

# Armarock B50

Basalt fiber mesh, primed and balanced, 220 g/m<sup>2</sup>



The Armarock B50 basalt mesh is a material with a leno structure, formed by elastic ribs of high-strength basalt threads, fixed in the nodes with a stitching thread, with the formation of square cells, the size of which is ideal for use with FRCM mortars. The mesh is treated with special compounds to improve alkali resistance properties and increase its stability. Balanced biaxial mesh in alkali-resistant basalt fibre, specific for strengthening and repairing structural elements.

**CUSTOMS CODE:** 6815 9900

**COMPONENTS:** Single-component

**APPEARANCE:** Net

**AVAILABLE COLORS:** Black

**PACKAGING AND DIMENSIONS:** Roll 50 m<sup>2</sup>

## FEATURES AND BENEFITS

The main properties of Armarock B50 are:

- excellent tensile strength
- high dimensional stability
- stable against cyclical stresses
- easy to install, light, compact
- adaptable to the shape of the support
- cuttable into the desired dimensions and widths
- resistant to aggressive environments, especially alkaline ones. Ideal in combination with cement or lime-based mortars for FRCM and CRM applications

## FIELDS OF APPLICATION

Bidirectional reinforcement in alkali-resistant basalt fibre, pre-primed, to be used in combination with our mortars (Unisan, Intosana, Repar line), GFRP connectors (Armaglass Connector line), stainless steel connectors (Helix Steel Aisi 304 line) , for the "reinforced" structural reinforcement of masonry and reinforced concrete products with CRM and FRCM techniques. Anti-tipping systems for partition walls and cladding. Structural reinforcement of arched and vaulted wall elements, both at the extrados and intrados. Reinforcement for reinforcing plastering to be created in historical and monumental contexts, capable of more uniformly distributing the stresses induced by seismic events, without substantial changes in the distribution of masses and stiffness.

## ALLOWED SUPPORTS

Concrete - Mixed walls (bricks and stones) - Brickworks - Stone walls - Porphyry and natural stones - Lime and lime-cement plasters and mortars

## PREPARATION OF SUPPORTS

To prepare the support, carefully follow what is indicated in the technical data sheets of the product with which the Armarock B50 mesh is combined. In general, in the case of reinforcements of masonry walls or intrados/extrados of vaults and arches, it is necessary to proceed with the complete removal of the existing plaster, manually or with mechanical tools, and of all possible inconsistent or detaching parts, up to get to the heart of the masonry and obtain a healthy, compact and mechanically resistant support. Wet the support to be strengthened; the excess water present on the surface must be allowed to evaporate so that the masonry to be strengthened is saturated with water but with a dry surface.

## MODE OF USE

Application with a flat metal trowel or spray of a first uniform layer of approx. 5-6 mm of mortar (Unisan, Intosana or Repar line) chosen according to the characteristics of the support.

At the same time as applying the first layer of mortar while it is still fresh, position the Armarock B50 mesh, compressing it with a flat trowel, so that it penetrates the applied mortar. Adjacent nets must be overlapped by at least 10-15 cm.

Application of a second layer of mortar on the previous one while it is still fresh, in such a way as to completely cover the mesh and reach the desired thickness.

In the case of anti-tipping systems, the recommended overall mortar thickness is approximately 10 mm.


In the case of reinforcement of arches or vaults, extrados or intrados, it is recommended to turn up the reinforcement system, in correspondence with the shutters, by at least 40 cm.


To improve the anchoring of the reinforcement system it is possible to appropriately prepare any connections made with elements in GRFP (Armoglass Connector) or stainless steel (Helix Steel AISI 304). The connections increase the efficiency of the applied reinforcement. Type, number and pitch of punctual connections must be defined during the design phase.

## APPLICATION METHODS


Apply by hand

## KEY FEATURES

 Length: 50 m

 Nonflammable

 Unlimited shelf-life

 Material 100% eco-friendly

 Suitable for contact with drinking water

 Width: 1 m

## TECHNICAL SPECIFICATIONS

Net elastic modulus (warp) **55 GPa**

Longitudinal elongation at break **4 %**

Net elastic modulus (weft) **55 GPa**

Mesh size **25 x 25 mm**

Weft tensile strength **50 kN/m**

Unit weight **220 g/m<sup>2</sup>**

Warp tensile strength **50 kN/m**

## CONSUMPTION

1.1 m/m<sup>2</sup>: The adjacent sheets of basalt fiber mesh must be overlapped along the edges by at least 10 cm.



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## STORAGE AND CONSERVATION

Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Store the product at a temperature between +5°C and +35°C.

## WARNINGS AND PRECAUTIONS

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge. Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

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