



PBT COURIERS DEPOT, MT WELLINGTON

Introduction

Topglass® translucent roofing has been specifically developed to combat the effect of ultra violet rays and atmospheric pollutants without the yellowing and rapid product degradation associated with commonly available glass reinforced roof sheeting. Utilising major technological advances developed by both Alsynite NZ and its suppliers, Topglass® is supplied as a cost effective product encompassing a purpose developed UV stabilised composite resin system and surface protected with an Alsynite proprietary weather surface coating providing longer term effective light transmission.

Key Benefits

- Topglass® is manufactured from an acrylic modified resin system, reinforced with high quality glass fibre rovings;
- Topglass® utilises surface coatings which are especially formulated and designed to provide high quality long term natural light transmission;
- Topglass® encompasses in-built NZA-5 UV inhibitors which prevent early degradation, yellowing and embrittlement of the sheet;

- The product is oven cured and profiled to ensure maximum binding and strength;
- The non-porous weather surface prevents water absorption and osmosis;
- Reduced fibre show in comparison to standard commercial grade translucent roofing products;
- The weather surface retains its smooth finish for a greater period of time providing self-cleaning benefits;
- An extremely flexible product providing innovative product variations in meeting design criteria;
- Topglass® is extremely cost effective UV resistant translucent roof sheeting.
- Closer inspection of Topglass® indicates that only minimal air bubbles are retained in the composite, resulting in improved aesthetics, extreme clarity and improved strength.

Applications

- Commercial, industrial, institutional and other projects where long-term high quality lighting is required;
- School/Kindergarten and public outdoor areas requiring excellent UV protection.

Special Applications

- Topglass® can be supplied encompassing a purpose developed corrosive resistant resin for use in areas of extreme corrosion.
- All Topglass® products can be supplied in various twin skin systems providing excellent thermal/acoustic benefits and energy savings.
- Topglass® can be supplied tinted to reduce light and heat transmission. (See Table page 5). This is recommended due to the long term clarity of the sheet;
- Topglass® roofing profiles can be supplied in reduced width sheet if so required.

Surface Coatings

The Topglass® weather surface polyester coating incorporates UV inhibitors and offers protection against early yellowing and degradation of the sheet. In specific applications and where minor corrosion may affect the underside of the sheeting, an Alsynite NZ proprietary high sheen corrosion resistant surface can be supplied in place of the standard polyester film.

*Topglass® cool provides blocking of 99.9% UVA and 100% UVB harmful Ultra Violet Light.

Solar heat gain	227w/m ²
Shading co-efficient	.33
Solar head gain co-efficient	0.20
UVA transmittance	.1%
UVB transmittance	0.0%

Colours and Tints

Topglass® is available in standard colours of Clear, Orchid, Opal and Cool*. Other colours to suit specific design criteria are available on request. MOQ may apply for non-standard colours.

Operating Temperature

The operating temperature range of Topglass® is - 40° to +110° C.

Fire Retardant

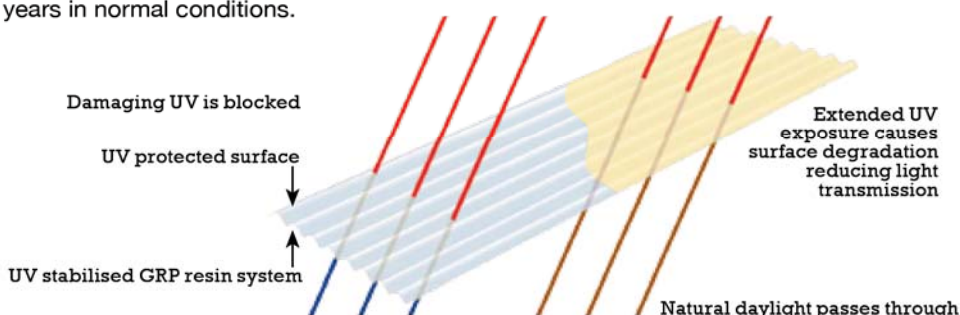
Topglass® can be supplied as fire retardant sheeting. See Topglass® FR 50 Plus, Topglass® 60 FR and Topglass® 25 FR Page 16-17.

Safety

To comply with the requirements of AS 1562.3: 2006 Part 3 Plastic, translucent roofing products are classified as "Brittle Roofing" and therefore not suitable to support foot traffic. With exception of Topglass® GC Ultra-Safe (see page 12). Safety mesh should be installed under all translucent roofing.

Weathering Performance

Topglass® incorporates UV inhibitors. Extended UV testing shows a significant reduction in UV degradation and yellowing as shown. Topglass® sheeting will have a service life of at least 25 years in normal conditions.

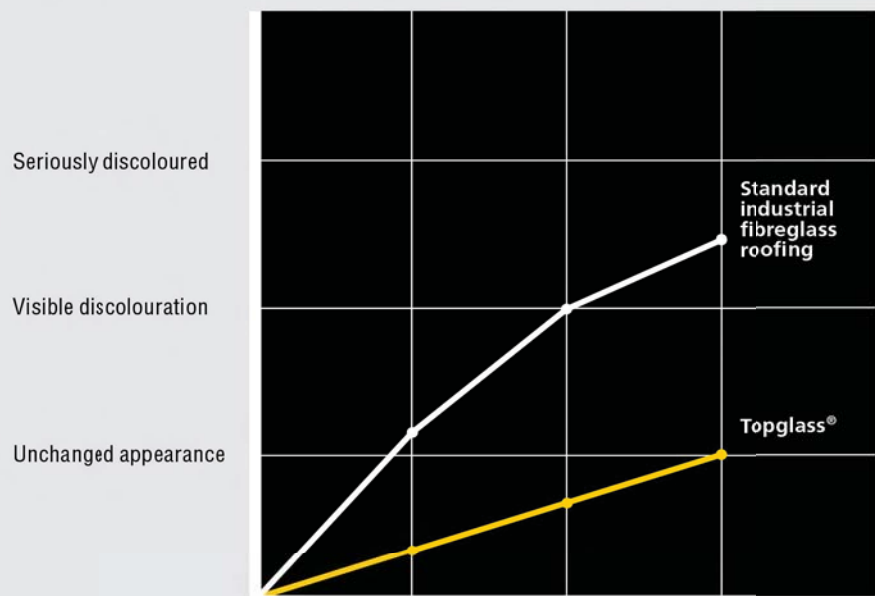


Visible Light and Solar Transmission

Weight	Clear		Orchid		Opal		Cool*	
	Light	Solar	Light	Solar	Light	Solar	Light	Solar
1800g/m ² (1.1mm)	84%	75%	78%	69%	70%	52%	n/a	n/a
2400g/m ² (1.5mm)	74%	65%	65%	60%	58%	49%	33%	22%
3660g/m ² (2.5mm)	62%	58%	60%	56%	47%	40%	n/a	n/a

Light and Solar transmission information is issued as a guide only and based on interpretation of natural exposure testing. Full test information is available from Alsynite NZ Ltd. Topglass® Solar, Optical and Ultra Violet Transmission information is contained in the Alsynite NZ Technical Catalogue see www.alsynite.co.nz

Compare the discolouration of sheeting after accelerated weathering



4,000 hours weatherometer testing simulates 10 years exposure in normal conditions



AGE

Topglass® out-performs conventional fibreglass materials. Topglass® retains light transmission and discolouration resistance after 4,000 hours continuous UV exposure (equivalent to 10 years in 'normal' conditions).

Specification

The Translucent roofing shall be Topglass® reinforced polyester roof sheeting as manufactured by Alsynite NZ Ltd to comply with AS 4256.3: 2006 JAS-ANZ Certification Licence No. 2349.

The sheeting shall be measured in g/m² or mm (sheet thickness) and manufactured to conform to the



nominated roofing and cladding profile (refer to Technical Information, page 23). Installation shall be carried out in accordance with the requirements of AS 1562.3: 2006, Topglass® technical literature and Alsynite NZ Technical Catalogue.

WARRANTY

Topglass® is supported by a comprehensive 25 year warranty and a 15 year light transmission warranty. For written project warranties, contact Alsynite NZ Ltd.

