



## Preformed GFRP composite mesh for concrete reinforcement

**Preformed GFRP mesh with very high resistance and durability composed of bars made of continuous ECR glass fibers with thermosetting epoxy resin impregnation.**

**ARMORCRETE NET is available with different mesh light solutions and with different bar diameters. Its construction geometry involves the coupling of pultruded warp and weft bars fixed in the knots with sewing thread to obtain non-deformable square meshes with high clear light without areas of weakening of the knot.**

**The ARMORCRETE system is used to replace the usual metal armor for the cortical reconstruction of reinforced concrete elements, consolidation of load-bearing or infill masonry panels, reinforcement of floors, reinforcement of vaults by virtue of its mechanical properties, lightness and properties chemical-physical.**

**Can be used both with the CRM technique for reinforced plaster interventions, with sprayed mortar, and for formwork castings.**

**The ARMORCRETE system has an ETA (European Technical Assessment).**

### SUBSTRATE PREPARATION

Demolition of the existing damaged part of the matrix until the surface of the support on which the reinforcing matrix will be applied is exposed. In the case of masonry facing, plaster and loose or inconsistent parts will be removed, bedding joints will be scarified, any existing cracks will be sealed and repaired; in the case of concrete elements, all the inconsistent parts or those characterized by carbonation degradation must be removed until a solid and coherent support is achieved which guarantees the necessary tear resistance.

In any case, cleaning of the surface is required, possible application of Premier Consolidante P1 cortical consolidating fixative; reconstruction of missing or particularly damaged wall portions, in order to restore the structural continuity of the element.

Before applying the matrix, wash and wet the surface until saturated.

### POSITIONING OF THE NETWORK AND CONNECTORS

ARMORCRETE NET 66X66\_3 allows you to operate by previously fixing the net to the support with specific GFRP Premier SISMABAR 08 connectors.

Whether proceeding with the CRM technique or with the casting in the formwork, position ARMORCRETE NET 66X66\_3 in the correct position foreseen by the project stratigraphy, fixing it on the L-shaped connectors previously inserted and made integral with the support with the Premier SISMACAST EP or SISMACAST VE resin based on to the required mechanics.

The net must be spread as flat as possible, avoiding creases and bulges. Provide an overlap of at least 20cm between one element of the net and another. Once the mesh has been fixed, it is possible to proceed with the mechanical application of the reinforcing product intended for the specific application or proceed with the formwork and subsequent filling with shrinkage-compensated pourable mortars.

The ARMORCRETE NET mesh light allows you to directly apply concrete repair grouts or certified mortars with high mechanical performance provided in the Premier range by machine.

In any case, the reinforcement layer must continuously cover



### USE

- Medium/high thickness widespread reinforcement interventions on concrete or masonry structures;
- Static and seismic adaptation and improvement of vertical and horizontal structural elements;
- Cortical reconstruction of concrete walls in channels, tunnels, retaining walls, etc.
- Anti-tipping and anti-breaking interventions on light brick elements.

### ADVANTAGES

- Quick and easy application;
- Lightness and resistance in reduced thicknesses;
- Excellent mechanical characteristics;
- Easy to cut;
- Use in aggressive environments including saline ones;
- Durability;
- Compatible with all supports: concrete, stone, brick and tuff;

### STORAGE

Store dry for 12 months and away from direct sunlight.

All the info on [www.premierpremiscelati.it](http://www.premierpremiscelati.it)

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RESTORATION AND REINFORCEMENT OF CONCRETE | ARMORCRETE

**Dimensions**

Diameter of longitudinal and transversal bars	3 mm
Mesh	66x66 mm
Starched fabric weight	450±5 g/m <sup>2</sup>
Roll width	2,00 m
Roll length	50 m
Bars per meter	15

**Mechanical characteristics**

	WARP	WEFT
Nominal weft bar section	7,07 mm <sup>2</sup>	7,07 mm <sup>2</sup>
Breaking load per linear metre, average	88,4 kN/m	98,2 kN/m
Breaking load per linear metre, characteristic	75,8 kN/m	84,1 kN/m
Breaking load for single bar, average	5,89 kN	6,55 kN
Breaking load for single bar, characteristic	5,05 kN	5,60 kN
Tensile strength, average	833 MPa	926 MPa
Tensile strength, characteristic	715 MPa	793 MPa
Average elastic modulus	39,68 GPa	43,78 MPa
Average elongation	2,25%	2,43%

**Chemical and physical characteristics**

Type of yarn	Continuous ECR glass fibre
Primer	Epoxy resin
Operating temperature	-20°/+90 °C
Thermal conductivity	0,35 W/m°C
Corrosion resistance	Non-corrosive
Electrical conductivity	Dielectric
Environmental compatibility	Non-toxic

**WARNINGS**

Product intended for professional use. Check the integrity of the packaging before use and do not use a product that is not perfectly packaged. In particular, do not use a product that appears to have been crushed or subjected to traction. The customer is required to verify that the product is suitable for the intended use and to ensure that this technical document is valid and not superseded by subsequent updates. During handling and application wear protective clothing, glasses and gloves. The updated technical documents can be found on the site

[www.premierpremiscelati.it](http://www.premierpremiscelati.it)

