COLORLAK

E4001
EKOFIX-Z
Frost-resistant adhesive mixture for insulation materials

Composition: The EKOFIX Z E4001 dry adhesive mixture for glueing thermal insulation materials and tiling elements is a mixture of cement, dry copolymer vinyl acetate dispersion, separated fraction of limestone and silica filler and special additives.

Colour shades: Non-standardised grey.

Use: The EKOFIX Z E4001 dry adhesive mixture for glueing insulation materials is a high-quality, special frost-resistant adhesive mixture designed for glueing polystyrene boards and mineral fibre boards to plasters, masonry, concrete, aerated concrete and gas silicates. Furthermore, for gluing ceramic tiles as a final surface treatment of contact thermal insulation systems.

EKOFIX Z E4001 is a standardly hardening cement adhesive with a reduced friction ratio and an extended dry tack time – **C1TE** (according to CSN EN 12004 +A1).

The substrate must be dry, mature, cohesive, free from dust and impurities and water-insulated. It must be flat – the flatness must show an unevenness of max. 5 mm per 2 meters when gluing the insulation over the entire surface or when gluing ceramic tiles to the bottom layer. When glueing the insulation "to the frame and targets", the unevenness must be less than 2 cm per 1 meter of length. Apply the EKOPEN E0601 or PENETRACE S2802A E0607 sealing coat on the substrate for gluing the insulation. Very moisture-absorbent substrates must be treated twice with EKOPEN solution diluted 1:1 with water.
Dispersion substrates must be mechanically roughened; substrates with surface treatment (dispersion, synthetic, kaolin, glue paints) must be scraped off and then primed with EKOPEN.
Before the application, prepare the adhesive mixture by mixing the powder mixture with water in the ratio of 1 part of water to 4 parts of powder mixture (pour 1 bag of adhesive into 6.0 to 6.5 l of water), stir the mixture with a slow-running mixer or a strong low-speed drill (the speed must not exceed 500 rpm). Let the resulting pasty mixture of homogeneous consistency stand for 5 minutes at least and then stir again briefly, adjusting the consistency as needed. The processibility of the prepared mixture is about 2 hours depending on the air temperature. No other additives may be added to the mixture. Use drinking water as mixing water or the water must comply with the requirements of CSN EN 1008. Never use water from unknown sources or water containing flower-forming salts. Apply the adhesive mixture according to binding technological procedures for individual thermal insulation systems.

The recommended application temperature (ambient, substrate, paint) is +5 °C to +25 °C.
The drying time is about 4–6 hours depending on the temperature and humidity of the air and substrate. Used tools and stained places must be immediately washed with water as the dried paint is very difficult to remove.

Application: With a stainless steel trowel.
Thinner: Water.
Thinning: 1 part water to 4 parts powder mixture.

Properties and technical parameters:

Bulk weight:	1.20–1.40 g/cm^3
Drying / depending on temperature:	4–6 hours

Property	Value	Tested in accordance with
Reaction to fire	E	CSN EN 12004+A1
Initial tensile adhesion [MPa]	≥ 0.5	CSN EN 1348:2007, Art. 8.2
High tensile adhesion after immersion in water [MPa]	≥ 1.0	CSN EN 1348:2007, Art. 8.3
Tensile adhesion after storage in heat [MPa]	≥ 0.5	CSN EN 1348:2007, Art. 8.4

High tensile adhesion after freeze-thaw cycles [MPa]	≥ 1.0	CSN EN 1348:2007, Art. 8.5
Friction ratio [mm]	≤ 0.5	CSN EN 1308
Extended dry tack time: tensile adhesion (not less than after 30 min.) [MPa]	≥ 0.5	CSN EN 1346
Adhesion to concrete – Initial status [MPa]	≥ 0.25	ETAG 004, Art. 5.1.4.1.2
Adhesion to concrete – 48 h storage in water + 2 h drying at (23±2) °C and (50± 5)% relative humidity [MPa]	≥ 0.08	
Adhesion to concrete – 48 h storage in water + 7 days drying at (23±2) °C and (50± 5)% relative humidity [MPa]	≥ 0.25	
Adhesion to insulating material – Initial status [MPa]	≥ 0.08	ETAG 004, Art. 5.1.4.1.3
Adhesion to insulating material – 48 h storage in water + 2 h drying at (23±2) °C and (50± 5)% relative humidity [MPa]	≥ 0.03	
Adhesion to insulating material – 48 h storage in water + 7 days drying at (23±2) °C and (50± 5)% relative humidity [MPa]	≥ 0.08	

Consumption: 3–4 kg/m^2 when reinforcing polystyrene boards.
4.5–5 kg/m^2 when reinforcing mineral wool boards.

Packaging: Paper bags á 25 kg.

Shelf life: In dry and covered storage areas without the need for tempering, on pallets.

Disposal: Containers/unused product should be handed over to a person authorised for disposal of wastes or to a hazardous waste collection point established by the local authorities.

Classification

Signal word: **Danger**

Hazard statements:	**Hazards identification**	
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H335	May cause respiratory irritation.

For details, see the Safety Data Sheet of this product.

"The user is responsible for correct use of the decorative plaster or for the composition and correct application of the whole system, i.e. the user must always consider all circumstances – conditions of application and processing that could affect the final quality of surface treatment.
A complaint relating to colour shades and plaster structure can be acknowledged only under the condition of a previously prepared test coating on a small surface in accordance with the mandatory technological process, which accompanies the complaint. No claims filed after using up the product will be taken into consideration. COLORLAK, a.s. reserves the right to change data in technical and advertising materials without any prior notice."

"Technical recommendations contained in this Catalogue Sheet are given based on our experience and best knowledge of the state of the art in science and practice; they are not binding and they do not constitute any obligations unless expressly defined in the purchase contract."

Marketing, 4/2020