

## FK 204

EN 998-1  
GP/CSIV/W<sub>c</sub>2

### Fiber reinforced, polymer modified adhesive & base coat for thermal insulation boards

#### DESCRIPTION

Fiber-reinforced, polymer modified cement-based insulation boards adhesive. Ideal for the adhesion of expanded polystyrene (EPS) extruded polystyrene (XPS) as well as mineral wool (MW) boards on surfaces of concrete, render or brick masonry.

Reinforced with suitable fiberglass mesh, it can be used for base-coating of thermal insulation boards, on external and internal surfaces of buildings.

With EUROFINS Indoor Air Comfort Gold certification which ensures that FK 204 meets the strictest European regulations regarding VOC emissions.

In addition, the product is accompanied by an Environmental Product Declaration (EPD) regarding the environmental impact during its life cycle. (EPD registration number: IES-0009040).

#### FIELDS OF APPLICATION

- In combination with suitable anchors it is used for the bonding of thermal insulation boards, on

surfaces such as concrete, bricks, render, cement blocks, aerated concrete, stone, render, cement blocks, aerated concrete, stone, etc., on exterior and interior surfaces of buildings.

- In combination with the decorative finish coat renders MARMOLINE, type SVR, it is used for coating of insulation boards of external thermal insulation of buildings.
- It is part of certified External Thermal Insulation Composite System (ETICS) of Marmoline.

#### FEATURES /BENEFITS

- Strong adhesion to the substrate such as concrete, cement, stone, masonry.
- Fiber reinforced.
- High mechanical strength.
- Excellent workability.
- Low Volatile Organic Compounds.
- User and environmentally friendly

## PRODUCT INFORMATION

<b>Appearance/ color</b>	Off-white powder <i>(Color tone variations may occur between batches, as the raw materials include crushed white Dionyssos marble aggregates, which naturally shows fluctuations in shade)</i>
<b>Packaging</b>	25kg
<b>Storage conditions</b>	In the original, closed, sealed and indestructible package, protected from direct sunlight and frost and at temperatures from +5°C to +35°C.
<b>Lifetime</b>	12 months from production date (stored in a closed container in a shady place)

## TECHNICAL CHARACTERISTICS

<b>Grading :</b>	1.2 mm
<b>Specific gravity of wet mortar:</b>	1650 Kg/m <sup>3</sup>
<b>Compressive strength in 28 days:</b>	15 MPa <i>(Average value based on production control laboratory tests)</i> EN 1015-11
<b>Flexural strength in 28 days:</b>	4 MPa <i>(Average value based on production control laboratory tests)</i> EN 1015-11
<b>Bond strength to concrete in 28 days:</b>	>1.0 MPa
<b>Bond strength with EPS - XPS:</b>	≥ 0.1 MPa - Cohesive failure in the insulation board (EAD 040083-00-0404)
<b>Bond strength with MW:</b>	≥ 0.01 MPa - Cohesive failure in the insulation board (EAD 040083-00-0404)
	≥ 0.004 MPa - Cohesive failure in the insulation board, after hygrothermal cycles (EAD 040083-00-0404)

## APPLICATION INFORMATION

<b>Environmental temperature</b>	Temperature from + 5 °C to + 30 °C
<b>Consumption</b>	4 – 4.5 kg of dry mortar per m <sup>2</sup> , when used as a base coat, with fiberglass mesh, on polystyrene or mineral wool. 4 - 7 kg of dry mortar per m <sup>2</sup> , depending on the nature of the substrate, when used as insulation boards adhesive
<b>Mixing ratio</b>	About 6 kg (lt) of water /bag of 25 kg.

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

The substrate must be stable, dry and free from dust, loosely attached particles and all kinds of dirt. In addition, the surface must be clean, without dust, salts or oil.

### APPLICATION

Mix the content of a 25 kg bag, with 5.5 - 6 lt of water, using a low-rev electric mixer until a homogeneous, lump-free mixture is obtained.

Leave the mixture to set for five to ten minutes and stir again.

#### As an adhesive:

*For smooth substrates:* The adhesive is evenly spread and combed over the entire surface using a notched trowel at a thickness of 2 - 3 mm.

*For uneven substrates:* The adhesive is applied in stripes around the edges of the board and in 3 - 4 selected dabs in the center using a notched trowel.

The adhesive must cover the 40% of the boards surface.

Place and press the insulation boards starting from the bottom of the masonry crossways without gaps.

#### As a reinforced base coat:

When used as a fiberglass reinforced coating, apply the mix all over the surface of the insulation board to a thickness of 2 - 3 mm. Place the appropriate MARMOLINE fibreglass mesh to the prepared surface and press with a spatula or trowel until the mesh is fully embedded in the adhesive. The strips of the mesh should overlap by 10 cm approx. Finally, smooth the surface, while simultaneously removing excess mortar.

Suitable anchors should also be used to secure the installation of the insulation boards.

You can use the mixture within 2-4 hours, depending on the environmental conditions (temperature etc.)

### ATTENTION

- The content of the bag should be protected from humidity
- Do not add excessive quantity of water for it may cause cracks and reduced strength of the product
- Not recommended for use in extreme weather conditions (frost or heatwave).

### CLEANING TOOLS

With plenty of water immediately after use. Hardened and/or cured material can only be removed mechanically.

## HEALTH, SAFETY & ENVIROMENTAL PROTECTION

Detailed information and instructions regarding the safe management of the product and in matters of Health & Safety, are provided in the most recent Safety Data Sheet (SDS), copies of which are available on the company's website <https://marmoline.gr/> or upon request.


## LEGAL NOTICES

We guarantee the quality of the product, in terms of its technical specifications, as presented in the technical data sheet. This guarantee is strictly only for the available product and in no case the final result from its application, which depends to a large extent on the experience and quality of work of each user, as well as the conditions of application.

It is recommended that the user apply the product on a small scale and after making sure of the result, then use it in his project.

Publication of this technical data sheet supersedes any previous version.

MARMOLINE reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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NORDIA S.A. 364 Kifissias Av., 15233 Chalandri, Athens/ Greece
EN 998-1:2016 MARMOLINE FK 204 GENERAL PURPOSE PLASTER (GP/CSIV/W <sub>c</sub> 2)
Reaction to fire: Class :A2-s1,d0 Water absorption: W <sub>c</sub> 2 Water vapour diffusion coef.: $\mu = 5/20$ Adhesion: $\geq 1.0 \text{ N/mm}^2$ (FPc) Thermal conductivity/density: ( $\lambda_{10, dry}$ ) 0.17 W/mK (tab. mean value; P= 50%) Dangerous substances: see product's SDS Durability (against freeze/thaw, in the intended place of use): NPD