

ARMORS - fiberglass

Polites AR 330

Reinforcement mesh for CRM structural systems.

Fiberglass mesh designed for the structural reinforcement of stone, brick, tuff and mixed masonry buildings, with the aim of improving strength and overall ductility. Resistant to alkali, it is planned to be used in combination with *Diathonite Sismactive*, it contains zirconium dioxide (>16%), it is alkali-resistant, coated and is made with a “Cross weave” structure.

BENEFITS

- Ready to use, easy and quick to apply.
- Light weight.
- Excellent mechanical properties in weft and warp.
- Resistance to atmospheric agents.
- Easy to cut and to handle.
- Suitable for use in aggressive environments.
- Durability.
- Suitable for any type of support.
- Radiolucent.

YIELD

1,0 m²/m²

COLOUR

Orange

PACKAGING

Single piece: 1 x 50 m roll.
Pallet: 550 m² (11 rolls)

APPLICATION FIELDS

Fibreglass mesh ideal for the structural reinforcement of masonry buildings by using CRM technology. *Polites AR 330* is designed to be used in combination with the *Elites L* or *Elites F* (*Elites F1* and *Elites F2*) connectors, the vinyl ester resin called *Sismabond* and with the thermo-structural mortar *Diathonite Sismactive* (see technical data sheets).

STORAGE

Polites AR 330 must be stored in well-ventilated

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rooms, away from direct sunlight, water and frost, at temperatures between +1 and +35 C.

PREPARATION OF THE SUPPORT

For the support preparation methods, please refer to the indications reported on the technical data sheets of those products with which the mesh *Polites AR 330* is used in combination with.

APPLICATION IN THE CRM STRUCTURAL REINFORCEMENT SYSTEMS

1. *Polites AR 330* is used in combination with the thermo-structural mortar *Diathonite Sismactive*. For the use of *Polites AR 330* in the structural context of the CRM, please do refer to the application phases reported in the technical data sheet of *Diathonite Sismactive*.
2. Proceed with the installation of the mesh. Place *Polites AR 330* into the first layer of *Diathonite Sismactive* when it is still fresh, making sure to partially incorporate it into the mortar. We recommend an overlap of the mesh bands for about 15 - 20 cm in order to ensure mechanical continuity. *Polites AR 330* shall not be crinkled or blistered.
3. Drown the net in the mortar as it is still fresh, then continue as reported in the data sheet of the product *Diathonite Sismactive*.



The indications and prescriptions given, while representing our best experience and knowledge, are to be considered indicative and must be confirmed by comprehensive practical applications. Diasen does not know the specificities of the process, let alone the determining characteristics of the application support. Therefore, before using the product, the applicator must in any case carry out preliminary tests, to verify the perfect suitability for the intended use and, in any case, assumes any responsibility that may arise from its use. In case of uncertainties and doubts, please contact the technical office of the company before the start of the work, it being understood that this support is a simple aid for the applicator, which must in any case guarantee the possession of adequate skills and experience for the laying of the product and for the identification of the most appropriate solutions. Always refer to the latest updated version of the data sheet, available on the website www.diasen.com that cancels and replaces each other.

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The mesh width of the *Polites AR 330* combines perfectly with the grain sizes of those plasters of the *Diathonite* line.

SUGGESTIONS

- Do not apply at environmental temperature or at support temperature lower than +5°C (34°F) and higher than +35°C (95°F).
- During summer season, apply the product in the cooler hours of the day, away from sunlight.

- Do not apply with imminent threat of rain or frost, in conditions of strong fog or with relative humidity higher than 70%.
- Follow the indications reported on the technical data sheets of those products with which the mesh *Polites AR 330* is used in combination with.

SAFETY

While handling, always use personal protective equipment (PPE) and respect the instructions described in product safety data sheet.

* These data, even if carried out according to standard test methods, are indicative and may be subject to changes to the specific site conditions.

Technical data *		
Features		Unit
Yield	1.00 m ² /m ²	m ² /m ²
Aspect	mesh	-
Colour	orange	-
Composition	fiberglass	-
Mesh width (UNI 9311/2)	50x50	mm
Mesh weight (UNI 9311/4)	when coated: 335 not treated: 235	g/m ²
Thickness (UNI 9311/3)	0.60 ± 5%	mm
Application temperature	+1 / +35 +34 / +95	°C °F
Drying time (T=23°C - 73 °F, R.H. 50%)	does not need to dry	-
Number of wires	warp: 20 weft: 20	-
Packaging	1 x 50 m roll pallet: 11 rolls	m
Warp equivalent thickness (warp t _i)	0.0438 ± 5%	mm
Weft equivalent thickness (weft t _i)	0.0438 ± 5%	mm

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Final performances		Unit	Regulation
Break Elongation	3.5%	-	UNI 9311/5
Tensile Strength Single wire (weft/warp) Tensile speed (100 mm/min)	3.150 ±5%	kN	ISO 10406-1:2015 STS-17/0013
Tensile Strength (weft/warp) Tensile speed (100 mm/min)	63 ±5%	kN/m	-
Glass density (ρ_{glass})	2.68 ±5 %	g/cm ³	-
Elastic modulus: glass	72.000 ±5 %	N/mm ²	-
Resistant section (warp)	43.843 ±5 %	mm ² /m	CNR-DT 200 R1/2013
Resistant section (weft)	43.843 ±5 %	mm ² /m	CNR-DT 200 R1/2013



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