

# UV STABILISED TRANSLUCENT ROOFING



## 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 Laserlite Building Products and its suppliers, Topglass® is supplied as a cost-effective product encompassing a purpose developed UV stabilised composite resin system.

## 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

## 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 Twinskin Systems providing excellent thermal/acoustic benefits and energy savings
- Topglass® can be provided as TopCool to reduce light and heat transmission. 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, Laserlite Building Products Topglass® GC can be supplied in place of the standard polyester film.

## Colours and Tints

Topglass® is available in standard colours of Clear, Opal and TopCool. Other colours to suit specific design criteria are available on request. Minimum order quantities 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® FR50

## 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 the exception of Topglass® GC Ultra-Safe. Safety mesh should be installed under all translucent roofing.

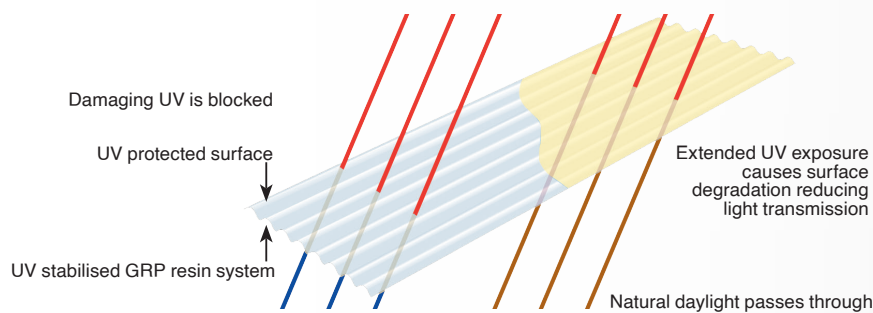
## Specification

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

The sheeting shall be measured in g/m<sup>2</sup> or mm (sheet thickness) and manufactured to conform to the nominated roofing and cladding profile. Installation shall be carried out in accordance with the requirements of AS 1562.3: 2006.

## Warranty

Topglass® incorporates UV Stabilised film, providing a 10 Year Warranty. Terms and Conditions apply.



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 Laserlite Building Products. Topglass® Solar, Optical and Ultra Violet

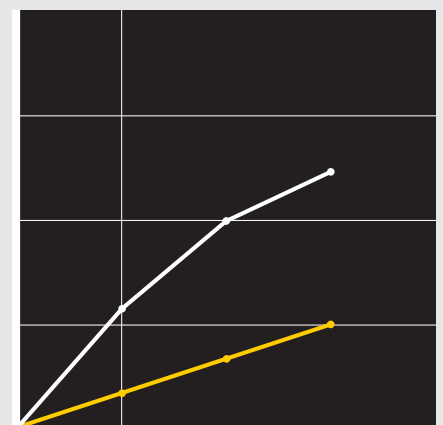
### Compare the discolouration of sheeting after accelerated weathering

#### Visible Light and Solar Transmission

| Weight                       | Colour |       |       |       |         |       |
|------------------------------|--------|-------|-------|-------|---------|-------|
|                              | Clear  |       | Opal  |       | TopCool |       |
|                              | Light  | Solar | Light | Solar | Light   | Solar |
| 2400g/m <sup>2</sup> (1.5mm) | 74%    | 65%   | 58%   | 49%   | 33%     | 22%   |
| 3660g/m <sup>2</sup> (2.5mm) | 62%    | 58%   | 47%   | 40%   | n/a     | n/a   |

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

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



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

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).