

SIBEXTREME AF MICRO

High Performance Micro-Terrazzo

AT GLANCE

Micro terrazzo

Natural look

Wide color range

Matte and polished finish

Indoor use

Joint free flooring

CE mark

VOC and APEO-free

No Shrinkage

High compression resistance

High flexion resistance

High abrasion resistance

Manufacturer

SIB, Sociedade Industrial
De Britagem De Pedra, LDA



DESCRIPTION

SIBEXTREME AF MICRO is an advanced, professional-grade, two-component screed that can be used to create low thickness floors with small aggregate exposure up to 2 mm (micro terrazzo look). It is based on selected aggregates and special cement to create a unique combination of hardness, flexibility, wear resistance and no shrinkage which allows joint-free floors.

SIBEXTREME AF MICRO is easy to screed and level and maintains workability between 30 to 60 minutes, giving the applicator time to carry out the correct application.

SIBEXTREME AF MICRO can be grinded and polished to the desired appearance.

FIELDS OF APPLICATION:

SIBEXTREME AF MICRO can be used in indoor spaces: new and renovation projects, homes, building entrance halls, museums, cinemas, exhibition halls, offices, general stores, food industry, restaurants, car garages, hotels, hospitals and industrial facilities.

SIBEXTREME AF MICRO is not recommended for wet areas, in locations subjected to freezing temperatures or where de-icing salts will be used and when the support has significant unevenness.

TECHNICAL PROPERTIES AND CHARACTERISTICS

Composition	Special cements and aggregates
Mixing ration	SIBEXTREME AF MICRO - 20 Kg SIBEXTREME COMP B S28 - 4 to 4,4 kg (20 to 22% in weight) PROSIB AT 900 - 600 ml
Consumption	SIBEXTREME AF MICRO - 2,1 Kg/m ² per mm of thickness
Density (SIBEXTREME COMP B S28)	1,22 ± 0,02
Density (PROSIB AT 900)	1,2
Application thickness	5 - 8 mm
Minimum thickness (after grinding)	4 mm
Opening time (22°C / 71,6 °F)	30 - 60 minutes
Shrinkage (EN 13454-2)	< 800 µm/m
Compressive strength (EN 13892-2)	40 - 80 MPa (N/mm ²) * - 28 days
Flexural strength (EN 13892-2)	12 - 15 MPa (N/mm ²) * - 28 days
Abrasion resistance (EN 13892-4)	AR0,5 *
Reaction to fire (EN 13501-1)	A1 fl
Drying time	Light traffic - 2 days Heavy traffic - 7 days

*Technical results may vary depending on site conditions, age of the material, aggregates, pigments used and mixing rate.

Ambient temperature, support and product: 5 to 30°C (41 to 86°F) – Outside of this range, the application, aesthetic or mechanical properties of the product, as well as its adhesion can be altered.

SUPPORT PREPARATION

Before application, ensure that the surface is stable and has a tensile strength of at least 1.5 MPa (Pull-off test).

The support must be dry and free from any trace of pollution and humidity (< 4,5%). Old supports with low adhesion must be removed. In any case, a test must be carried out to validate the compatibility of the products.

If the substrate has a significant unevenness (max. 2/3 mm per 3 m), it must be leveled by applying self-leveling compounds or by mechanical work with diamonds.

Mechanical preparation of the surface is recommended, using a diamond, milled, sandblasted or sanded mechanical process. Cracks, holes and other deeper defects must be filled and repaired.

Apply SIBAQUAPOX or SIBPRIMER E-100 primer saturated with broadcast sand. Let it dry for up to 24 hours, depending on atmospheric conditions. After drying, the surface must be vacuumed to remove loose sand. If you have any doubts regarding the primer, consult the Technical Department.

SIBECOPRIMER A6 is green alternative to epoxy primers. SIBECOPRIMER A6 is a green water-based product that works together with a cement powder that is brushed onto the surface. Consult SIBECOPRIMER A6 technical data sheet.

Foam, special tapes or other flexible separators should be used to avoid direct contact with the product and walls, columns, tubes or other objects going through the floor.

Surface and ambient temperatures should be between 10°C to 32°C (50°F to 90°F).

NOTE: turn off heated floors (when turning back on do it gradually), watch out for wind, block sources of natural light (may cause fast drying), close access to all people and animals (cats, dogs, etc...).

MIXING

Prepare the work area to ensure continuous application without joints. A more uniform application will be achieved if the product is applied continuously.

Make sure that the SIBEXTREME COMP B S28 and PROSIB AT 900 are well stirred before use.

Prepare the material with a traditional concrete mixer (avoid mixers that create air bubbles in the product). First add the required amount of liquid (SIBEXTREME COMP B S28) and then add SIBEXTREME AF MICRO and PROSIB AT 900 (consult the technical data sheet for more information) while mixing. The material must be mixed for 2 to 3 minutes, until the mixture is free of lumps. Always repeat the same process for each mixture.

PROSIB AT 900 should never be added to, and mixed with SIBEXTREME COMP B S28. It should be added directly to the mixture of SIBEXTREME products, in a 3-component system (SIBEXTREME AF MICRO + SIBEXTREME COMP B S28 + PROSIB AT 900).

Additional liquid can be added if necessary. For more uniform results, use bags from the same batch and the same mixing times.

It is recommended the use of horizontal mixers or traditional concrete mixers. Hippo mixers can also be used. Make a test and ensure that the material mixes well. Avoid mixers that entrap large amounts of air.

During application, and whenever the mixture remains in the container for more than 5 minutes, remix a little before applying.

A test sample must be made before application to adjust the correct amount of SIBEXTREME COMP B S28 to be used in the mixture and test workability and drying time. Wind, temperature, air and substrate humidity influence the product's workability and drying time. There may also be slight variations in the mixing ratio depending on the color and pigments used.

Do not add water, sand, stones, lime, cement, gypsum or other products to the SIBEXTREME AF MICRO mix.

APPLICATION

The product can be applied manually. Pour SIBEXTREME AF MICRO and spread the product with a leveling spatula. To guarantee a minimum thickness of 4 mm (after grinding), set the spatula between 5 to 8 mm. After levelling, use a stainless steel smoothing spatula to remove the marks left by the levelling spatula. After, level and remove the air bubbles with a spike roller. Finally, finish with a smoothing spatula.

Use spike shoes to walk over the product.

A test sample must be carried out, to test the entire process and avoid making mistakes on site.

If the base does not have joints, SIBEXTREME AF MICRO can be applied without retraction joints. Joints in existing floors must be respected in the new application or special precautions must be taken. If joints are cut into the floor, they must be filled to prevent water from infiltrating the product, which could cause efflorescence or discoloration of the joints.

SIBEXTREME AF MICRO needs to breathe and should not be covered with non-permeable materials during or after curing. The product does not require traditional curing. Do not add any curing products or plastics, usually used to cure traditional concrete. Low temperatures can prolong drying time and high temperatures can speed up curing time. The floor should not be walked on during the curing process.

POLISHING

SIBEXTREME AF MICRO can be grinded and polished after 24 to 72 hours at normal conditions. The grinding and polishing process is fast (3 to 4 steps) and doesn't require the use of industrial/heavy machinery. Can be polished with mono-disc or rotary washers with diamonds.

To achieve the right appearance and correct sealing of the floor you need to grind until the surface film created during the curing is removed.

Polishing any coating requires a high degree of experience and skill. SIBEXTREME AF MICRO is polished with diamond tools. Several polishing steps are required to obtain a polished surface. Consult the technical department to know the polishing protocol.

The grinding process can create micropores in the surface. Fill the pores with PROSIB PF 100 during the polishing process. Check the Technical data sheet for more information.

SEALING

SIBEXTREME AF MICRO must be sealed depending on usage. Consult the technical department for more information on the appropriate sealing system for each situation.

PRODUCTION, PACKAGING, STORAGE AND EXPIRY DATE:

SIBEXTREME AF MICRO is available in:

- SIBEXTREME AF MICRO – 20 kg (44,1 lbs) bags.
- SIBEXTREME COMP B S28 (liquid) – 20 lt buckets or 1000 lt IBC's.

The product can be stored in its original packaging for 12 months in a dry place at a controlled temperature (not below 0°C/32°F). Recommended storage is between 10 and 25°C (50°F and 77°F).

COMPLEMENTARY INFORMATION:

Support preparation is essential for a good result. The flatter and more level the support, the better the result.

If there are non-homogeneous surfaces, with differences in absorption, it is recommended to apply a coat of epoxy primer (SIBAQUAPOX) with sand to obtain a more uniform application. It is necessary to work with the same batch number (see label).

SIBEXTREME AF MICRO can cause corrosion in direct contact with some metals. When decorative profiles are used, apply Epoxy primer and sand on the sides of the profiles that are in direct contact with the product.

Note that this product is a mineral product. The colors of floors made with SIBEXTREME AF MICRO are not always uniform, a typical characteristic of this type of product. In addition to the inherent nature of this type of product, differences in tones and marks can also be caused by the way the product is applied, differences in temperature and substrate. To ensure a uniform appearance, it must be applied continuously without interruption. Attention to slight color differences due to the use of different production batches. Ensure that the application can be carried out with the same production batch.

Product colors are not fully compatible with the RAL code and therefore should only be considered as estimated ratings. The final color of the product must be validated by physical sample before starting the application. Always perform a test sample to see if the requested color matches the color supplied. SIB is not responsible for manufacturing errors after application.

Before using SIB products, consult applicable data sheets, protocols, product labels and safety data sheets. On request from your consultant.

Wash tools with clean water and dry them before and immediately after use.

It is the user's responsibility to read the instructions and warnings for any SIB product before using it. The valid updated data sheet can be found at www.sibland.company.

WARNING:

Use suitable PPE: impermeable gloves, boots and protective goggles.

Use material only in well-ventilated areas. Exposure to cement dust may irritate eyes, nose, throat and the upper respiratory system/lungs. Silica exposure by inhalation may result in the development of lung injuries and pulmonary diseases, including silicosis and lung cancer. Seek medical treatment if you experience difficulty breathing while using this product. The use of a NIOSH/MSHA-approved respirator (P, N- or R-95) is recommended to minimize inhalation of cement dust. Skin contact with dry material or wet mixtures may result in bodily injury ranging from moderate irritation and thickening/ cracking of skin to severe skin damage from chemical burns. If irritation or burning occurs, seek medical treatment. Protect eyes with goggles or safety glasses with side shields. Cover skin with protective clothing. Use chemical resistant gloves and waterproof boots. In case of skin contact with cement dust, immediately wash off dust with soap and water to avoid skin damage. In case of skin contact with wet concrete, wash exposed skin areas with cold running water as soon as possible. In case of eye contact with cement dust, flush immediately and repeatedly with clean water, and consult a physician. If wet concrete splashes into eyes, rinse eyes with clean water for at least 15 minutes and go to the hospital for further treatment.

See the complete Product Safety Data Sheet.

LIMITED WARRANTY:

SIB - Sociedade Industrial De Britagem De Pedra, LDA warrants its materials to be of good quality and, at its option, will replace or refund the purchase price of any material proven to be defective within one (1) year from date of purchase. The above remedies shall be the limit of SIB's responsibility. Except for the foregoing, all warranties expressed or implied, including merchantability and fitness for a particular purpose, are excluded. SIB shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the materials. In order to obtain all the results and technical properties of the products, all SIB specifications and instructions on transport, storage, use, application and maintenance must be fully complied with, otherwise, SIB does not guarantee the technical results and properties of the products.

The warranty does not cover scratches, which are normal for this product. The guarantee is associated with correct maintenance procedures. This warranty does not apply and SIB is not responsible for small surface marks and color variations. Due to the raw materials used in the manufacture of the products, small surface marks and/or color variations may occur. These are not considered product defects as they are inherent to the manufacturing process.