KNAUF

K3

Extra flexible tile adhesive for the floor

Product description

Water and frost-resistant, rapid-setting, extra flexible, thin and medium-layer, high-quality cement-based tile adhesive.

Composition

A mixture of dolomite and natural sand with portland and aluminat cement, enriched with polyvinyl acetate polymer and additives to improve mass properties.

The content of soluble chromium VI (Cr VI) meets the requirements specified in point 47 of EC Regulation No. 552/2009.

Type C2FES1   acc. to LVS EN 12004

Storage

6 months. Store in a dry, cool place on wooden pallets in unopened original packaging. Seal open bags hermetically and use as the first.

Quality

In accordance with the requirements of LVS EN 12004, a product type test has been carried out in a notified laboratory, constant control of the production process is ensured. The product is marked with the CE mark.

Properties and added value

- Especially suitable for large format 60x60 cm and larger floor tiles
- Self-flowing
- Extra flexible
- Fast-setting
- Thermal resistance from -20 °C to +80 °C
- High initial adhesion
- Without shrinkage and tension
- Load resistant
- Water resistant
- Frost resistant
- With extended laying time
- Hydraulic curing
- Manual application
- For indoor and outdoor use

Field of application

Thin and medium layer tile adhesive for large size tiles and slabs, suitable for floors, also including heated floors.

Suitable for:

■ heated floors,

■ terraces and balconies,

■ surfaces subject to fast temperature fluctuations.

Intended for:

■ gluing large floor tiles (> 60x60 cm),

■ gluing water-absorbing and non-absorbing tiles,

■ gluing degreased and opaque natural stone slabs.

For indoor and outdoor use.

Application

Substrate and pretreatment

The base should be smooth, hard, unfrozen, free of any dust, paint and oil residues.

The maximum allowable humidity of the substrates

Substrate	Max. moisture content
Cement floor covering	4 %
Cement floor covering with heating	2 %
Gypsum anhydrite floor	0.5 %

Preparation

Highly absorbent and absorbent bases should be primed with Knauf Spezialhaftgrund (diluted 1:2 with water) or Knauf Tiefengrund. Non-absorbent surfaces – polished concrete, terrazzo, etc. primed with Knauf Spezialhaftgrund (undiluted).

Knauf Flächendicht or Knauf Flex-Dicht waterproofing should be applied to surfaces where the influence of moisture is expected. Tile only after the primer has completely dried.

Mixing

Mix the content of one bag (25 kg) with 5.7-6.2 l of clean, cold water, mix by hand or with a slowly rotating mixer until a homogeneous mass without lumps is formed, let it swell for 5 minutes and mix again. Adjust the consistency by adding powder or water to the mixture.

When laying tiles with the middle layer method – the tile adhesive should be mixed to a thicker consistency.

Application

First, the mixed adhesive should be applied with a ladle or trowel to the entire prepared surface in the appropriate layer thickness. Then, holding the trowel at a 90° angle, comb with a suitable notched trowel (the sizes of the notches are specified in the Consumption Table). When laying large tiles, it is recommended to use insert-wedge plane levelling systems. When tiling, insert the insert into the seam under the tiles about 7 cm from the edge of the tile. After that, the wedge should be pressed into the loop of the insert, adjusting the position of both tile surfaces in the same plane.

If a film forms (check with your finger), the adhesive should be reapplied. The time of laying and adjustment depends on the absorbent capacity of the base and tiles, as well as the ambient temperature. Use only clean tools and vessels!

Grouting

Grouting can be done only after the adhesive has cured – after about 1 day.

Tiling of heated floors

The underfloor heating should be commissioned before tiling. Heated floor systems should be switched on at maximum temperature for 24 hours. It should be switched off and cooled before starting work. Full heating may be switched on no sooner than 28 days after tiling.

Temperature/climate

Air and base temperature during development and drying should be between +5 °C and +25 °C.

Protect newly laid tiles from drafts, direct sunlight and rain. The technical data of the development are defined under the conditions, if the temperature of the air and the base is +23 °C and the relative air humidity is 50 % during curing.

Drying

The drying time depends on the absorbent capacity of the base, ambient temperature and humidity in the room.

Cleaning

Wash tools with water immediately after use.

Notes	**Attention!** The larger the tiles and the lower their water absorption capacity, the slower the adhesive dries. Spots smeared with adhesive should be cleaned immediately. The instructions and recommendations of the tile manufacturer should also be taken into account. Do not add other materials to Knauf K3, as they can significantly change the properties of the product.

Other instructions

For outdoor works and heavily loaded surfaces, the combined method should be used (adhesive is applied both to the base and to the tiles) achieving up to 100 % adhesive contact with the base. This method should also be used when laying very weak (< 0.5 %) water absorbing tiles.

If the material has got into the eyes, rinse them with plenty of water and seek medical help.

This technical datasheet defines the scope of use of the material and the recommended work to be carried out, but it cannot replace the skill of the worker. In addition to these recommendations, the work should be carried out in accordance with the requirements of the construction work. The manufacturer guarantees the quality of the product, but this has no influence on the means and conditions of its application. In case of doubt, a trial application should be carried out.

This technical datasheet supersedes previous editions of technical datasheets.

Work safety and waste collection

Waste identification class:

170904

(see the material Safety Data Sheet).

Technical data

Designation	Unit / Standart	Value / Size
Type	acc. to LVS EN 12004	C2FES1
Layer thickness	mm	3-20
Working time	h	1
Tiling time*	min	30
Tile adjustment time*	min	15
The time of grouting	h	24
Walking on the surface	h	6
The surface can be fully loaded after	days	7
Adhesion – to concrete	N/mm^2	> 1.0
Initial adhesion	N/mm^2	> 0.5
Reaction to fire	acc. to LVS EN 13501-1	A1
Applying temperature	°C	+5 to +25
Thermal resistance	°C	-20 to +80

* The time depends on the type of tiles and the ambient temperature

Material requirement / Consumption

Tile size cm	Trowel notch size mm	Consumption* kg/m^2
up to 20	6	1.9
up to 30	8	2.5
up to 40	10	3.3
up to 50	12	4.5
up to 60	15	5.5

* Adhesive consumption is not determined by the size of the tiles, but by the thickness of the adhesive layer, which depends on the size of the trowel's grooves

Product range

Product	Packaging	Material number	EAN
K3	25 kg	00289132	4750614006245

The building physical, static and technical properties of the Knauf system are fully guaranteed only if the components of the Knauf system or products specifically recommended by Knauf are used.