

# WATERPROOF ADHESIVE MORTAR FOR BONDING AND CLADDING EXPANDED POLYSTYRENE BOARDS (EPS).

## BIKTHERM 4200

### Product description

- Premixed dry mortar based on cement, limestone sand of a selected grain size, chemical additives, resins and reinforced with fibres.

### Applications

- Bonding of expanded polystyrene boards directly over the enclosure.
- Rendering of expanded polystyrene boards.
- Strong adherence to hold the polystyrene boards.
- Excellent workability.
- Permeable to water steam.
- Applied by hand or using a spraying machine.


### Supports

- The product is suitable to be applied on most porous surfaces such as brick, thermo-clay blocks, concrete blocks, concrete or cement based mortar.
- Suitable for not very porous supports (smooth concrete), previously apply the BIKREX primer or achieve the necessary ruggedness using mechanical means.
- Do not apply on plaster or similar type supports.
- The support must be stable (> 28 days of setting), clean and free of dust, grease, paints, etc.

### Precautions

- Check that the product to be used is suitable for the type of support and the type of work that is going to be carried out.
- Always mix the product using the recommended amount of water (approximately 6 liters/sack) and do not add cement, sand or any other product that will modify the original formula.
- Once the life cycle of the paste has been exceeded, do not add water to re-mix.
- The ambient temperature during the application of the product must be between 5° C and 35° C.
- Avoid breathing the powder and contact of the mixed product with the skin and the eyes. For more information consult the applicable Safety Data Sheet.

### Standards

	
Morteros y Revocos BIKAIN, S.A. B/Aldebarrena, no. 18 48212 (Mañaria)-Bizkaia 13 DdP No. : RTH1	
EN 998-1 <b>BIKTHERM 4200</b> Industrial mortars for rendering brick walls, ceilings, pillars and partitions	
<b>Compressive strength:</b>	CSIV Category
<b>Adhesive strength:</b> <i>(over concrete)</i>	≥ 0.8 N/mm <sup>2</sup>
<b>Bulk density of hardened mortar:</b>	1,3-1,5 (gr/cm <sup>3</sup> )
<b>Reaction against fire:</b>	Class F
<b>Water absorption:</b>	W2 m0.2 (kg/m <sup>2</sup> .min <sup>0.5</sup> )
<b>Water vapour permeability</b> (λ <sub>10dry</sub> ):	≤15
<b>Thermal conductivity:</b> <i>(tabulated value P 50%)</i>	0.45 W/mK
<b>Durability:</b>	PND

### Other technical characteristics

- **Appearance:** ..... Grey powder
- **Grain size:** ..... 0-0.6mm
- **Bulk density of fresh mortar (UNE-EN 1015-6):**  
ō ō ō ō ō ō ō ō ō ō ō ō ō ō ō 1.5 ± 0.1 gr/cm<sup>3</sup>
- **Water % (consistency of 175±10 mm UNE-EN 1015-3):**.....24-25%
- **Approximate theoretical yield:**  
As an adhesive for boards: ..... 3-5 Kg/m<sup>2</sup>  
As 3 mm thick renders. .... 4-6 Kg/m<sup>2</sup>
- **Tariff heading** ..... 3824.50.90.00

## Usage instructions

---

- Prior to applying the product check that the support is clean and free of dust, grease, etc., and is aged enough to avoid cracking due to shrinkage.
- If the support is in poor condition, it must be cleaned by chipping and repairing the damaged areas. If irregular areas are present, fill them beforehand using BIKREV 3300P.
- Stable cracks larger than 1 mm must be sealed and if the cracks are not stable, they must be spot drilled to prevent stresses from being transmitted to the boards.
- Use a low rpm mixer to mix the product with the indicated amount of water until a lump free homogeneous paste is obtained.

### Bonding of the polystyrene boards

- Apply the mortar in strips around the perimeter separated about 2 cm from the edges of the board and apply about 8 cm "globs" in the centre of the boards. The thickness of the applied adhesive depends on the condition of the support but it is recommended that the at least 60% of the surface area of the board contacts the support.
- Once the board is bonded press it against the wall and pound them with a mallet to improve the adherence and achieve the required plane area.
- The use of dowels is required.
- The boards must not cover the building's thermal expansion joints.

### Fastening of the mesh and cladding

- 24 hours after the boards have been bonded, use a trowel to extend a 2mm thick coat of mortar over them. immediately and with the mortar still fresh, install the fibreglass mesh.
- Apply a second layer and using a trowel, completely cover the mesh and the dowels until a regular and level surface is attained.
- At abutments, the mesh must overlap about 1 cm on each side.
- Once the coat is dry and hard, the chosen acrylic cladding is applied.
- Avoid freezing temperatures, strong winds and exposure to intense sunlight. Never use on frozen surfaces.

## Supply

---

- In 25 kg paper sacks Palletized in 60 sacks/pallet (1500 Kg).
- The supply will follow the General Terms of the Contract that is in force.

## Storage

---

- Storing in sacks guarantees that the characteristics of the product are maintained intact for one year from the manufacturing date, as long as they are kept in a location that is under cover and dry.

## Customer / technical service

---

- In case of doubt regarding the selection, use or application of the products, first consult with our Customer/Technical Service Department.
- If you need a specific product, our Customer/Technical Service Department will help you determine your specific needs and will provide the best solution for your needs.

## Remarks

---

- *Our technical advice, whether the advice is provided verbally or via tests, is provided according to the best of our knowledge but shall be considered only as a recommendation WITHOUT OBLIGATION. Since we are not involved in the execution of the works, the information is provided for general purposes and is not legally binding for BIKAIN.*
- *The technical sheet cannot include all the applications and factors involved with using a material. Therefore, regarding installations not described in this sheet, we recommend consulting with our technical department or carrying out a preliminary test to check the suitability of said application.*
- *The usage instructions are drafted based on our tests and knowledge and do not relieve the consumer from examining or checking the products are suitable for use. Therefore prior to using the product, whomever is going to use it must determine if it is suitable or not for the intended use, since he or she will assume any responsibility that may be derived from its use. The responsibility of BIKAIN shall be limited to the value of the used merchandise.*
- *BIKAIN, a registered company in accordance with Standard UNE-EN-ISO 9001 regarding quality systems, guarantees that its products have been controlled by its quality laboratory in accordance with the characteristics described in the Technical Sheets.*

July 2020

### **MORTEROS Y REVOCOS BIKAIN, S.A.**

Aldebarrena, 18 – 48212 Mañaria (Bizkaia)

+34 946 202 496

www.bikain.com

info@bikain.com

