futubeton
DECORATIVE FLOORS AND WALLS

PRODUCT TECHNICAL SHEET: **FUTUMIKRO TWO BF (BASE/FINISH)**

Description of the product	**FUTUMIKRO TWO BF** is a product used to create a thin-layer mineral floor about 2-3 mm thick (**FUTUMICROTWO FLOORING SYSTEM)** containing high-performance cement, special polymer additives and specialized fillers. Creates a durable, abrasion-resistant and dust-proof smooth floor. During processing, a surface with a heterogeneous individual result with shaded elements can be obtained. The use of liquid pigment pastes gives an unlimited colour palette.
Application	· For even, smooth and decorative flooring. · For decorative coatings on walls or gypsum plasterboards, · Can be used in wet areas such as bathrooms or kitchens. · For use in shopping centres, housing, apartments, exhibition rooms, shops, airports, public utility buildings, etc.. · For indoor use. · For use in flooring.

Technical characteristics	
Curing time (at 20 °C)	
Foot traffic after 24 hours	Full load 7 days after substrate impregnation
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The floor is not resistant to metal wheel loads or acid-based materials	
Additional requirements	
In addition, the product complies with the requirements of EN 13813:2002	
Application	
Preparation of the substrate	Concrete floors should be strong, dry (with a moisture content of up to 4 % and in the case of moisture content of 5-15 % it is recommended to use Siconofloor GW-E primer), clean, slightly rough, with open pores, manufactured according to construction standards. All impurities such as: Cement milk, dust, oil, grease marks, fragments that are loose, unbound or poorly attached to the substrate, and old coatings should be removed. The average tensile strength of the concrete, measured by the pull-off method, should not be less than 1.5 MPa. The mature concrete must be ground. The required time for maturing of concrete, cement, and repair materials must be observed. Uneven substrates can cause variations in the thickness of the FUTU MICRO TWO BF coating, which will directly affect the properties of the entire floor. The FUTU MICRO TWO BF decorative floor can be constructed no earlier than 24 hours after the base layer has been made.
Application conditions	
The substrate temperature must be min. 3°C from the dew-point temperature.	
Minimum ambient temperature +10 °C	Minimum substrate temperature +10 °C
Maximum substrate and ambient temperature +25 °C	Maximum relative humidity 75 %
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Maximum substrate and ambient temperature +25 °C	Maximum relative humidity 75 %
The stated ambient and substrate temperature should be maintained at least 5 days before and after the start of the work. Protect the surface from excessive moisture loss due to e.g. high temperatures, drafts, direct sunlight, etc. a minimum of 5 days before starting the application of the FUTU MICRO TWO floor, the floor heating must be switched off.	
Product data FUTU MICRO TWO	
Form	Component A Dry mortar Component B Liquid Polymer
Packaging	17.5 kg sets (2-component product-12.5kg components) Loose material packed in a bucket+ 5L, polymer B-comp. B in a canister)
Storage	A period of 9 months in factory-sealed packages In a cool and dry place (5 °C to 30 °C)
Control	According to EN 13813

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Application method consumption - system smooth	The concrete must be ground according to the instructions in the technical sheet for Siconofloor GF-E or GW-E. Properly mixed material should be spread on a concrete substrate in one or two layers using a roller or trowel. Then, fill the area evenly with 0.4-0.8 mm fraction at approximately 1.5 kg/m2 until it is completely filled. After hardening, gently grind and vacuum. The practical yield (consumption) of the priming resin depends on, inter alia, the absorbency of the substrate, the conditions prevailing during application, application technique, shape and roughness of the surface to be protected, and application losses. **Preparation of the decorative mass:** FUTU MICRO TWP BF is supplied as two components (Component A – powder, component B – liquid polymer). Before use, thoroughly mix the contents of component A by stirring and component B by shaking. Carefully measure the amount of component A into component B and the pigment (FUTU COLOR) required to complete the given surface with a reserve of approximately 10 % before starting the work. Liquid pigment paste should also be stirred. Liquid pigment (FUTU COLOR) is always added to component B (polymer). Fill the coloured liquid with the measured dry mass (component A). Mix the ingredients with a basket mixer. The mixing process should take approximately 2-3 minutes until a homogeneous mixture is obtained. The application FUTU MICRO TWO BF is a manual application with steel trowels of different widths. The material should be applied in rapid, powerful movements, either in a circular or longitudinal direction, depending on the desired visual effect. Apply a layer of FUTU MICRO TWO BF – 1.0-1.2 kg/m2 to a polished, completely dust-free substrate. Excess material being left between the trowel movements will leave a visible sign of streaking. It can be partially or completely ground the next day. During operation, avoid so-called "technological breaks", especially in the central part of the room. Sanding of the structural layer of FUTU MICRO TWO BF is performed after it has completely dried. The material must be sanded with 60 and 80 grade sandpaper. The final result of the entire floor depends on the sanding of the first layer. Partial retention of the so-called abrasions obtained from excess material during application will be visible after application of the finishing layer and re-sanding. The application of FUTU MICRO TWO BF finishing mass should be carried out after the first structural layer has completely dried out. Before use, the contents of the package of component A must be mixed thoroughly by means of a stirrer and component B must be shaken. To the substrate, which has been ground, cleaned and washed with a wet mop, apply a layer of FUTU MICRO TWO BF, at a consumption of approx. 0.5-0.7 kg/m2. Compared to the construction layer, the finishing mass is much smoother and easier. The construction layer should be covered completely. Any visible abrasions left will be directly reflected on the floor. Excess material being left between the trowel movements will leave a visible sign of streaking. It can be partially or completely ground the next day. After the finishing layer is dry, the surface must be gently sanded with a single disc sander using an appropriate gradation of paper depending on the desired effect. All contraction and expansion gaps in the substrate should be reconstructed within 24 hours from the end of the trowelling. The reconstructed gaps should be filled with a SICON KD 240 expansion mass. Varnishing should be carried out 24 hours after the FUTU MICRO TWO BF floor has hardened. An alternative option to FUTU PU varnish is the painting of the floor surface with water-soluble Siconofloor PU Satin or PU Matin.
Comments and recommendations	
Health and safety conditions	The materials included in the system should be used by trained teams of contractors. Use eye protection, respiratory protection and skin protection during work. When working in confined or enclosed spaces, and during drying, adequate ventilation must be provided. Detailed information on hazards is contained in the Product Safety Data Sheets of particular products available on request. ***After complete hardening, the coating is neutral to health and the environment.***
Conditions for storage of components of the system	The products in the system and their components in an uncured state should not enter sewage, ground or groundwater. It is essential to harden the residual materials. Hardened materials must be disposed of according to local regulations.
Technical Support	It is recommended that the manufacturer's technical adviser be consulted before using the system in order to ensure that the material and/or system is used correctly.
Final remarks	These specifications are based on trials and laboratory tests. FUTU MICRO TWO BF can be used in a wet zone, but is not suitable for surfaces permanently exposed to water. Practical results of measurements may differ from those provided, due to circumstances beyond the control of Sicon. Sp. k.

	. All information is given in good faith and takes into account current knowledge and experience. The manufacturer indicates that the colour of the finished floor may vary. This phenomenon does not indicate a defect in the floor or reduced technical parameters. Possible discolouration may occur due to the way the work and drying are performed. It is recommended that particular areas be covered from batches of material from one production run. The product documentation is general information, appropriate under certain conditions. It is recommended that the purchaser carry out an application test, and performs appropriate checking measurements, under specific construction environmental conditions prior to large-scale application of the product. The flooring in these areas should be assessed and accepted by the investor/principal. The supplier has no influence on the types of application, application methods or execution conditions on the site, therefore these instructions may not be held responsible for the end result of the application. Recommendations of Sicon's associates that deviate from the information in the technical sheet are mandatory only if they are confirmed in writing. Release Date: 01.03.2021 All previously issued sheets of the product the system FUTUMIKRO TWO BF shall expire on the date of issue of this sheet.