

# RESIWOOD® SYSTEM CFRP PLATE



**PRODUCT CODE:** 3718

**DESCRIPTION:** **ROTAFLEX CARBON FIBRE PLATE** is ready to use pultruded laminate consisting of unidirectional carbon fibres in a vinyl or epoxy resin matrix. The plate is available with a peel ply covering on one or two sides in rolls of up to 50 metres.

**PACKAGING:** Supplied in various widths, lengths and thicknesses.

**PREPARATION:** Surface quality is of paramount importance for bonding. Remove the single or double peel ply immediately before the bonding operation. Do not contaminate the surface.

**CHARACTERISTICS** High strength and rigidity, good flexural stress behaviour, excellent static and dynamic load bearing capacity. Excellent corrosion resistance unaffected by wood tannin and both solvent and aqueous based timber preservatives and treatment. **ROTAFLEX PLATE** may be cut with standard 18 or 24 TPI hacksaw blades or ideally with a diamond bladed mechanical saw.

## PHYSICAL PROPERTIES

Property	Uni-directional Carbon/Epoxy
Fibre Content (Vol) -%	65
Density -g/cc	1.58
Compressive Strength - Mpa	1000

Epoxy resin matrix (peel ply surface is not available)		
Tensile Modulus	Typical value	> 160 GPa
	Minimum value [mean - 2σ]	155 GPa
Ultimate Tensile Strength	Typical value	>2.8 GPa
	Minimum value [mean - 2 σ]	2.6 GPa
Inter Lamina Shear Strength	Typical value	>70 MPa
Elongation at Break	Typical value	>1.7%

**SPECIFIC USES:** Shear connectors for timber joints and connections. Strengthening and upgrading of timber structure components used in conjunction with the Resiwood range of adhesives.

**MATERIAL ESTIMATE:** Adhesive thicknesses should normally approximately 2mm min. Therefore material usage will be 2 litres/m<sup>2</sup> per 2 mm thick.

ROTAFIX PLATE does not present any particular hazard. When the PLATE is being cut or sawn there is a possibility of fibrous particles becoming airborne. Use wet cutting methods whenever possible. Always use appropriate protective clothing including safety goggles and suitable particulate face mask.

The information in this document is based on practical tests, but given without guarantee inasmuch as methods of use by others is beyond our control. Due to continuing development and improvements, it may be necessary to change without notice the material specification. All goods are sold subject to our Standard Conditions of Sale.

**The requirements for a Rotafix product(s) may be specific for an individual project.**

**Advice given by Rotafix can only be considered as part of the contract if it is provided in writing.**

**RESIWOOD IS A REGISTERED TRADE MARKS OF ROTAFIX (NORTHERN) LTD.**

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