



# WONDERCLAD GC

SOLID COLOUR FIBREGLASS CLADDING

New Zealand's leading manufacturer of industrial fiberglass sheeting introduces **Wonderclad GC** a solid colour fiberglass sheet specifically designed for areas where corrosion resistance is vital. Complete buildings can be clad with **Wonderclad GC** which utilizes the same resin technology and highly UV resistant surface coating used on Ampelite's premium grade **Wonderglass S996** the preferred solution for commercial buildings throughout New Zealand and Australia. **Wonderclad GC** provides a maintenance free cladding guaranteed for a specific lifetime. For extreme environments, where high levels of acids or alkalines may occur, **Wonderclad GC+** which incorporates vinyl ester resins, will provide additional protection.

now performs to  
**GROUP 3**  
Internal  
Surface  
Linings



### SUPERIOR FEATURES OF WONDERCLAD

- Full range of colours available.
- Available in a range of standard thicknesses from 1.1mm to 2.6mm.
- The top (weatherside) is protected with Silmar S996 a specially formulated high UV resistant gel coat.
- The Silmar S996 surface provides an almost impenetrable barrier and is warranted against water penetration for 25 years.
- Good resistance to a range of commonly used chemicals.

### APPLICATIONS

- Corrosive Chemical processing
- Petrochemical environments
- Wastewater Treatment
- Marine Environments
- Mining Industry
- Paper and pulp manufacturing
- Salt extraction and desalination plants
- Power Stations

*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.*

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.



## Suitable for the following profiles

Wonderclad GC is available to suit the commonly manufactured profiles in New Zealand and is manufactured to comply with AS/NZ54356.3.1994, part 2. Wonderclad GC is suitable for curved roof applications. Curved roof radius to suit 1800g/m<sup>2</sup> corrugated and 5 Rib minimum radius 3.8 metres. 2400g/m<sup>2</sup> corrugated and 5 Rib minimum radius 4.0 metres.

## Specification

The Translucent Sheeting shall be Ampelite Wonderclad GC 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 Wonderclad GC 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](http://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 <sup>-5</sup> 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

## AVAILABLE COLOURS

Wonderclad GC is available in 3 standard colours Tinania, Gull Grey and Desert Sand. Wonderclad and Webglas can be colour matched to any colour. For information on other colours, please contact your local Ampelite office.

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