

## Kimitech TONDO VR

ST5-1022

*Glass fibre reinforcing bars*



### DESCRIPTION

**Kimitech TONDO VR** is a structural element with a full circular section, available in various diameters, supplied in standard bars of 2 meters, composed of unidirectional glass fibers impregnated with synthetic resins. It is not influenced by stray and electromagnetic currents and has very high resistance to corrosion.

### USES

**Kimitech TONDO VR** glass reinforcing bars can be used for end anchorings and anti-delamination connectors for composite systems and, in general, for nailing and micro-crimping (in combination with Kimitech resins, cementitious products, Betonfix or lime-based Limepor). Kimitech TONDO VR bars are used as reinforcement in the reconstructions with epoxy castings loaded with wooden beams degraded to the supports.

### WORKS

- Restoring wooden structures without changes at the intradox (**SA57**).
- Restoring wooden beam degraded in the beam-masonry-wall junction (**SA58**).

### APPLICATION

For various types of intervention, refer to the technical specifications and the technical data sheets of the materials to be used.

### PACKAGING

2 metres bars.

Diametres: 6, 12, 16, 20 mm

| Characteristics             | Value          |
|-----------------------------|----------------|
| Specific weight             | 1,9 g/cm       |
| Fibre content               | > 70 %         |
| Tensile elastic modulus     | 40 GPa         |
| Tensile strength            | > 1000 MPa     |
| Elongation at failure       | 4.5 %          |
| Limit operating temperature | - 30 / + 70 °C |
| Color                       | Clear          |

### STORAGE

Store the product in a sheltered and dry place. In these conditions and in closed containers, its stability is unlimited.

### WARNING

Product for professional use.

The product is an item according to the definitions of Regulation (EC) n. 1907/2006 and therefore does not require a Safety Data Sheet.

The information and requirements indicated in this Technical Data Sheet are based on our current knowledge and experience and are to be considered, in any case, purely indicative. They cannot guarantee the final result of the applied product and they have to be confirmed by exhaustive practical applications; therefore the user must test the suitability of the product for the intended application and its purpose. Users must always refer to the latest version of the local technical data sheet related to the product.

## TECHNICAL SPECIFICATIONS

**SK57** - Restoring wooden structures without changes at the intrados I

**SK58** - Restoring wooden beam degraded in the beam-masonry-wall jonction

**(SK57)** Shoring the structure. Check and elaboration of on-site loads. Cut in the intrados surface of the wooden beam of an adequate opening in order to apply the reinforcing system. Treat the existing wooden element with anti-bug and anti-mould product removing before any elements (dust, grease, etc...) that could affect the adhesive power of the used resin.

Insert, in the created openings, 4 composite bars Kimitech TONDO VR by Kimia S.p.A. or a similar product.

In order to anchor the bars use the epoxy resin Kimitech EP-IN by Kimia S.p.A. or a similar product, loaded with adequate dry aggregates in proportion by weight 1:5.

Once cured, restore the existing conditions removing the shoring system.

**(SK58)** Shoring the structure. Check and elaboration of on-site loads. Cut in the intrados surface of the wooden beam of an adequate opening in order to apply the reinforcing system. Treat the existing wooden element with anti-bug and anti-mould product removing before any elements (dust, grease, etc...) that could affect the adhesive power of the used resin.

Accurately drill the end of the wooden beam and proceed hooving the dust in order to avoid any problem with the adhesion of next intervention phases.

Insert, in the created openings, 4 composite bars Kimitech TONDO VR by Kimia S.p.A. or a similar product.

In order to recreate the degradd portion of thw wooden beam use the epoxy resin Kimitech EP-IN by Kimia S.p.A. or a similar product, loaded with adequate dry aggregates, like Kimifill HM by Kimia S.p.A. or a similar product, in proportion by weight 1:5.

The proltruted bar with high resistance to corrosion based on unidirectional glass fibres and impregnated with synthetic resins, it will be employed strictly following instructions indicated in the technical data sheet issued by the Manufacturer and respecting with the following characteristic:

Sepecific weigth: 1,9 g / cm;  
Elastic tensile modul: 40 GPa;  
Tensil resistance:> 1000 MPa;  
failure elongation: 4,5 %.