MAPEI

Mapegrid G 220

Primed alkali-resistant fibreglass mesh for reinforcement of stone, brick and tuff supports

WHERE TO USE
Fibreglass reinforcement used in conjunction with **Planitop HDM** (two-component, high-ductility cementitious mortar) for structural strengthening of masonry work, to improve the distribution of stresses induced by mechanical loads.

Some application examples
- Structural reinforcement of masonry facing walls, applied externally and/or internally.
- Strengthening reinforcement for a more even distribution of stresses induced by seismic activity.

TECHNICAL CHARACTERISTICS
Mapegrid G 220 is an alkali-resistant, special mesh made up of primed, glass fibres which, thanks to its special woven pattern, increases ductility and distributes stresses more evenly in reinforced masonry work. As a result, if the structure is subject to movement, it distributes the stresses across the entire surface of the elements which have been reinforced with the mesh. In so doing, the cracks which inevitably develop during such movement, form contemporarily in both the construction joint and the stone, brick or tuff support.
The system adheres perfectly to the support so strongly that localised stresses provoke failure of the support itself, rather than of the support/strengthening system interface.

ADVANTAGES
- Excellent tensile strength.
- Long-lasting and resistant against chemical attack by the cement.
- Resistant to atmospheric agents.
- High dimensional stability.
- Does not rust.
- Light and easy to handle.
- Easy to cut and adapt to the conformation of the support.

APPLICATION PROCEDURE
Preparation of the support
The surface on which **Mapegrid G 220** is to be applied must be prepared correctly. Render must be completely removed using either mechanical or manual means. This operation must be carried out right down to the underlying masonry work. Where necessary, when removing the render, large gaps must be filled with new stone, bricks and/or tuff with physical characteristics as similar as possible to the original materials. Remove loose material and dust and wash the structure down with water.
Then wet the structure to be strengthened. Excess water must be left to evaporate off so that the masonry to be repaired is saturated with water, but is left with a dry surface (s.s.d.). This operation may be speeded up by using compressed air.

Mapegrid G 220

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Type of fibre:	alkali-resistant fibreglass
Weight (g/m²):	225
Mesh size (mm):	25 x 25
Customs class:	7019 90 99
APPLICATION DATA	
Tensile strength (kN/m):	45
Elongation at breakage (%):	< 3

Application of the first layer of Planitop HDM

Positioning of Mapegrid G 220

How to lay Mapegrid G 220

1. Preparation of **Planitop HDM** (please refer to the relevant technical data sheet).
2. Application of a uniform, 3-4 mm-thick layer of **Planitop HDM** using a flat, metal trowel.
3. While the product is still “fresh”, insert the **Mapegrid G 220** by pressing it lightly with a flat trowel so that it adheres perfectly to the mortar.
4. Application of a second uniform layer of **Planitop HDM** approximately 2-3 mm thick in order to completely cover the mesh.

Adjacent longitudinal and transversal strips of **Mapegrid G 220** must overlap by at least 5 cm at the junction points.

PACKAGING

Mapegrid G 220 is available in 0.90 m-wide, 45.70 m-long rolls packed in cardboard boxes.

STORAGE

Store in a dry, covered area.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

All relevant references for the product are available upon request and from www.mapei.com

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