

## TecnoFib TETRA GLASS

### QUADRO-AXIAL GLASS FIBRE REINFORCEMENT SYSTEM

**Description** Balanced quadro-axial glass fibre net.

**Advantages and characteristics** The mechanical performance of the reinforcement system TECNOFIB TETRA GLASS shows a typical linear elastic behaviour till break. The tolerated static load applied, shall be 1/3 of the tensile strength of the fibre. The glass fibre net is alkali resistant.

- Fields of use**
- Reinforcement of masonry walls.
  - Restoration of vaults, arches, masonry constructions
  - Anti-tilt systems for partitions and perimeter walls.

**Method of use** The application of the reinforcing mesh must be preceded by a preparation of the substrate by wire brushing or sandblasting to remove loose parts, and next the levelling with epoxy putty or by a repair cycle based on the use of thixotropic mortars if the element to be strengthened is in reinforced concrete and affected by degradation of the concrete. The glass fibre network can be applied with either epoxy-based adhesive TECNOEPO 701/UNIC, or with two-components thixotropic mortar with high adhesion (BS 38 MuCis® or BS 38/39 MuCis®). This is possible thanks to the good adhesion which allows bonding the fiberglass against the cement matrixes. The installation of the fabric has to start by the application by roller or brush of an epoxy primer, about 0,800 kg/m<sup>2</sup>, on the internal contact substrate of the fibre. The manual application of the net must be accompanied by a special rolling with a spiked roller, to eliminate any air bubbles and allow the penetration of the resin in the cavities of the net. For any subsequent layers proceed by repeating the cycle as described above and onwards. The curing time is related to the crosslinking of the epoxy matrix and this depends on the environmental conditions in relation to temperature and humidity. In particular, applications should be avoided in extremely humid climate with temperatures below +10°C. For applications with temperatures lower than stated, to have a pot life of the resin, which is not too long, it is recommended to warm up the environment slightly. If the application of glass fibre network is through the use of two-component cement-based mortar, apply a layer of mortar (BS 38 MuCis® or BS 38/39 MuCis®) of at least 2 to 3 mm, and then on the fresh place the glass fibre net into the mortar so it can penetrate through the openings of the net. Then smooth the surface with another 2 to 3 mm of the same mortar.

**Packaging** Rolls of 50 linear meters, width 127 cm

- Technical characteristics (typical values)**
- Tensile strength: 2600 Mpa
  - Tensile elasticity modulus: 73 GPa
  - Weight: 123 g/m<sup>2</sup> - 240 g/m<sup>2</sup> (on request)

**Safety indications** Read carefully the safety indications on the packaging, or consult the relevant Material Safety Datasheet of this product.

The above data are based on our actual and most experienced practical and laboratory knowledge and the results are collected from application of the product in different situations. Tecnochem Italiana does not assume any responsibility regarding inadequate or negative performance as a result of improper use of the product or for defects deriving from factors or elements other than the quality of the product including improper storage. The technical characteristics and performance mentioned in this datasheet are updated periodically. The revision dates and number of revision of the datasheets are listed in the table below. Eventual variations are traceable on our website [www.tecnochem.it](http://www.tecnochem.it) where the most updated datasheets can be retrieved

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