

TECHNICAL DATA SHEET

HYDROFEST

**Water-resistant microcement,
for indoor use**



DESCRIPTION

HydroFest is a microcement system that provides water resistance and durability on indoor surfaces. Thanks to its unique composition, HydroFest is ideal for application in areas exposed to water and moisture, such as bathrooms, showers and other wet areas. This system is an excellent solution for those looking for aesthetic, durable and easy-to-maintain surfaces.

WHERE TO USE?

- Bathrooms, showers - as a water-resistant finish for walls and floors
- Kitchens - as a water-resistant material for walls, a kitchen splashback, a countertop and flooring
- Furniture, countertops - exceptional durability and aesthetics

PROPERTIES

- Water resistance
- Very high adhesion to many types of substrates
- UV resistance
- High abrasion resistance
- Available in a wide range of colours
- System thickness: from 1 to 2 mm
- Easy daily maintenance
- Unlimited colour palette

PACKAGING

- 5 kg,
- 10 kg,
- 15 kg,
- 20 kg.

CLEANING OF TOOLS

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

SYSTEM COMPONENTS

Basic system for indoor use:

- FEST Grunt - priming
- HydroFest microcement
- Impregnation - PU FEST 2K / PU FEST 2K CARBON / PU FEST Turbo, products used to protect the finished surface.

APPLICATION CONDITIONS

- Air and substrate temperature: 15°C-25°C
- Relative air humidity: up to 60%
- Substrate moisture: up to 3%

TECHNICAL DATA

- Application temperature: 15°C-25°C
- System thickness: from 1.5 to 2 mm
- Adhesion to substrate: >1.5 N/mm², UNE-UN 13892-8 test
- Density: 1.75 kg/dm³
- Pot life: 6 months in a closed original package

STORAGE

Products included in the HydroFest system should be stored for 6 months in their original sealed packaging and in a dry place at temperatures from 10°C to 25°C, away from heat sources. Protect from frost and direct sunlight.

FLOOR SURFACE PREPARATION

The substrate must be stable and load-bearing. In the case of cement screeds, the substrate concrete class must be at least C16/20 (B20), with a minimum pull-off bond strength tested by the pull-off method of 1 N/mm². 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 used at wall joints, wall-to-floor joints, and around the drain. The tapes must be bonded in and covered with HydroFest compound.

Before starting work, underfloor heating must be switched on and tested at the highest temperatures used; no later than 72 hours before application of the HydroFest system, the underfloor heating must be switched off. In the case of weak substrates, they must be reinforced. To protect a cement screed against crack transfer, it is recommended to use FESTFLOOR Base together with fibermesh. Cement laitance, other coatings, and any contamination from e.g. plasters, oils, asphalts, etc. must be removed by grinding or shot blasting and vacuuming. In the case of an uneven or non-uniform substrate, it should be ground down or levelled using self-levelling screeds or epoxy screed. Any missing areas should 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 and 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 dull the glazed layer / grind off the glaze). Defects and joints should be filled. The substrate moisture must not exceed 3%. In wet areas, waterproofing tapes should be applied at the joints of walls, walls with the floor, and around the drain. The tapes should be glued in and covered with HydroFest compound.

Apply a priming layer of FEST Grunt to the prepared surface with a roller (1 or 2 coats, as needed) and wait approx. 2-4 hours for it to dry. In the case of substrates other than concrete, such as OSB boards or tiles, FEST Kontakt should be used together with Fibermesh to strengthen the substrate. Spread evenly with a trowel. Wait 4-6 hours between applying successive layers.

MIXTURE PREPARATION

The HydroFest product is supplied in ready-to-use packaging. If necessary, the product can be thinned by adding 1-3% water. After opening, the product should be mixed with a low-speed drill. Shades may vary slightly between production batches, therefore microcement from different packages should be poured into one larger container and mixed to even out the shades. Before starting work, ensure good lighting in the room. Drafts should be avoided. Other work on the construction site that generates dust and other contaminants that may spread should be suspended. Observe the recommended application temperature.

APPLICATION

Before starting application, prepare enough material to complete the first layer over the entire surface. Spread the material 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 desired effect. Apply subsequent batches of material using the wet-on-wet method, moving from the windows towards the exit. Do not interrupt the work while applying the material. After about 4 hours, when the material has fully set and is dry, sand the floor with a single-disc sander (so-called polisher) using 60-120 grit sandpaper (depending on the desired effect). Hard-to-reach areas (corners, along walls, etc.) should be sanded with hand-held random orbital sanders. Vacuum the entire surface. Then prepare the material needed for the second layer and proceed with its application, following the same procedure as for the first layer. During the work, the use of plastic shoe covers is recommended to avoid soiling the floor. After the final layer has dried, sand it with a single-disc sander (so-called polisher) using 80 grit sandpaper and higher (depending on the desired effect). After completing the final layer, leave the floor for 4-6 hours to dry completely. After this time, you can proceed with impregnation.

SEALING

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

- **PU FEST 2K:** Shake the container with the PU FEST 2K polyurethane sealer well. Add the hardener according to the marking on the packaging. Mix component A with component B in a 5:1 ratio (5 parts by weight of component A; 1 part by weight of component B). Then add 10% water relative to the total volume of components A and B and mix thoroughly. Leave the open container for approx. 10 min., then mix again. Apply with a high-quality roller with an 8 mm nap. The second coat of PU FEST 2K sealer can be applied after 4 hours without sanding, or after 24 h after sanding the surface with 220-grit sandpaper.
 - **PU FEST 2K CARBON:** Shake component A of the sealer thoroughly or mix it with a drill and mixing paddle. Then mix component A with component B in a 100:8 ratio (100 parts by weight of component A; 8 parts by weight of component B). Mix vigorously with a drill and paddle until a homogeneous mass is obtained, then leave for 3 minutes. After that time, you can proceed with sealing. Apply with a high-quality roller with a 7-9 mm nap. 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 use PU FEST 2K CARBON sealer during the hottest hours of the day, when weather conditions are unfavorable, or on damp substrates.
 - **PU FEST TURBO:** Shake the container with the PU FEST Turbo polyurethane sealer well. Add the hardener according to the marking on the packaging. Pour the hardener in a 2:1 ratio into the container with the sealer and mix thoroughly. Leave the open container for approx. 10 min., then mix again. Apply with a high-quality roller with a minimum 6 mm nap. After 24 hours from application and after sanding the surface with 220-grit sandpaper, it is possible to apply a second coat of PU FEST Turbo sealer. Before use, read the technical sheet of the sealer.
- The surface can be used after 12 hours.
 - Full curing after 7 days.
 - Water resistance after 7 days.
 - High humidity, low temperature, and poor ventilation may extend the stated times.

DAILY FLOOR MAINTENANCE

HydroFest surfaces are decorative systems and therefore special attention should be paid to their use and care. Use water for daily cleaning. Under furniture, chairs, tables, etc., we recommend placing felt pads to distribute the load evenly and reduce the formation of dents. Spilled substances and other dirt should be removed immediately after soiling, especially during the initial period of floor use. Remove more difficult stains with FEST Cleaner or POWER-FEST. Do not use products with a low pH or products that may cause discoloration. Before using a new cleaning product, it is recommended to test it in an inconspicuous area. More information can be found in the instructions for use of Festfloor decorative microcement coatings.

SAFETY AND HEALTH

The product is intended for professionals. Before starting work, familiarize yourself with the technical data sheets of the components that make up the system, available from the manufacturer. 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. The use of masks and gloves is recommended. In enclosed rooms, ensure good ventilation and avoid inhaling dust.

CONSUMPTION

No.	LAYER	MATERIAL	CONSUMPTION
1	Existing concrete substrate	-	-
2	Priming layer [second coat optional]	FEST Primer	Approx. 0.1-0.3 kg/m ²
3a	Base coat [optional]	Festfloor Base	Approx. 1-1.2 kg/m ²
4	Fibermesh [optional]	Fibermesh	-
3b	Base coat [optional]	Festfloor Base	Approx. 0.8-1.0 kg/m ²
5a	1st layer of HYDROFEST microcement	HYDROFEST	Approx. 0.5-0.7 kg/m ²
5b	2nd layer of HYDROFEST microcement	HYDROFEST	Approx. 0.5-0.7 kg/m ²
6	Impregnation – first coat of sealer	PU FEST 2K CARBON, PU FEST 2K, PU FEST Turbo	Carbon: 0.07-0.15 kg / m ² PU FEST 2K: 0.1-0.15 kg / m ² Turbo: 0.1-0.15 kg / m ²
7	Impregnation – second coat of sealer	PU FEST 2K CARBON, PU FEST 2K, PU FEST Turbo	Carbon: 0.07-0.15 kg / m ² PU FEST 2K: 0.1-0.15 kg / m ² Turbo: 0.1-0.15 kg / m ²

FLOOR CROSS SECTION

