



### Description

High performance cementitious S1 class deformable tile adhesive, with extended open time and reduced slip, for ceramic tiles and stones.

### Fields of Application

- 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.
- Bonding of tiles on existing ceramic tile, granite.
- Bonding of tiles on painted walls and gypsum.
- Bonding of ceramic tiles in swimming pools, basins and any other wet places.
- Bonding of tiles on terraces and balconies.
- Bonding of tiles on places where sudden temperature changes occur like cold storage depots and underfloor heating systems.
- Bonding of tiles on places subject to heavy traffic like shopping malls, hospitals, schools.
- Approved for use with plywood.

### Properties

- Perfect adherence.
- Highly deformable thanks to its S1 classification, it is resistant to temperature changes.
- Can be applied on vertical surfaces even for bonding of heavy tiles, without sagging.
- Extended open time.
- Easily trowelable.
- Complies with ANSI A118.11 and A118.4 standart.

### Preparation of Substrates

- Substrates must be sound, free from oil, grease and sufficiently dry. Cementitious substrates must be cured.
- Cracked plaster 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.
- 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.
- In case of application on existing tile, first prime the surface with Kalekim Dolgulu Astar (Smooth Surface Primer).
- Wipe the back sides of tiles with water if dusty.

### Application

- Pour Technoflex into the advised amount of clean water 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 the mortar to stand for 5-10 minutes to mature. After 1-2 minutes of remixing, the paste is ready for application.
- Consumption is 3-5 kg/m<sup>2</sup>.
- Consume the prepared mortar within 6 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 Technoflex with the flat side of the trowel, then notch with the toothed side of the trowel.
- In case of applications of large tiles (greater than 40x40 cm), on existing tiles or in areas which are subject to frost or heavy traffic, Technoflex should also be applied on the back of tiles (combined method).
- Open time is 30 minutes. Install the tiles within this period of time with firm pressure. Unfavorable 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.

#### Post-Application Protection & Suggestions

- Clean tools and hands with water, and surfaces with a damp cloth.
- It is recommended to use protective gloves and goggles.
- Dispose mortars of which the pot life is expired.
- Tiles installed with Technoflex must not be subject to water for at least 24 hours and must be protected from frost and strong sunlight for at least 5-7 days after installation.
- Time required for grouting on walls is 8 hours and on floors is 24 hours.
- Floors can be opened to light foot traffic after 24 hours.
- It should not be applied in rainy weather and the applied surface should be protected from rain in 24 hours.
- Application temperature should be between +5°C and +35°C.
- Since it 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

- Product storage conditions should be between +5°C and +35°C.
- Store in dry medium.
- Do not stack more than 10 bags on top of each other.

#### Packaging

- 20 and 25 kg multi-ply paper bags.



## Technical Properties

(at 23°C and 50% RH)

## General Data

Appearance	Grey and White powder
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	6.5-7 liters water / 25 kg for grey powder 7-7.5 liters water / 25 kg for white powder
Pot Life	6 hours
Grouting	8 hours on wall; 24 hours after on floor
Set to Light Foot Traffic	24 hours
Consumption	3 - 5 kg/m <sup>2</sup>

## Performance Data

Slip (EN 12004-2)	≤ 0.5 mm
Slip (ANSI A118.4 6.0)	≤ 0.02 in. (0.5 mm)
Open Time (EN 12004-2)	After 30 minutes ≥ 0.5 N/mm <sup>2</sup>
Open Time (ANSI A118.4 5.3)	≥ 75 psi (0.5 MPa) at 30 minutes
Tensile Adhesion Strength (EN 1348)	
- Initial (after 28 days)	≥ 1 N/mm <sup>2</sup>
- After heat exposure	≥ 1 N/mm <sup>2</sup>
- After immersion in water	≥ 1 N/mm <sup>2</sup>
- After freeze/thaw cycles	≥ 1 N/mm <sup>2</sup>
Shear Strength, impervious ceramic (porcelain mosaics) (ANSI A118.4 7.2.5) (after 28 days)	> 200 psi (1.38 MPa)
Shear Strength, glazed wall tile (ANSI A118.4 7.1.2) (after 7 days)	> 300 psi (2.07 MPa)
Shear Strength, quarry tile (ANSI A118.4 7.3.2) (after 28 days)	> 150 psi (1.03 MPa)
Shear Strength, quarry tile to plywood (ANSI A11 4.1.2) (after 28 days)	> 150 psi (1.03 MPa)
Deformability (EN 12002)	≥ 2.5mm - S1 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)	A2



1054 Technoflex



#### Certificates of Quality

TS EN 12004, Class C2TE, S1.

C: Cementitious

2: Improved

T: Reduced slip

E: Extended Open Time

S1: Deformable