

# Adhesive for gypsum boards

## GENERAL DESCRIPTION

Our adhesive for gypsum boards is a dry pre-mixed gypsum compound to be prepared just before application by mixing it with water.

## PURPOSE

This product is used for gluing gypsum boards to ceramic building bases.

## CONTRAINDICATIONS

This product should not be used on metal, glass, plastic or wood-based materials, as well as very smooth precast concrete. It is also not recommended for bases that are damp, subject to biological corrosion or ones in which the bonding processes of other mineral binders have not finished, yet. This product is not recommended for spaces subject to permanent dampness, or interiors with permanent air humidity exceeding 70%. Temporarily increasing humidity in kitchens and bathrooms is not harmful.

## PROPERTIES

- **Bonding time**

Bonding time, or the length of time during which the compound is to be used after it has been mixed with water, depends on the temperature of the environment and the amount of water used to prepare the mortar. At 20°C and with the water to binder ratio of 1:2, the bonding time will be from 30 to 40 min. A lower temperature and a larger amount of water will extend the bonding time, while a higher temperature and a smaller amount of water will shorten the bonding time. At temperatures below 5°C, the bonding processes cease almost completely.

- **Open working time**

Open working time, which allows for fitting and correcting the positioning of a gypsum board pressed to the base, depends on base absorption rates and ranges between 2 and 10 min.

## BASE PREPARATION

The base does not need any preparation while this product is applied as intended. If used on old brickwork, old plaster, concrete or aerated concrete, the base must be primed.

## MORTAR PREPARATION

The mortar is made using only pure, preferably potable



water, at a temp. of 5–30°C, at a ratio of 1 l of water to 2 kg of compound. The mortar can be mixed manually or mechanically using an electric stirrer. When mixing manually, the dry product should be poured into water so that portions of the product get soaked and fall to the bottom on their own. This procedure should be repeated until the entire water is absorbed. If just a 1-2 mm of water remains over the poured and soaked gypsum, the mortar will need to be mixed. After the mortar has been mixed thoroughly, it is ready to use. When mixing mechanically, the dry product should be put all at once into a measured portion of water and, without waiting for it to take up the water, mixed thoroughly till homogeneous mass is produced. At the beginning of the mixing, the mortar is thinner, which makes mixing easier. Following approx. 1 minute after the compound is poured into the water, the slurry thickens. After another 2-3 minutes, mortar thickness reaches its final consistency. If the resultant mortar is too thin or too thick, a respective amount of dry product or water needs to be added and mixed with the rest, again. The thickness improvement procedure can be performed within the first 10 minutes, at the most. Choosing the right mortar consistency is essential. It should be as thin as possible, but

cannot flow down the boards when positioned vertically. An appropriately matched consistency allows for pressing the board to the base and pulling it away again without the adhesive losing contact with the base and the board, at the same time. The mortar should only be made using stainless vessels free from bonded gypsum residues.

## WORK TECHNOLOGY

When gluing gypsum boards to a base, mortar should first be applied to the board surface, and only then should the board be pressed against the base. Portions of mortar should be applied 50 cm apart from each other, with approx. half a liter per single portion. Laths 1 to 2 meters long should be used for pressing the boards, so that an even plane is obtained. If the board has been pressed down too far, it should be pulled away from the base immediately using quick and short push and pull movements, alternately. Each subsequent board can be fitted to the preceding one after the mortar has bonded. For all wet jobs, clean stainless steel tools should be used. Wet jobs should be performed at temperatures of 5-30°C.

## PACKAGING AND STORAGE

The product is packed in 10 kg and 20 kg three-layer paper ventilated bags with an antimoisture barrier. It should be stored under dry conditions in unopened, original

packagings at temperatures ranging from 0 to 40°C. Pallets can be stacked on top of each other up to a maximum of three layers.

## GUARANTEES

Within a period of 12 months from the manufacture date as stated on the packaging, the manufacturer guarantees standard properties of the product, as long as it is used as intended and according to the widely applied rules of the art, and stored as recommended. The product has a Declaration of Conformity with PN-EN 14496:2007 and a Hygienic Certificate from the National Institute of Hygiene no. HK/B/1301/01/2009.

## TECHNICAL DATA

Reaction to fire	- A1
Time in which to use	- 30 min
Calcium sulfate	- more than 30% of the weight
Adhesion to the base	- more than 0.1 MPa
Coverage	- approx. 1 kg/dm <sup>3</sup> of the mortar
Consumption	- approx. 3 kg/1 m <sup>2</sup> of the gypsum board