



## Heavy Duty Corrosion Resistant Reinforced Solid Coloured Glass Roofing and Cladding System



### Introduction

In some highly corrosive industrial sites and areas of high salt contamination, high build paint coatings on roofing and cladding substrates such as aluminium and steel may not perform as expected. To address these concerns, Alsynite NZ Ltd has developed a unique heavy duty roofing and cladding material utilising advanced GRP technology to formulate a corrosive resistant cladding system for use as an innovative replacement for traditional materials.

### Key Benefits

- The surface coatings and substrate used in the manufacture of Topclad have been designed specifically by Alsynite NZ Ltd to withstand corrosive atmospheres. The added benefit provided by Topclad, is the highly polished corrosive resistant surface on the underside of the sheet.
- Topclad is solid-coloured to match modern roof colours (Subject to pigment availability) this is achieved by applying a 100 micron\* coloured gel coat layer to the GRP sheeting substrate.

Flexibility associated with the FGW Corporation Gel coat manufacturing process allows different solid colour pigmentation to be applied to each side of the sheet, particularly important where the underside of the sheet is not covered by a membrane

- Available to match a wide range of roof profiles including flat sheet;
- Lightweight cladding for easy handling and installation;
- Reduces solar absorption;
- Manufactured to any length.
- Lower freight costs

### Applications

- Wool scouring plants;
- Fertiliser buildings;
- Poultry and animal sheds;
- Acid plants and smelters;
- Galvanising plants;
- Effluent tank cladding;
- Extreme marine environments;
- Buildings in geothermal areas;
- Compost plants;
- Tanneries;
- Abattoirs

### Special Applications

- Where corrosion is of concern to the interior of the cladding system, an FGW Corporation Proprietary high polished corrosion resistant surface can be applied to the underside of the sheet. In areas of extreme corrosion Vinyl ester resin can be incorporated into the sheet for maximum protection.

### Weight/Thickness of Sheeting

The standard weight for Topclad is 2800g/m<sup>2</sup> (1.9mm). Other weights up to 4880g/m<sup>2</sup> (3.06mm) are available subject to minimum order.



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### Colours

Topclad provides excellent opportunity to replicate the colours normally associated with pre-painted metal roofing and cladding products with the added benefit of corrosion protection. Topclad Standard colour range is, Titania, Grey Friars, Silver, Mist Green and Sandstone Grey. Colour swatches can be viewed in the FGW Corporation Technical catalogue. Other colours are available subject to pigment availability. All Topclad Products are subject to minimum order quantities.

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### Operating Temperature

Topclad will not become brittle with age and will not soften or crack within the designed temperature operating range of -30°C to +70°C.

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### Fire Retardant

Topclad can be supplied as fire retardant sheeting.

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### Trafficability

Where trafficability is of concern contact FGW Corporation for specific technical support.

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### Moisture

Where Topclad will be in continuous contact with moisture, FGW Corporation Technical department should be contacted prior to ordering.

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### Safety

To comply with the requirements of AS/NZS 1562.3:1996 Part 3 Plastic, all translucent roofing products are classified as being not suitable for foot traffic irrespective of raw materials used during manufacture. Any foot traffic on the roof must be via approved walk boards or other purpose built traffic platforms. All translucent roofing shall have safety mesh installed under translucent roofing unless specifically excluded in AS/NZS 1562.3: 1996 clause 2.4.3.2 or the FGW Corporation Technical catalogue.

Purpose designed plastic-coated mesh in meeting the minimum requirements of the Building Code is readily available. Solid coloured GRP Roofing projects should be clearly identified with safety signage at roof access points indicating that the roofing is not designed to support foot traffic and directing enquiry to Property Management. FGW Corporation Pty Ltd has purpose designed "Hi-Viz" Safety labels which can be purchased for this purpose

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### Thermal Expansion

2.2 x 10.5 cm / cm / °C  
E.g. 7m long sheet with a 40°C temperature change = 2.2 x 10.5 x (10 x 100) x 7 x 40 = 6.16mm per 7m length at 40°C temperature rise.

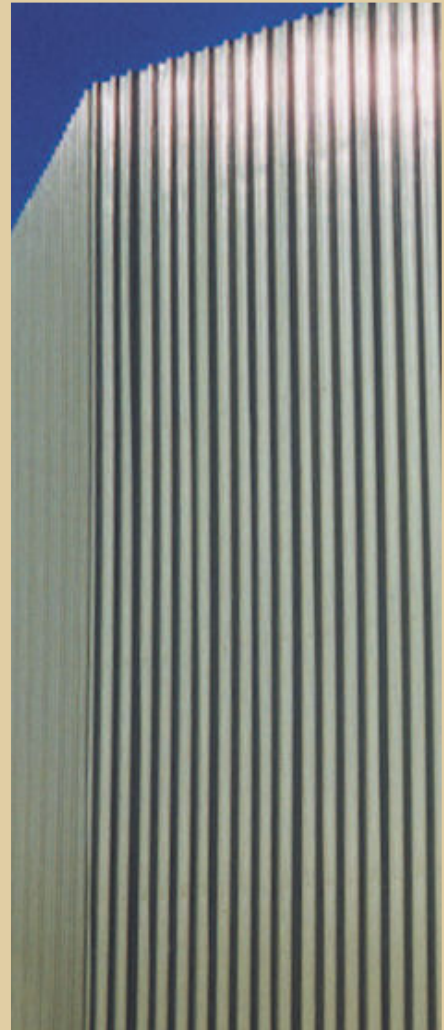
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### Chemical Resistance

- Topclad has no known chemical reaction with any construction materials;
  - The sheeting is resistant to solar deterioration and most corrosive atmospheres;
  - Unaffected by solvents, including hydrocarbons, and provides excellent resistance to most corrosive acids and alkalis.
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### Specification

The Translucent roofing shall be Topclad (Insert tint/colour) reinforced Polyester roof sheeting as manufactured by FGW Corporation Pty Ltd to comply with AS/NZS 4256.3. The sheeting shall be .....g/m2 or .....mm and manufactured to conform to the nominated roofing and cladding profile. Installation shall be carried out in accordance with the requirements of AS/NZS 1562.3: 1994.



### Flashings

For flashings information contact FGW Corporation Pty Ltd.

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### Product Handling

Care must be taken when handling and installing the product to avoid stress damage and/or scratching of the surface.

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### Warranty

Topclad is supported by a comprehensive 25 year warranty. Refer to the FGW Corporation Technical Catalogue for warranty details, or contact FGW Corporation Pty Ltd.

\*\* Nominal 100 micron gel coat