FESTFLOOR

TECHNICAL DATA SHEET

FESTFLOOR TITAN

Decorative, coloured micro mortar for indoor use



DESCRIPTION

FESTFLOOR TITAN is an epoxy system for creating seamless surfaces on existing substrates such as cement screed, anhydrite screed, ceramic tiles, OSB boards, etc. Thanks to a formula consisting of two components - a coloured compound and a hardener - FESTFLOOR TITAN is the ideal solution for areas exposed to intensive use.

WHERE TO USE?

- floors in houses and apartments;
- floors in offices, catering buildings, warehouses, public utility rooms;
- staircase finishing;
- floors in bathrooms;
- walls;
- cladding for kitchen countertops and other furniture;
- cladding for doors and columns;

PROPERTIES

- high hardness
- very high adhesion to many types of substrates
- system thickness - from 1.5 to 2 mm
- high abrasion resistance
- high thermal conductivity
- water resistance
- easy daily maintenance
- unlimited colour palette
- versatile use

PACKAGING

- 5.8 kg set - 5 kg FESTFLOOR TITAN and 0.8 kg TITAN HARDENER
- 7.25 kg set - 6.25 kg FESTFLOOR TITAN and 1 kg TITAN HARDENER
- 11.6 kg set - 10 kg FESTFLOOR TITAN and 1.6 kg TITAN HARDENER

CLEANING OF TOOLS

Clean equipment and tools with water immediately after use. Remove hardened material mechanically.

SYSTEM COMPONENTS

Basic system:
- FEST Grunt - priming
- Two-component epoxy decorative compound: FESTFLOOR TITAN and TITAN HARDENER
- Sealer of choice: PU FEST 2K CARBON, water-based, two-component polyurethane sealer, or PU FEST TURBO, two-component solvent-based polyurethane sealer, used to protect the finished surface.

TECHNICAL DATA

- Application temperature: 15°C-25°C
- Service temperature: up to 50°C
- Substrate moisture: <3%
- Drying time: sanding recommended no earlier than 12 hours and no later than 3 days. Full cure after 7-14 days.
- Open time: 45 minutes after mixing the components
- Consumption: 0.4-0.8 kg/m²
- System thickness: from 1.5 to 2 mm
- Adhesion to substrate: above 2 MPa
- Compressive strength: above 35 MPa

STORAGE

Products included in the FESTFLOOR TITAN system can be stored for 6 months in original sealed packaging and in a dry place at temperatures from +10°C to +25°C, away from heat sources. Protect from frost.

FLOOR SURFACE PREPARATION

The substrate must be stable and load-bearing. In the case of cement screeds, the concrete class of the substrate must be at least C16/20 (B20) with a minimum pull-off strength of 1 N/mm², tested using the pull-off method. The substrate moisture must not exceed 3%. In the case of anhydrite screeds, the residual moisture must not exceed 0.5% CM for screeds without underfloor heating and 0.3% CM for screeds with underfloor heating.
In wet areas, waterproofing tapes must be applied at wall joints, wall-to-floor joints, and around the drain. The tapes must be bonded in and covered with FESTFLOOR TITAN.
Before starting work, the underfloor heating must be switched on and tested to the highest temperatures used, and no later than 72 hours before the start of application of the FESTFLOOR TITAN system the underfloor heating must be switched off. Weak substrates must be strengthened. To protect a cement screed against crack transfer, it is recommended to use TITAN BASE together with a fibermesh. Cement laitance, other coatings, and any contamination from, for example, gypsum, oils, asphalt, etc. must be removed by grinding or blasting and vacuuming. If the substrate is uneven or non-uniform, it must be ground down or levelled using self-levelling screeds or epoxy screed. Voids must be filled with epoxy mortar or repair mortars. The concrete substrate must be primed with FEST Grunt (1 or 2 coats, as needed) and left to dry for approx. 2-4 hours.

WALL SURFACE PREPARATION

The surface should be smoothed, vacuumed free of all dust and dirt. In the case of ceramic and porcelain tiles, the substrate should be cleaned of all dirt and stains by grinding with a diamond disc (to matt the glazed layer / grind off the glaze). Any damage and grout joints should be filled. Substrate moisture must not exceed 3%.
In wet areas, waterproofing tapes should be applied at the joints of walls, walls and floors, and around the drain. The tapes should be embedded and covered with FESTFLOOR TITAN.
Apply a priming coat of FEST Grunt to the prepared surface using a roller (1 or 2 coats, as needed) and wait approx. 2-4 hours for it to dry.

MIXTURE PREPARATION

The epoxy decorative layer is supplied in two components: a finishing, coloured mass and a hardener, which after combining form an easy-to-apply floor mass. The suggested mixing ratio of the components is 100:16 (one hundred parts by weight of component A - the coloured mass - and 16 parts by weight of component B - the hardener). To adjust the consistency, 1 to 4% water may be added relative to the weight of both components.
For precise measuring of the components, all components must be weighed on precision electronic scales. Application temperature 15°C-25°C. Application at higher temperatures will significantly shorten the setting time. Application at lower temperatures may lead to insufficient curing of the material.
Before starting work, make sure the room is well lit. Drafts must be avoided. Other construction work that generates dust and other contaminants that may spread should be stopped.
The hardener should be stored in a cool, shaded place before and during application. Pour the hardener (component B) into the coloured mass (component A) and mix using a cage stirrer at low speed. Mix everything until a homogeneous mass is obtained. After mixing, application of the microcement on the previously prepared substrate may begin.

APPLICATION

Before starting the application, prepare an amount of compound sufficient to apply the first coat over the entire surface. Spread the compound over the entire surface using trowels and other metal tools to a thickness of no more than 1 mm. Apply using quick, energetic movements in different directions depending on the expected effect. Apply subsequent portions of the same layer using the wet-on-wet method, moving from the windows towards the exit. Do not stop work during application. After approximately 18-24 hours, when the material has fully cured and is dry, the floor should be sanded with a single-disc sander (the so-called buffer) fitted with a 50-grit diamond pad (depending on the desired effect). Hard-to-reach areas (corners, along walls, etc.) should be sanded with handheld eccentric sanders. Vacuum the entire surface. Then prepare the material needed for the second coat and proceed with its application, following the same procedure as for the first coat. During the work, it is recommended to use disposable shoe covers to avoid soiling the floor. After the last coat has dried, sand it with a single-disc sander (the so-called buffer) fitted with a 50-grit diamond pad, then finish with an 80-120 grit abrasive fibermesh (depending on the desired effect). After that, leave the floor for 18-24 hours until it is completely dry. After that time, impregnation can begin.

SEALING

The surface must be perfectly cured, load-bearing, dry, clean and free from dust, wax and oils.

PU FEST 2K CARBON sealer:
The surface must be perfectly cured, load-bearing, dry, clean and free from dust, wax and oils. Shake the PU FEST 2K CARBON sealer container (component A) well. Add component B according to the marking on the packaging. Component A and component B must be mixed in a ratio of 100:8 (100 parts by weight of component A: 8 parts by weight of component B). Apply using a high-quality roller with a nap length of 7-9 mm. The second coat of PU FEST 2K CARBON sealer can be applied after 2 hours without sanding or after 24 h after sanding the surface with 220-grit sandpaper. Do not apply PU FEST 2K CARBON sealer during the hottest hours of the day, when weather conditions are not favourable, or on damp substrates.

PU FEST TURBO sealer:
Shake the PU FEST Turbo polyurethane sealer container well. Add the hardener according to the marking on the packaging. Pour the hardener in a ratio of 2:1 (2 parts by weight of component A: 1 part by weight of component B) into the sealer container and mix thoroughly. Leave the open container for approx. 10 min., then mix again. Apply using a high-quality roller with a nap length of min. 6 mm. After 24 hours from application and after sanding the surface with 220-grit sandpaper, a second coat of PU FEST Turbo sealer can be applied. Do not apply PU FEST Turbo sealer during the hottest hours of the day, when weather conditions are not favourable, or on damp substrates.

- The floor can be used after 12 hours.
- Water resistance after 7 days.
- Full curing after 7-14 days.
- The usage guidelines provided apply to conditions of 22°C and 50% air humidity.
- Lower temperature and higher humidity may extend the drying time of the products.

DAILY FLOOR MAINTENANCE

FESTFLOOR TITAN floors are decorative floors, and therefore special attention should be paid to their use and maintenance:
- use water for daily cleaning,
- under furniture - chairs, tables, etc. - we recommend placing felt pads to distribute the load evenly and limit the formation of dents,
- spilled substances and other dirt should be removed immediately after soiling, especially during the first period of floor use,
- remove more difficult dirt using FEST Cleaner or POWER-FEST,
- do not use products with a low pH or those that may cause discolouration,
- before using a new cleaning product, it is recommended to test it in an inconspicuous place.

More information can be found in the instructions for use of decorative microcement coatings by Festfloor.

SAFETY AND HEALTH

The product is intended for professionals. Before starting work, please familiarise yourself with the Safety Data Sheets of the components included in the system, available on request. Avoid contact with skin, mucous membranes, eyes, etc. In the event of accidental contact, wash with soap and water and seek medical advice. Measures should be taken to prevent dusting or splashing with the mortar. Keep out of reach of children. It is recommended to use masks and gloves. In enclosed spaces, ensure good ventilation and avoid inhaling dust.

CONSUMPTION

No.	LAYER	MATERIAL	CONSUMPTION
1	Existing concrete substrate	**-**	-
2	Primer layer [second layer optional]	**FEST Grunt**	Approx. 0.1-0.3 kg/m²
3a	Base coat [optional]	**TITAN BASE**	Approx. 1-1.2 kg/m²
4	Fibermesh [optional]	**SUPER THIN Fibermesh**	-
3b	Base coat [optional]	**TITAN BASE**	Approx. 0.8-1.0 kg/m²
5a	I layer of FESTFLOOR TITAN microcement	**FESTFLOOR TITAN**	Approx. 0.4-0.8 kg/m²
5b	II layer of FESTFLOOR TITAN microcement	**FESTFLOOR TITAN**	Approx. 0.4-0.8 kg/m²
6	Impregnation - first coat of sealer	**PU FEST 2K CARBON,** **PU FEST Turbo**	Carbon: 0.07-0.15 kg/m² Turbo: 0.1-0.15 kg/m²
7	Impregnation - second coat of sealer	**PU FEST 2K CARBON,** **PU FEST Turbo**	Carbon: 0.07-0.15 kg/m² Turbo: 0.1-0.15 kg/m²

FLOOR CROSS SECTION

