



Key Features

- Heavy Weight Biaxial Glass Cloth
- High Performance E-Glass
- Ideal for adding off-axis stiffness
- Mechanical advantage over other glass cloth types

Description

Heavy weight 600gsm $\pm 45^\circ$ biaxial glass reinforcement used to add off-axis stiffness to GRP moulds and components. This multi-axial reinforcement is made up of two layers of non-crimp unidirectional glass fibre, one at $+45^\circ$ and the other at -45° and can be used on its own or more commonly in conjunction with other weights or weaves of reinforcement to create the optimum laminate.

Uses

600gsm biaxial glass reinforcement with a $\pm 45^\circ$ fibre orientation suitable for use in a wide range of glass reinforced composite applications; most commonly boat hulls and vehicle panels but also recreational sports equipment and general GRP manufacturing.

Biaxial glass cloth offers mechanical performance advantages over traditional woven glass cloth (and significant advantages over chopped strand mat) because of straight, flat paths that the glass fibre bundles are stitched into. Unlike a woven cloth where the intersecting weft and warp fibres go over-under-over-under (in the case of a plain weave), biaxial cloth is actually two layers of unidirectional fibre aligned at 90° to each other. Because these unidirectional fibres take a much more direct line (rather than being woven up and down) meaning then when the laminate is stressed the fibres cannot try to 'straighten-out' like they do with a woven cloth, resulting in significant improvements in the tensile strength of the laminate.

Suitable for use with epoxy, polyester and vinylester resin systems.

Properties

The general properties of the woven glass are listed in the following table:

| Property | Unit | Value |
|--------------------------|------|-------------------|
| Glass Type | - | E Glass |
| Colour | - | White |
| Width | mm | 1270 |
| Fibre Type | - | E-Glass 600 TEX |
| Areal Weight Overall | gsm | 600 |
| Areal Weight $+45^\circ$ | gsm | 301 |
| Areal Weight -45° | gsm | 301 |
| Areal Weight Stitching | gsm | 6 |
| Stitching Type | - | Polyester 76 dtex |

Disclaimer

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