

Wonderglas S-996

GEL COATED POLYESTER SHEETING

PROVEN

now performs to
GROUP 3
Internal
Surface
Linings



Ampelite introduced Wonderglas GC (now Wonderglas S-996) gel coated sheeting to New Zealand in 1995 expressly to combat our very harsh environments. Wonderglas S-996 continues to be a preferred solution for commercial buildings throughout New Zealand and Australia. Wonderglas S-996 is recommended for commercial and retail applications where excellent long term light transmission is required.

Proven:

Ampelite uses the superior Silmar S-996 Gel Coat on all Wonderglas S-996 (formally Wonderglas GC) product. Silmar S-996 was specifically designed as a clear Gel coat for roofing. This highly UV resistant Gel coat provides Wonderglas S-996 (formally Wonderglas GC) with the ultimate impenetrable barrier that reduces surface erosion and loss of light transmission to negligible proportions. Since its introduction, Wonderglas S-996 (formally Wonderglas GC) has been proven on thousands of installations throughout New Zealand.

Tested:

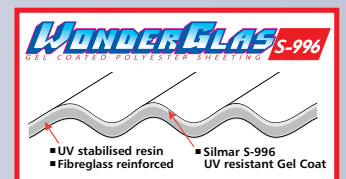
Wonderglas GC (now Wonderglas S-996) has been tested at the Allunga Exposure Laboratory in Allunga QLD, a world renowned testing facility. All methods of testing are performed to strict Standards. The Altrac system (in which the sample tracks the sun), is generally accepted to have a 5 to 1 weathering value. The Wonderglas GC (now Wonderglas S-996) result was a light loss of 22% over a period equivalent to 20 years exposure. The test samples still displayed a very smooth, glossy surface with no fibre show at all.

Surface Finish Properties have been tested to ISO 5660 and achieved a group number 3 performance in accordance with NZBC Verification Method CIVM2 Appendix.

Wonderclad GC 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.

Unchanged:

The composition of our Silmar S-996 Gel coat has remained un-changed since Wonderglas GC (now Wonderglas S-996) introduction into the New Zealand market in 1995, making it the oldest and most dependable Gel coated roofing sheet in the market.



- Surface erosion (fibre show) is eliminated.
- Superior resistance to yellowing and hazing.
- Minimal loss of light transmission over life.
- 99% protection from UV rays.
- More cost effective over the life of the building.



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makes light work!

Suitable for the following profiles

WonderGlas S-996 is available to suit the commonly manufactured profiles in New Zealand and is manufactured to comply with AS/NZ54356.3:1994, part 2. WonderGlas S-996 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 WonderGlas S-996 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 WonderGlas S-996 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 fibreglass 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 ⁻⁵ 6 cm/C
SHEAR STRENGTH	90 MPA	THERMAL CONDUCTIVITY	0158 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%