

# Durolite® WEBGLASS

Revolutionary Durolite® Webglass solves roofing problems in highly corrosive environments! Its polyester sheeting is reinforced with heavy gauge woven web matting that acts as a built-in safety mesh. Durolite® Webglass fully complies, without restriction, to the requirements of the New Zealand Building Code clauses B1, B2, E2, F2 and G7.

## Key Features

- Provides continuous reinforcement in every direction.
- Safety mesh is not required
- Corrosion resistance
- Webglass can be 100% opaque, or translucent to transmit natural light
- Webglass plus incorporates vinyl ester resins, which will provide additional protection
- Combination of strength, resistance to a wide range of chemicals and low surface erosion
- 20 year warranty for surface erosion

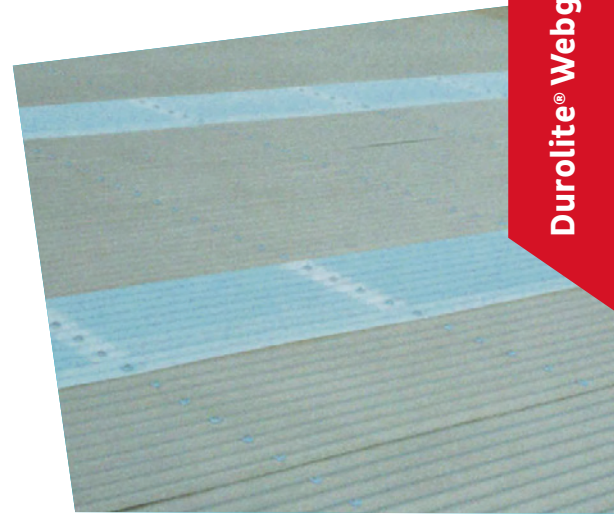
## Stability

### Material Comparisons

	Durolite® Webglass	Fibreglass	Polycarbonate
Thermal Expansion	9.1mm	14.4mm	32.4mm
0°C to 40°C temperature variation. Based on a sheet length of 12 metres.			
Thermal Co-efficient 2.4 x 10 <sup>-5</sup>	1.9 x 10 <sup>-5</sup> cm/cm °C	3.0 x 10 <sup>-5</sup> cm/cm °C	6.75 x 10 <sup>-5</sup> cm/cm °C
Thermal conductivity	0.096 W/m.K	0.158 W/m.K	0.21 W/m.K
Density	1685 kg/m³	1400 kg/m³	1200 kg/m³

### Internal Span and Fastener Table for 2.0mm Thick Sheet or 3660 g/m²

Sheet application		Skylight strip		*Complete roof
Profile	Fastener Spacing	1.0 kPa	2.0 kPa	Maximum
Corrugate	every 2nd crest**	1.9m	1.5m	1.5m
Styleline/Veedek	every crest	2.1m	1.6m	1.7m
Super 6	every 2nd crest**	2.6m	2.0m	2.1m
LT7	every 2nd crest**	2.1m	1.6m	1.7m
*Maximum span for complete Durolite® Webglass roof, allowing for 1.1kN concentrated load as per AS1170.2				
**All crests fixed on end spans				



## Standards

Webglass and Webglass Plus fully comply with the New Zealand Building Code of B1, B2, E2, F2 and G7 which takes into account Australian and New Zealand Standards AS1170.2:1989, AS/NZS 4256.3:1994, AS/NZS 1562.3:1996, AS4040.1:1992.

## Fire retardant properties

Webglass and Webglass Plus are available in the FireGuard (FG2 or FG3) range.

## Physical properties

Tensile strength	111MPa (min requirements 50 MPA)
Impact strength	10 Joules
Shear strength	90 MPa
Modulus of elasticity	5500 MPa
Compressive strength	151 MPa
Flexural strength	181 MPa
Specific gravity	1.6
Water absorption	.2% in 24 hrs/26°C

## Specification

Easy to specify - callup Durolite®

Webglass manufactured to comply with AS NZS4256.3:1994. The weight of the sheet shall be 3660g/m<sup>2</sup> and be manufactured to conform with the nominated profile and colour. Sheetting shall be installed in accordance with Durolite® fixing instructions and with AS/NZS 1562.3:1996 Design and installation of sheet roof and wall cladding Part 3: Plastic.

## Light/shade factors

	Light transmission	Shading co-efficient
Clear	60%	0.69
Opal	56%	0.46
Opaque	0%	0.12

## Chemical Group

	Webglass	Webglass Plus	Polycarbonate	P.V.C.
<b>Organics</b>				
Acetic Acid 25%	LS	R	LS	NR
Ethanol	R	R	NR	LS
Heptane	R	R	R	LS
Kerosene	R	R	R	LS
Turpentine	R	R	LS	LS
Urea	R	R	LS	LS
<b>Acids</b>				
Hydrochloric Acid Conc.	LS	R	NR	LS
Hydrochloric Acid 10%	R	R	R	R
Hydrochloric Acid 40%	NR	R	NR	LS
Nitric Acid	R	R	R	LS
OLEic Acid Concentrate	R	R	R	NR
Phosphoric Acid Conc.	LS	R	NR	R
Phosphoric Acid 30%	LS	R	NR	R
Sulphuric Acid 30%	LS	R	R	R
Sulfurous Acid	NR	R	NR	LS
Sulphuric Acid 3%	R	R	LS	LS
<b>Alkalines</b>				
Amonium Hydroxide 10%	LS	R	NR	R
Amonium Sulphate	LS	R	LS	R
Sodium Hypochlorite (Chlorine)	LS	R	R	NR
Sodium Hydroxide 10% (Caustic)	LS	R	NR	R
Sodium Hydroxide 25% (Caustic)	LS	R	NR	R
<b>Salts</b>				
Ammonium Carbonate	R	R	NR	NR
Copper Chloride	R	R	R	R
Nickel Chloride	R	R	R	R
Pottasium Carbonate	R	R	R	LS
Sodium Carbonate	R	R	R	LS
Zinc Sulphate	R	R	R	R
KEY: R = Recommended LS = Limited Service NR = Not Recommended. Recommendations are based on total immersion at 40°C and therefore may be conservative				

## Warranty

The following benefits are in addition to any rights conveyed by Government regulations and the Trade Practices Act. Durolite® warrant 'Webglass' and 'Webglass Plus' glass reinforced polyester sheeting over:

### (A) A period of 20 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 surface of the sheet.

### (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 25 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. Installations above this latitude will be covered by individual warranty based on known climatic conditions.

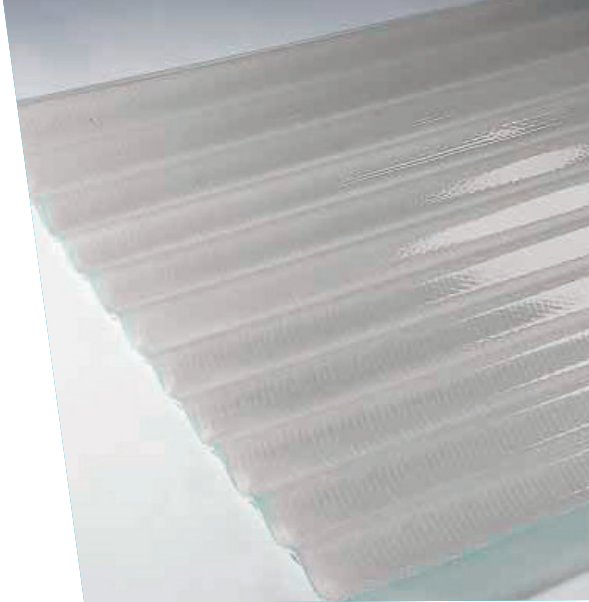
For further information, please refer to Dimond's website or contact your local branch.

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## Applications

- Fertilizer and Agricultural Chemical Plants
- Corrosive Chemical processing
- Petrochemical environments
- Wastewater Treatment
- Marine environments
- Mining Industry
- Paper and pulp manufacturing
- Salt extraction and desalination plants.
- Power Stations
- Skylighting where safety mesh is not desirable.



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