



Description

Two component, high performance, flexible, fast setting cementitious adhesive with reduced slip and extended open time for ceramic tiles and stones.

Fields of Application

- Exterior bonding of large size ceramic tiles, stones, granite tiles, porcelain tiles, marble, etc.
- Ultratech allows grouting within 2-3 hours after application and rapid tiling of large size tiles in places which have to be ready for use within one day.
- Bonding of tiles on places which are subject to heavy traffic like shopping malls, hospitals, schools.
- Floor and wall bonding of large format and thin tiles (3-5 mm) like Kalesinterflex.
- Interior and exterior floor and wall bonding of all types and sizes of ceramic tiles, natural stone, marble, granite, porcelain ceramic, clinker, cotto on cementitious renders, cementitious screeds and concrete.
- Exterior bonding of ceramic, granite or porcelain tiles with dimensions more than 40x40 cm up to 30 meter height and more than 60x60 cm up to 15 meter height.

Properties

- Perfect adherence.
- Extra fast setting: sets within 3 hours.
- Highly deformable, resistant to temperature changes.
- Resistant to all climatic conditions.
- Can even be used on vertical surfaces for bonding of heavy tiles without sagging.
- Extended open time.

Preparation of Substrates

- Substrates must be sound, free from oil, grease, and sufficiently dry. Cementitious substrates must be cured.
- Cracked plasters mortar and cement residues must be scraped off the surface.
- The porous surfaces should be wetted and must be left to dry before application.
- Use Tamirart or Mastar 10 in case of uneven substrates to get a sound and flat surface. Use Gypsastar on anhydrite screeds.
- The surface should be primed with Kalekim Astar (Primer) depending on the absorbency of the substrate before application.
- Exposed concrete surfaces should be primed with Kalekim B-tone in order to increase the adhesion strength of tile adhesive.
- Wipe the back sides of tiles with water if dusty.

Application

- Pour 25 kg of powder component into 7.5 liters of liquid component slowly and mix to obtain a homogeneous paste free from lumps. A low speed mixer is recommended to mix. Do not add any additive which is not mentioned in the instructions for the application.
- Allow to stand for 5 - 10 minutes to mature. After 1-2 minutes remixing, the paste is ready for application.
- Consumption is 4.5-6.5 kg/m².
- Consume the prepared mortar within 1 hours.
- Spread the mortar onto the substrate with a notched trowel of which notch size is appropriate to the tile dimension to obtain a good adhesion.
- First apply a thin coat of Ultratech with the flat side of the trowel, then notch with the toothed side of the trowel.
- Installation of large tiles (greater than 40x40), application on existing tiles or in places which are subject to frost or heavy traffic, Ultratech should also be applied on the back of the tiles (Combined method).
- Open time is 30 minutes. Install the tiles within this period with a firm pressure. Unfavourable climatic conditions (high temperature, low humidity, wind, etc.) can reduce this time to just a few minutes. If this period is exceeded, scratch and discard the mortar.
- In installation of large format tiles, lay the tiles horizontally and do not start to lay the upper row before the below one is cured. Leave an expansion joint at every 4-5 meter and use Kalepolymas to fill expansion joints.

**Post-Application Protection & Suggestions**

- Clean tools and hands with water, and surfaces with a damp cloth.
- Dispose mortars of which the pot life is expired.
- Tiles installed with Ultratech must not be subject to water for at least 12 hours.
- Time required for grouting 2-3 hours.
- If joints can be grouted with Fugaflex, Fugaflex Rapid, Fugasim and Fugatech, the site may be open for use within 1 day.
- The surface should be protected from air stream during and after the application.
- It should not be applied in rainy weather and the applied surface should be protected from rain in 12 hours.
- The mortar should not be exposed to direct sunlight and the mixture should be made with warm water.
- Application temperature should be between +5°C and +35°C.
- Since contains cement, it irritates the eyes, respiratory system and skin. For further information refer to the safety data sheet.
- The consumption values in the table refers to an average consumption amount. It may vary depending on the application conditions and surface properties.

Storage

- Packages should be kept dry and cool at between +5°C and +35°C in moisture free conditions. Avoid direct sunlight.
- Store in temperatures 5°C to 23°C in original sealed packaging.
- Packages should be protected from water, frost and adverse weather conditions.
- Do not stack more than 10 bags on top of each other.
- Shelf life is maximum 12 months conditional to complying with the above mentioned conditions.

Packaging

- Powder component: 25 kg multi-ply paper bags.
- Liquid component: 7.5 lt drums.

**Certificates of Quality**

TS EN 12004-1, Class C2FTE S2.

C: Cementitious

2: High Performance

F: Fast Setting

T: Reduced Slip

E: Extended Open Time

S2: Highly Deformable

Technical Properties

(at 23°C and 50% RH)

General Data

Appearance	1st component: Grey powder 2nd component: White liquid
Shelf Life	12 months when stored in the original sealed packing in a dry place.

Application Data

Application Temperature Range	(+5°C) - (+35°C)
Mixing Ratio	7.5 liters liquid / 25 kg powder
Pot Life	1 hour
Grouting	2-3 hours
Consumption	4.5 - 6.5 kg/m ² (Combined Method)

Performance Data

Slip (EN 12004-2)	≤ 0.5 mm
Open Time (EN 12004-2)	After 30 minutes ≥ 0.5 N/mm ²
Tensile Adhesion Strength (EN 12004-2)	
- After 3 hours	≥ 0.5 N/mm ²
- Initial (after 28 days)	≥ 1 N/mm ²
- After heat exposure	≥ 1 N/mm ²
- After immersion in water	≥ 1 N/mm ²
- After freeze/thaw cycles	≥ 1 N/mm ²
Deformability (EN 12002)	≥ 5mm - S2 Highly deformable
Service Temperature Range (after final cure)	(-40°C) - (+80°C)
Release Dangerous Substances (EN 12004-1)	See SDS.
Reaction to Fire (EN 13501-1)	Bs1Do

"Please Note: All suggestions and application instructions herein are based on our latest technical experience. Due to a wide variety of individual application conditions, the user alone is responsible for any consequences deriving from the use of the product."

