



SL GROUP 3 FIRE RETARDANT

BROMINE FREE fire retardant sheeting

Ampelite announces the next generation of SL Group 3 Fire Retardant sheeting with a 'Bromine Free' formulation. To meet the Internal Surface Performance requirements of the New Zealand Building Code, Ampelite's SL Fire Retardant sheeting was originally manufactured from a fire retardant resin that used a chemical called Bromine. Bromine is a very good fire retardant, however it can change colour and become a yellowish brown colour when exposed to UV and heat. A substantial amount of Research and Development work has been undertaken in order to achieve a Group 3 rating without the use of 'Bromine'.

- New 'Bromine free' formulation.
- Excellent clarity and long term long-term light transmission.
- Premium Industrial fibreglass sheeting with the same UV resistant gel coated surface as 'Wonderglas S-996 (formally Wonderglas GC)'.
- 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
- Eliminates 99% of harmful ultra violet rays.
- Available in range of colours including clear or IR heat reducing sheeting and also as a solid colour sheet for corrosive environments.
- 25 year warranty protection for both water penetration and light transmission.









SL GROUP 3 FIRE RETARDANT BROMINE FREE fire retardant sheeting

SL GROUP 3 FIRE RETARDANT S-996 sheeting utilises the same highly UV resistant surface as Ampelite WonderGlas S-996 (formally Wonderglas GC).

Like our WonderGlas S-996 (formally Wonderglas GC), SL GROUP 3 FIRE RETARDANT sheeting is protected by the same highly UV resistant Silmar 996 gel coat which is integral with the sheet and cannot delaminate. Wonder Glas GC (now Wonderglas S-996) was tested at Allunga Queensland, through the Allunga Exposure Laboratory. Allunga is an independent laboratory that specializes in natural weather testing, and is well known in Australasia and overseas. All methods of testing are performed to strict Australian Standards. The Wonder Glas GC (now Wonderglas S-996) technology was developed in the United States through BP Chemicals, and has been in the American market for in excess of 25 years and widely used throughout New Zealand since 1995.

Suitable for the following profiles

SL GROUP 3 FIRE RETARDANT sheeting is available to suit the commonly manufactured profiles in New Zealand and is manufactured to comply with AS/NZ54356.3.1994, part 2. SL GROUP 3 Fire Retardant is suitable for curved roof applications. Curved roof radius to suite 1800g/m2 corrugated and 5 Rib minimum radius 3.8 metres, 2400g/m2 corrugated and 5 Rib minimum radius 4.0 metres.

The Translucent Sheeting shall be Ampelite SL GROUP 3 FIRE RETARDANT industrial fiberglass 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 to the nominated profile and colour. Ampelite SL GROUP 3 FIRE RETARDANT 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 Manufactures Association Code of Practice.

Installation

- I. Pre-drill oversize holes to allow for expansion and contraction of sheet.
- 2. Use appropriate fixing assembly including a metal profiled washer and EPDM seal to ensure a firm, watertight sheet.
- 3. Apply a protective fibreglass strip between mesh and fibreglass sheet at each purlin.
- For end laps, apply a self-adhesive closed cell foam strip directly over the purlin between the overlapping sheets.
- 5. Install side stitching fasteners at a maximum of 450mm centres for profiles with a rib height less 30mm and 600mm

centres for profiles with a rib height of more them 30mm. Ampelite recommend using a T17 coarse treaded selfdrilling screw with the same metal profiled washer and seal being use on the primary fasteners.

- 6. Store sheets in a dry and fire safe area. Do not store heavy materials on sheets as they may fracture.
- 7. 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: Ampelite SL GROUP 3 Fire Retardant 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 Manufactures Association Code of Practice.

Physical Properties

Tensile strength	80MPA (min requirements 55 MPA)		
Impact strength	8 Joules		
Shear strength	90MPA		
Modules of elasticity	550MPA		
Compressive strength	135 MPA		
Flexural strength	I50MPA		
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 Ran	ge 20C to 95C		

Typical transmission levels (for series 1800/1.1mm)

Sheet Colour	Light Transmission	
Clear	84%	
Mist	78%	
Opal	70%	
Green	74%	
Blue	60%	
Grey	35%	

Spanning Capacity

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

