# **FORTE BAK®**

### Serial Number 9517

# waterproof sealing compound for walking surface and insulation of balconies and terraces

## Features:

**FORTE BAK** is a two component sealing material with waterproofing properties, designed for full pedestrian isolation and repair of balconies, loggias and terraces. The loose component is made of inorganic components containing cement and additives. The liquid component contains special aqueous polymer dispersion. After drying, **FORTE BAK** has permanent waterproofing properties, high resistance to UV light and is weather resistant and has a non-slip features.

### Usage:

**FORTE BAK** waterproofing compound is designed for surface – surface repair, damaged surfaces, balconies, terraces and loggias from concrete, and unglazed ceramic tiles. **FORTE BAK** can be applied on damp and not fully mature concrete. This can also be used to fill cracks, close pores and repair damaged areas and more. **FORTE BAK** is the final walking surface finish. **FORTE BAK** can be used with the paint **ETERNAL stabil**, and can be applied on tiles. **FORTE BAK** is suitable for busy public areas and asphalt materials.

#### Appearance:

bulk component liquid component

### Technical data:

Mixing ratio (wt. parts) Processing time Walkable surface Full load operation Vol. weight Frost resistance Water resistance Tensile strength after 28 days Compressive strength Surface adhesion (concrete, ceramic tiles)

### Consumption:

- approximately 1,8 kg/m<sup>2</sup> for 1 mm thickness
- layer: about 1,0 to 1,5 mm, i.e. about 1,8 to 2,7 kg/m<sup>2</sup>
- final treatment: about 2,0 to 2,5 mm, i.e. about 3,6 to 4,5 kg/m<sup>2</sup>

### Shades:

gray

**Packaging:** 20 kg (Component A 15 kg loose, Component B 5 kg liquid) gray powder substance white liquid

3 (component A) : 1 (component B) 45 minutes (23 °C) 24 hours 7 days min. 1,6 g /cm<sup>3</sup> min. 25 cycles 0,0 l/m<sup>2</sup> per hour min. 1,5 MPa min. 20 MPa 1,0 MPa

# Storage:

Bulk folder – in a dry place in properly closed original containers from 5  $^{\circ}$ C to 30  $^{\circ}$ C. It must not freeze!

The liquid component – in original tightly closed containers from 5 °C to 25 °C. It must not freeze!

# Surface preparation:

The surface must be prepared as described below for FORTE BAK:

- smooth (tensile strength perpendicular to the surface at least 1,5 MPa.)
- cleaned from loose particles and grease (ETERNAL odmašťovač concentrate solution or other suitable detergent)
- repaired (repair damaged places, potholes, joints, etc.), materials which are suitable for repairing

   FORTE vyrovnávací hmota, FORTE opravný beton. The surface must be prepared for continuous application of coats.
- damp, (not wet) or primed with FORTE penetral
- highly polished surfaces are recommended to be roughened (blasting, grinding)

Priming of the surface is needed to increase its adhesion and to prevent the rapid exhaustion of water mass of **FORTE BAK** during application basis. At higher substrate temperatures and surroundings (max. 30 °C), it is recommended to consider a mass-wet primer to ensure an adequate supply of water needed for curing the applied material. The surface heated to a temperature higher than 30 °C can be cooled off with cold water and after drying the described procedure can be resumed (see processing).

# Repairing cracks and surface defects:

- cleaned surface is primed with undiluted FORTE penetral
- defects to a depth of 2–3 mm call for FORTE BAK prepared by mixing with 3 wt. parts bulk ingredients with 1 wt. part of the liquid component, larger defects masses require FORTE vyrovnávací hmota (2–30 mm) or FORTE opravný beton (2–50 mm)
- in case of expansion joints, cracks and space transitions between different parts of the structure, which can assume different behavior, use bridge **FORTE flexible sealing strip** applied on a dry surface
- the whole area is then treated with FORTE BAK (see processing)

# Application:

FORTE BAK is prepared by mixing 3 wt. parts of bulk ingredients with 1 wt. part of the liquid ingredients and homogenization of the mixture for 2 minutes with an electric drill mixer. After this time the mixture can be applied. FORTE BAK is applied on a consistent, repaired, cleaned and degreased surface, free of loose particles and soaked in primer FORTE penetral. The first layer is applied with a stainless-steel trowel with thickness about 1,0 to 1,5 mm. Consumption of the priming agent is 1,8–2,7 kg/m<sup>2</sup>. After 24 hours, the second layer is applied with a trowel. This needs to be done quickly. After closing of the applied surface layer, it is no longer possible to modify the surface appearance. To help achieve the look of solid surface finish without any trace of the impurities, FORTE BAK can be made ready for the top layer by adding water (experimentally up to 10 wt. % liquid ingredients). When adjusting the upper layer is also possible to use a roller, so-called hedgehog (e.g. TOPTRADE leveling roller 106 188  $\phi$  120 × 230). The total thickness of the waterproofing is walkable from 2,0 to 2,5 mm, the total consumption of 3,6 to 4,5 kg/m<sup>2</sup>. To apply the putty **FORTE** BAK it is necessary to keep temperatures between ambient and surface from 5 °C to 30 °C. At higher temperatures there is a danger of the rapid drying of surface materials applied and subsequent cracking. Unused material should be protected for at least 24 hours from rain, drying winds and intense direct sunlight. Tools should be washed with water after usage. Detailed work flow incl. technical solution details are stated in the Application manual - Waterproofing.

## Surface:

When waterproofing, the walking surface may be inconsistent in color due to the raw materials and varying thicknesses of **FORTE BAK**. For this reason, we recommend using **FORTE BAK** and then (but not earlier than 14 days) paint with **ETERNAL stabil** in the selected color. The coating increases the level of aesthetic qualities of the balcony or terrace as well as decreases the wear of the resistance surface. Waterproofing can be done on outside breathable PVC flooring for terraces and balconies, it is also possible to lay tiles. Manufacturer recommends that work with **FORTE BAK** be carried out by people who are trained for it. Trained personnel are certified by the manufacturer, who entitles them to the application of this material. The acquired certificate also allows free use of advisory services and technical assessment of the state of objects in large investment projects.

### Certification:

TZÚS Prague Authorized Person No. 204

## Waste disposal:

Described on safety data sheet of the product.

### Safety and hygiene at work:

**Component A:** Causes serious eye damage. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Avoid breathing dust. Wear protective gloves, protective clothing, eye protection, face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and possible. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Dispose of contents/container by incineration in an incinerator or disposal of hazardous waste in landfills for hazardous waste. Other details are on the Safety data sheet of the product.

**Component B:** The product is not a health hazard. The product is a treated article, contains a biocidal product. It contains a reaction mixture: CMIT/MIT (3:1) [Index number: 613-167-00-5]. May cause an allergic reaction. It is necessary to use suitable protective clothing, gloves and goggles. Wash skin with soap and water, in case of contact with eyes, flush immediately with water. If irritation does not stop, seek medical help. If accidentally swallowed, seek medical help. Do not induce vomiting. Other details are on the Safety data sheet of the product.