

# Kimitech PLUG VR-HD ST1-0723





# DESCRIPTION

Kimitech PLUG VR-HD is a pre-formed "L" shaped connector with improved adhesion, part of the CRM reinforcement system in combination with Kimitech WALLMESH MR-HD or Kimitech WALLMESH HR-HD mesh.

**Kimitech PLUG VR-HD** is CE marked in accordance with EAD 340392-00-0104: 'CRM (Composite Reinforced Mortar) Systems for strengthening concrete and masonry structures'.

### **CHARACTERISTICS AND ADVANTAGES**

- Excellent mechanical characteristics, durability even in aggressive environments (it is stainless) and resistance to atmospheric agents; it can be used with lime and/or cement based mortars.
- Quick installation
- Perfect compatibility with any matrix used for grouting, suitable for interventions on buildings of historical and cultural interest.

#### USES

Suitable for structural reinforcement of masonry, arches and vaults. Suitable for seismic adaptation, securing and restoration of structures

#### WORKS

 Structural reinforcement with CRM systems consisting of H.R. glass fibre mesh and natural hydraulic lime mortar (SA154)

#### **APPLICATION**

Make sure that the substrate is completely hardened, resistant and free of loose parts that come off.

In the presence of degraded existing plaster, smooth the surface until a substrate with sufficient strength. Cleaning and saturation of the substrate by low pressure washing. Remove any efflorescence and salts by washing or mechanical systems such as brushing, sandblasting or water sandblasting.

On particularly irregular or poorly absorbent substrates, apply a coat of rough coat before applying the structural mortar.

The substrate temperature must be between +  $5^{\circ}$ C and +  $30^{\circ}$ C. Do not apply mortars on frozen substrates.

After carefully preparation of the substrate, before applying the first layer of lime-based structural mortar, wet with water at low pressure until saturated; the non-saturation could cause the non-adhesion and cracking of the mortar. Apply by trowel or spatula in stainless steel or with a plastering machine a first layer of structural mortar for a thickness of about 1.5 cm, leaving the surface sufficiently rough to allow adhesion of the next layer. Place the sizeable alkaline fiberglass mesh from **Kimitech WALLMESH MR-HD** or **Kimitech WALLMESH HR-HD** range on the still fresh mortar.

Drill with a suitable diameter of at least 4 per m<sup>2</sup>. Insert **Kimitech PLUG VR-HD** connector and fill the hole with **Kimitech EPOXY CTR** epoxy resin. Apply a second layer of mortar to a thickness of about 1.5 cm.

# PACKAGING

Box 100 pcs.

Characteristics	Kimitech PLUG VR-HD
Color	White
Material	Glass fibre with resin
Types	L 10x20 cm L 10x30 cm L 10x50 cm L 10x70 cm
Diametre	8 mm
Resistant area	50,24 mm <sup>2</sup>
Linear weight	92 g/m
Tensile load	40 KN
Tensile strength	800 MPa



Compressive strength	300 MPa
Elastic modulus	48,51 GPa
Elongation at failure	2,5%
Corrosion resistance	Corrosion absent

## WARNING

Product intended 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 marking obligations are not related to the intrinsic nature of a given product, but to the use for which a specific material is used: before placing the orders, it will be the customer's responsibility to submit all the available documentation to the works supervision in order to explain the suitability of the materials (in terms of certifications and performance) in relation to the use to which they are intended.

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.