	4.27	4.88
Corrugated	1200	1500	1700	-	-
5 rib	1500	1700	2000	2300	-
Spandek	1600	2000	2300	2600	2800
500 Decking	1400	1700	2000	2300	2600
Kliplok 700	1400	1700	2000	2300	2600

## Physical Properties

Tensile strength	(Min. requirement 50 MPa)	80 MPa
Impact strength		8 Joules
Shear Strength		90 MPa
Modulus of elasticity		5500 MPa
Compressive strength		135 MPa
Flexural strength		150 MPa
Specific gravity		1.45
Thermal expansion		3.0 x 10 <sup>-5</sup> cm/°C
Thermal conductivity		0.158 watt/m°C
Water absorption		.2% in 24 hours/26°C
Curved roof radius - Corrugated & 5 rib	2400g/m <sup>2</sup> minimum radius: 4.0 metres	
Recommended service temperature:	range -20°C to +96°C	

## Screw Patterns

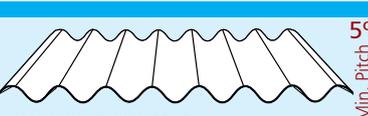
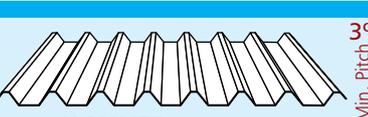
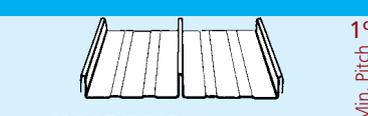
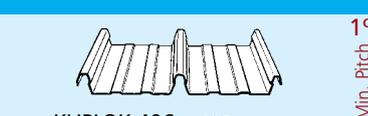
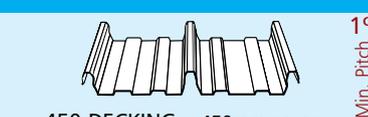
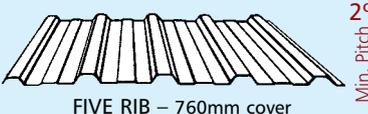
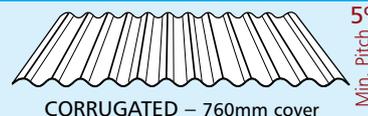
Profiles	Pattern
Corrugated	1, 4, 7, 10, 12
5-Rib	All, 1, 2, 3, 4, 5
700 Deck	All, 1, 2, 3, 4
Hardies	1, 3, 5, 7

## Light & Heat

Colour	Series	Light	Heat
Ice Clear	2400	74%	68%
Opal	2400	72%	64%
CoolLite	2400	51%	23.5%

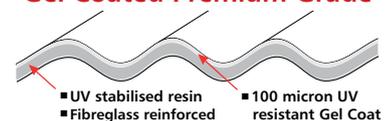


Plus many more, ask us for more information.



In addition, most current and superseded profiles can be supplied. Plus custom profiles as required.

## Gel Coated Premium Grade



The Wonderglas GC 100 micron gel coat provides unsurpassed performance. In comparison, surface film is just 20 microns in thickness.

## Benefits

- Hail Resistance
- Stable Light Transmission
- UV Stable 100 Micron Gel Coating
- Cuts 99% of UV Transmission
- Low Surface Erosion
- Chemical Resistance
- SL, SR76 Fire Retardent

## Standard Colours



• Ice Clear

• Opal

• CoolLite

## 25 Year Warranty

The following benefits are in addition to any rights conveyed by Government regulations and the Trade Practices Act.

Ampelite Australia Pty Ltd warrant 'Wonderglas GC' glass reinforced polyester sheeting over:

**(A) a period of 25 years (pro-rata cover) for the following:**

1. The product will not allow water penetration through the actual sheet.
2. The product will not de-laminate or allow protrusion of reinforcing fibres through the sheet surface.

**(B) a period of 10 years (pro-rata cover) for the following:**

1. Remain structurally sound and shatter resistant under normal conditions. This includes fracturing of sheet by hailstones up to 20 mm in diameter accompanied by winds up to 100 km/hr.
2. Excessive yellowing of sheets leading to loss of light transmission exceeding 10% of the original light value when installed below a latitude of 26° South of the equator. Installations above this latitude will be covered by individual warranty based on known climatic conditions.

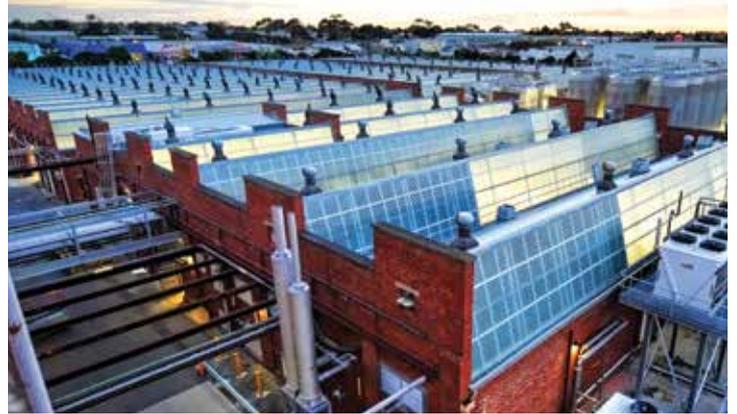
**Warranty conditions:**

- (a) The product must be installed strictly in accordance with AS1562.3:2006 Design and installation of sheet roofing and wall cladding Part 3: Plastic, and with the Manufacturer's recommendations and specifications which are available from Ampelite offices.
- (b) The product must not be affected by failure to remove debris, or failure to keep the surface clean or to provide free drainage of water from the product's surfaces.
- (c) The sheet shall not be directly exposed to the range of chemicals known to cause deterioration of polyester materials.

## Specification

### Wonderglas GC Premium grade Fibreglass

The Translucent Sheeting shall be 'Wonderglas GC' gel coated Fibreglass Reinforced Polyester Sheeting as manufactured by Ampelite Australia Pty. Ltd. to comply with AS 4256:3-2006. Licence No. 986. The weight of the sheet shall be \*2400 g/m2 and be manufactured to conform to the nominated profile and colour. Sheeting shall be installed in accordance with Ampelite fixing instructions and with AS 1562.3-2006 Design and installation of sheet roof and wall cladding Part 3: Plastic.



Provided by Ampelite Australia Pty Ltd an Australian owned and operated company.

- (d) Sheet failure or damage due to vandalism, fire or natural disasters, improper storage or installation is not covered.

**Replacement or refinishing**

From the date of installations in latitudes below 26° South, and during the applicable warranty period, Ampelite Australia Pty. Ltd. will, upon verification and acceptance of a claim supply a replacement panel at a cost to the user calculated as follows: 1/300th warranted for 25 years for each month of service obtained prior to the submission of the claim, or refinish the defective panel to restore minimum surface integrity.

## DISCLAIMER

While the contents of this brochure are believed to be correct at the time of printing, revisions to the colour range, procedures or data may be made without notice. All recommendations are made in good faith but without warranty.

The colour representations of WonderGlas GC in this brochure are as accurate as the nature of the material and commercial photographic and printing processes allow. It is probable that colours may vary between those shown in this brochure, sample pieces and the delivered product. Where colour is critical we recommend that you inspect up to date samples of the actual material to be used at your retail outlet prior to purchase. Very minor variations in sheet colour may occur from time to time but are virtually undetectable in situ; blue or grey skies and intense sunlight may cause a variation in the apparent colour from day to day.

Ampelite is proudly Australian owned and manufactured. Profits remain in Australia and taxes paid benefit our community.



Ampelite Australia Pty Ltd  
ABN 91 487 122 629

Plumbing Merchants Association  
Supplier Of The Year for  
2006, 2007, 2008, 2009, 2011 & 2014



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