Topclad™ GC

Heavy Duty, Corrosion Resistant, Solid-Coloured 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 One New Zealand manufactures unique solid-coloured 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™ GC have been designed specifically to withstand corrosive atmospheres. The added benefit provided by Topclad™ GC, is the highly polished corrosive resistant surface on the underside of the sheet.
- Topclad™ GC is solid-coloured to match modern roof colours (Subject to pigment availability) this is achieved by applying an Alsynite One 130 micron* EXO-SET 206 Gelcoat layer to the GRP sheeting substrate.
- Advanced technology associated with the Alsynite One NZ 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 heat transmission;
- 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 may be of concern to the underside of the roofing and cladding system, an Alsynite One NZ Proprietary high polished corrosion resistant surface can be applied to the underside of the sheet. At additional cost, Vinyl Ester Resin can be incorporated for maximum protection.

Weight/Thickness of Sheeting

The standard weight for Topclad™ GC is 2800g/m^2 (1.9mm). Other weights up to 3660g/m^2 (2.5mm) are available subject to minimum order.

ALSYNITE ONE exo-set 206
PREMIUM GRADE GEL COAT

Surface Coatings

The Alsynite One 130 micron* EXO-SET 206 Premium Gelcoat weather surface used in the manufacture of Topclad® GC Offers superior sheet clarity and unsurpassed long-term resistance against UV degradation.

** Nominal Thickness 130 Micron.*

Colours

Topclad™ GC provides excellent opportunity to replicate the colours normally associated with pre-painted metal roofing and cladding products. Topclad™ Standard colour range is, Titania, Grey Friars, Silver, Mist Green, and Sandstone Grey. Other colours to suit specific design criteria are available on request. All Topclad™ GC Products are subject to minimum order quantities.

Operating Temperature

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

Fire Retardant

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

Moisture

Where Topclad™ GC will be in continuous contact with moisture, Alsynite One NZ Ltd Technical department should be contacted prior to ordering.

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®/Topclad™ GC Ultra-Safe (see page 10.) Safety mesh should be installed under all translucent roofing.

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.

Chemical Resistance

- Topclad™ GC 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.

Specification

The Translucent roofing shall be Topclad™ 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.

Flashings

For flashings information contact Alsynite One NZ Ltd.

Product Handling

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

WARRANTY

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