

Topglass GC Ultra-Safe

High Impact, Corrosion Resistant Glass Reinforced Roofing and Cladding



WELLINGTON ZOO AMPHITHEATRE

Introduction

Industry concerns relating to Natural Roof-Lighting being classified as “brittle” and therefore possibly posing a danger to foot traffic on the roof, has led to Alsynite NZ purpose develop a heavy duty and high impact roof lighting system to alleviate these concerns. Aptly named Topglass® GC Ultra-Safe, the product utilises a heavy duty, woven roving reinforcing system positioned within the resin matrix, thereby providing exceptional strength. Further, the innovative fastening system jointly developed by Alsynite NZ Ltd and the Company’s fastening supplier provides maximum security to any foot traffic across the roof once installed whether this is day, night or in times of restricted visibility.

Key Benefits

- Topglass® GC Ultra-Safe is manufactured utilising heavy duty woven roving enclosed within the resin matrix which in turn provides a structural capability not normally available with traditional translucent roofing materials.

- Topglass® GC Ultra-Safe meets the impact strength tests of AS/NZS 4040 and satisfies the requirements of AS 4256.3 alleviating the need for safety mesh to be installed under the sheeting (refer to Safety) This is of particular benefit to building designers who face corrosive atmospheres damaging the safety mesh zinc coating.
- As the roving matrix runs both longitudinally and laterally within the sheet, Topglass® GC Ultra-Safe demonstrates exceptional high impact strength.
- A 100 micron Silmar Gel coated surface provides long term light transmission and is supported by a 20 year weather surface structured warranty.
- Corrosion resistant when installed in wide range of aggressive environments.
- Excellent spanning capabilities.
- Topglass® GC Ultra-Safe meets the impact strength tests of AS 4256.3 clause 11.3, AS 4040, and AS 1562 alleviating the need for safety

mesh, rather than just a roof lighting product.

Applications

- Educational facilities and Public Assembly areas where there is a danger of persons climbing onto a roof.
- Fertiliser Plants
- Chemical and Powder-coating Plants
- Wool scouring facilities
- Waste water treatment plants
- Salt Extraction Facilities
- Severe marine environments
- Natural roof lighting where safety mesh is not installed
- Wood Pulp and Paper Plants

Special Applications

- In very severe corrosive environments the Topglass® GC Ultra-Safe resin system can be fortified using Vinyl Ester to provide maximum protection.



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- Topglass® GC Ultra-Safe can be supplied as a heavy duty solid coloured roofing and cladding material to replace metal roofing products for use in corrosive environments. See also Topclad™ GC Page 18.

Weight Thickness of sheeting

Topglass® GC Ultra-Safe is supplied as standard weight of 3660g/m².

Colours

The standard colours of Topglass® GC Ultra-Safe are translucent Clear and Opal. Other pigments are available subject to minimum order quantity.

Profiles

Topglass® GC Ultra-Safe is available to match most common roofing profiles.

Light and Solar Transmission

Tint	Visible Light Transmission	Solar Transmission
Clear	61%	56%
Opal	58%	49%

Spanning

Refer Load Span Capabilities: Technical Information page 23.

Safety

Whilst Topglass® GC Ultra-Safe is classified as heavy duty, meets the impact test of AS 4040, satisfying the requirements of AS 4256.3, and can support foot traffic, long term degradation and or post roof installation impact damage can seriously affect the performance of the sheeting. In order to comply with the requirements of AS 1562.3:2006 Part 3 Plastic, protect the weather surface coating and provide continual structural strength, all FRP products should be protected from foot traffic, therefore a suitable proprietary aluminium walkway is always recommended. Consult Alsynite NZ Ltd for recommended systems.

Specification

The translucent sheeting and/or roofing and cladding shall be Topglass® GC Ultra-Safe (insert tint) as manufactured by Alsynite NZ Ltd to comply with AS 4256.3 JAS-ANZ Certification Licence No 2349. The sheeting shall conform to the nominated roofing and cladding profile and installed in accordance with the requirements of the Alsynite Topglass® GC Ultra-Safe proprietary safety fixing system.

WARRANTY

Topglass® GC Ultra-Safe is supported with a 20 Year weather surface structured warranty and a 10 year structured loss of light transmission warranty. Full warranty conditions and written project warranties are available from Alsynite NZ.

