



VitrA Fix FLEX PORSELEN

Cement based, high performance, non-slip, S1 class, elastic adhesive mortar with extended working time

DESCRIPTION

Cement based, elastic porcelain tile adhesive with high adhesion strength and flexibility, used for bonding porcelain tiles, granite, ceramic tiles, natural limestone, travertine, marble, cotto tiles, bricks, thermal insulation plates, glass bricks and glass mosaics to walls and floors.

AREAS OF USE

- Application of porcelain tiles, granite, natural stone, ceramic tiles, cotto, marble, etc. on cement-based surfaces indoors and outdoors
- Underfloor heating, cold storage, terrace, etc. in areas with high temperature changes
- In floor applications exposed to heavy pedestrian traffic such as shopping centers, schools, etc.
- In wet areas such as pools etc.
- Suitable for ceramic applications on difficult surfaces such as paint, plaster, ceramic etc.

FEATURES

Material structure: It contains high quality cement, additives giving elasticity, auxiliary materials giving superior adhesion properties.

- Type : Powder
- Color : Grey/white
- Density : $1.3 \pm 0.05 \text{ gr/cm}^3$

TECHNICAL PERFORMANCE

- Tensile bond strength
- initial (after 28 days) : $\geq 1.0 \text{ MPa (N/mm}^2\text{)}$
- after heat aging : $\geq 1.0 \text{ MPa (N/mm}^2\text{)}$
- after aging with water : $\geq 1.0 \text{ MPa (N/mm}^2\text{)}$
- after freeze thaw cycle : $\geq 1.0 \text{ MPa (N/mm}^2\text{)}$
- open holding time (after 30 min.) : $\geq 0.5 \text{ MPa (N/mm}^2\text{)}$

- Shear : $\leq 0.5 \text{ mm}$
- Transverse deformation : $2.5 \text{ mm} \leq S1 \leq 5 \text{ mm}$
- Acid and alkali resistance : good
- Temperature resistance : $-40 \text{ }^\circ\text{C} - +80 \text{ }^\circ\text{C}$
- Reaction to fire class : A1 (TS EN 13501 - 1)

*These values are obtained as a result of laboratory tests and are the performance values of the finished applications after 28 days. Values may vary due to differences in the construction site environment.

REFERENCE STANDARD

- TS EN 12004-1 / C2TE, class S1.
- CE

CONSUMPTION

Average 3-6 kg /m² may vary depending on the application surface, tile size and comb size used.

PACKAGING

In 25 kg kraft bags (48 pieces per pallet / 1200 kg)

STORAGE AND SHELF LIFE

- For storage, maximum 10 kraft bags should be placed on top of each other.
- Product storage conditions must be complied with and products must not be stored in damp and waterlogged warehouses.
- Shelf life is 1 year provided that the packages are kept in closed and moisture-free environments. Production date and charge number are indicated on the packaging.
- Packages should be tightly closed when not in use.

- Strong bonding performance of large-sized coating materials
- Top-down ceramic pouring without slipping
- Easy troweling
- High resistance to thermal shocks and surface movements due to its flexibility
- Long working hours
- Strong adhesion to challenging surfaces



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APPLICATION FEATURES

Mixing ratio	: 5,5-6,5 liters of water per 25 kg bag
Working and tile correction time	: 30 minutes
Time to use the mixture	: 3 hours (pot life)
Application temperature	: +5 °C - +35 °C
Opening time for pedestrian traffic	: minimum 24 hours after
Jointing time	: minimum after 24 hours

SURFACE PREPARATION

- Application surfaces must be free from dust, dirt, oil, etc., must be smooth and sound, and must not be too dry or sweating.
- On surfaces that have been polished or hardened afterwards (concrete, etc.), the hardness or brightness of the surface should be removed by scraping, etc. before application.
- On surfaces with high absorbency, the surface should be primed with **VitrA Fix FILM** before application.
- Glossy surfaces such as ceramic, exposed concrete etc. should be primed with **VitrA Film Plus** or **VitrA Film Plus BETON** before application.
- Before application on surfaces exposed to direct sunlight and overheated surfaces, the surface temperature should be reduced by moistening the surface with water sprinkling method.
- **VitrA Fix FLEX PORSELEN** is not a filling material. Accordingly, the deepest point on the application surface should not exceed 7 mm under a 2 m gauge. If there are larger deviations, the necessary repairs should be made using **VitrA Fix RM 20** or **VitrA Fix S 30** before tile laying.

APPLICATION

- Slowly add 25 kg **VitrA Fix FLEX PORSELEN** to 5,5-6,5 liters (22-26%) of clean water and mix until the mixture is homogeneous without lumps.
- The mixture should have a consistency that will not flow when taken on a trowel.
- Allow the mixture to rest for 5 minutes before starting the application and mix again for 1-2 minutes and then apply.
- **VitrA Fix FLEX PORSELEN**, which is spread well on the surface with the flat side of the toothed steel trowel, should then be combed at the desired tooth thickness.
- For coating materials larger than 40x40 cm, a combined bonding method (adhesive application both on the surface and on the back of the ceramic) should be used. Consumption may increase by approximately 30-50%.
- When laying transparent or light-colored natural stones, a preliminary test should be made in case of the risk of stains and shadows appearing on their surfaces, and in case of shadows, white **VitrA Fix FLEX PORSELEN** should be used.
- When laying coating materials with nail backing, it is necessary to apply adhesive until the nail depth is filled.
- In order for the adhesion to be strong and for the adhesive to fully spread and adhere to the back of the tile, the tile should be lightly rammed with a rubber mallet.
- Joint filling should be started at least 24 hours after the bonding process.

APPLICATION SURFACES

Suitable for use on cement-based plaster and screed surfaces, exposed concrete surfaces and concrete slabs.

PRECAUTIONS

- If hardening or petrification is detected after the bags are opened, the product should not be used.
- Do not add more or less water to the mixture than the amount of water indicated on the bag.
- Do not apply directly on metal, rubber, PVC, wood, cement based particle board surfaces. Consult technical service for solution.
- Do not apply on unset plastered and concrete surfaces (horizontal and vertical) before the curing period is completed.
- In floor applications such as terraces, wet areas, etc., a minimum slope of 3% should be given in the direction of the water drain along the entire terrace and surface.
- The open time of **VitrA Fix FLEX PORSELEN** is 30 minutes. However, in unsuitable ambient conditions (high temperature, dry air and strong wind) or on

surfaces with high absorbency, the open time is shortened. For this reason, a wetness test should be performed by touching the surface of the adhesive with fingers in case of premature drying and film formation. If the mortar is not smeared on the fingers, the application time of the adhesive has passed. It is not possible to bond by wetting the dried adhesive surface. In this case, the dried or filmed adhesive must be scraped off the surface and a new application must be made. Under low temperature and high humidity conditions, the drying time may be prolonged.

- Considering the thermal stress and mechanical loads that may occur on the floors; in areas with inter-seasonal temperature changes, depending on the heat-bearing systems and insulation applications, and in applications to be made in large areas, depending on the load and pedestrian traffic on the floor, necessary expansion joints should be left on the floor, suitable expansion profiles or **VitrA Fix PU Sealant** polyurethane sealant should be used for these joints.
- Tiled surfaces should be protected from direct sunlight, frost and rain for at least 24 hours.

SAFETY INSTRUCTIONS

- Avoid contact with skin and eyes as it contains cement. Contact areas should be washed with plenty of water.
- It is recommended to use rubber gloves during product application.
- The product should not be inhaled directly. Dust mask should be used when necessary.
- Please read the Material Safety Data Sheet (MSDS) for more detailed safety information.

Note: Technical values and application instructions are the results of our experience and tests carried out in accordance with international standards, valid at ambient conditions of 23 °C and 50% relative humidity.