

Gel-Coated Natural Roof Lighting



SUPERCHEAP AUTO WAREHOUSE, ONEHUNGA

#### Introduction

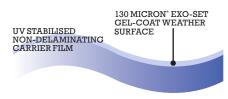
Topglass® GC is the flagship of the Topglass® natural lighting family of products, and uses an innovative manufacturing process developed by Alsynite One NZ, whereby a 130 micron\* EXO-SET 206 Premium Gelcoat is applied to the weather surface of the sheeting.

Offering exceptional resistance against corrosive atmospheres and providing protection against solar deterioration, Topglass® GC brings additional benefits to building designers and owners. Topglass® GC can also be supplied in solid colours providing an excellent alternative to metal roofing and cladding systems in corrosive environments (see Topclad page 8).

## **Key Benefits**

- Manufactured from an acrylic modified polyester resin system and incorporating additional ultra violet stabilisers, Topglass® GC utilises antistatic high quality glass fibre rovings to give maximum strength during the curing and bonding
- The ultimate benefit of the Topglass® GC product over general purpose

- grades of GRP natural roof lighting products is the addition of Alsynite One's UV-stabilised 130 micron\* EXO-SET 206 Gelcoat surface which is a reactive thermo-set to provide a high gloss surface;
- Topglass® GC, which is manufactured to meet the requirements of AS 4256:3.2006, is economical and provides flexibility whilst resisting UV degradation and yellowing much longer than is commonly experienced with general purpose grade translucent roofing products;
- Harmful Ultra Violet Rays remain a major concern for today's building designers. Topglass® GC can be supplied in a variety of pigments and can be supplied as Topglass® GC SPF. This innovative Gel-Coat additive provides excellent UVA and UVB block and offers exceptional heat and light data (refer page 7).



\* Nominal Thickness 130 Micron.

#### **Applications**

- Roof and wall lighting to all commercial, industrial, institutional and other buildings requiring long term natural lighting without early surface degradation;
- School/Childcare Centres and public outdoor areas requiring good UV protection.

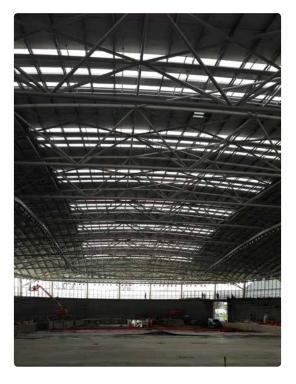
## **Special Applications**

- Topglass® GC can be pigmented to meet varying light and solar transmission requirements;
- Heavy duty solid colour-fast roofing and cladding can be supplied to replace traditional roofing and cladding products for use where corrosion exists. These are manufactured as Topclad GC (refer page 8).



## **Surface Coatings**

The Alsynite One 130 micron\* EXO-SET 206 Premium Gelcoat weather surface used in the manufacture of Topglass® GC gives very good protection against solar





deterioration. The reverse side of the sheeting is protected with a 20 micron UV stabilised Polyester film. Where corrosive atmospheres exist which affect the underside of the sheeting, Alsynite One NZ Proprietary high sheen corrosive resistant surface can be supplied in place of the film.

## Colours and Tints

Topglass® GC 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.

## **Noise Reducing Sheeting**

Topglass® GC can be supplied as an effective noise reducing sheeting. See: Topglass® Twin Skin Systems and Triple Skin Systems (page 18-20).

## **Operating Temperature**

The operating temperature of Topglass® GC is -30°C to + 70°C.

#### **Fire Retardant**

Topglass® GC can be supplied as fire retardant sheeting. See Topglass® FR 50 Plus Page 16.

Visible Light and Solar Transmission								
Weight	Clear		Orchid		Opal		Cool	
	Light	Solar	Light	Solar	Light	Solar	Light	Solar
1800g/m² (1.1mm)	84%	75%	78%	69%	70%	52%	n/a	n/a
2400g/m <sup>2</sup> (1.5mm)	74%	65%	65%	60%	58%	49%	33%	22%
3660g/m <sup>2</sup> (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 One NZ Ltd. Topglass® Solar, Optical and Ultra Violet Transmission information is contained in the Alsynite One NZ Technical Catalogue see www.alsynite.co.nz

## 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.

# Severe Corrosion Environments

In areas where corrosion is severe Topglass® GC can be manufactured using a special purpose Vinyl Ester corrosion-resistant resin system.

#### **Specification**

The Translucent roofing shall be Topglass® GC reinforced Polyester roof

sheeting as manufactured by Alsynite One 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 24). Installation shall be carried out in accordance with the requirements of AS 1562.3: 2006, Topglass® technical literature and Alsynite One NZ Technical Catalogue.

# WARRANTY

Topglass® GC is supported by a comprehensive 25 year warranty and a 20 year visible light and solar transmission warranty. For written project warranties, contact Alsynite One NZ Ltd.