



RESIWOOD® SYSTEMS

ROTAFIX FULCRUM PLATE AND STRIP

- PRODUCT CODE:** 3735 - 1.3 mm thick by 20 cm wide in cut lengths
- DESCRIPTION:** FULCRUM is an engineering thermoplastic polyurethane pultrusion consisting of unidirectional glass in a polyurethane matrix with no volatile contents.
- PACKAGING:** Supplied in various widths, lengths and thicknesses.
- PREPARATION:** Surface preparation is of paramount importance. The plate should be mechanically abraded followed by a solvent wipe. For specific information consult our technical department.
- 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. **FULCRUM** may be cut with standard 18 or 24 TPI hacksaw blades or ideally with a diamond bladed mechanical saw.

PHYSICAL PROPERTIES:

| | | |
|---|-------------|-------------------------------|
| Glass content by volume | | 76% |
| Coefficient of Linear Thermal Expansion | ASTM D 696 | 9.0x10 ⁻⁶ mm/mm/°C |
| Density | ASTM D 792 | 1.91 g/cm ³ |
| Flexural Modulus | ASTM D 790 | 45 Gpa |
| Flexural Strength | ASTM D 790 | 1150 Mpa |
| Tensile Modulus | ASTM D 3039 | 45 Gpa |
| Tensile Strength | ASTM D 3039 | 1000 Mpa |
| Tensile Elongation | ASTM D 3039 | 2.2% |
| Shear Strength | ASTM D 3846 | 55 Mpa |
| Izod Impact ⁽²⁾ | ASTM D 4812 | 5900 J/m |
| Notched Izod Impact | ASTM D 256 | 4200 J/m |
| Instrumented Impact ⁽³⁾ | ASTM D 3763 | 30 J |
| Heat Deflection Temperature | | 80°C |
| Glass Transition Temperature ⁽⁴⁾ | | 90°C |

- (1) NB typical properties were measured on 12mm Ø rod and a 20x2 mm strip.
 (2) 3 strips glued together.
 (3) 20mm width sample.
 (4) According to G" in DMS

- 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/m² per 2 mm thick.

FULCRUM 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 insomuch 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.
 FULCRUM IS A REGISTERED TRADE MARK OF FULCRUM COMPOSITES INC.**

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