

AT A GLANCE

Manufacturer

SIB, Sociedade Industrial
De Britagem De Pedra, LDA

Eco- Binder technology
Environmentally friendly
100% mineral-based
VOC and APEO-free
Salt-water resistant

Extreme high abrasion resistance
High resistance to chemicals
Easy application
Pumpable application
Indoor and outdoor use



DESCRIPTION:

SIB MICRO CRETE is an advanced, professional grade self levelling topping made using selected additives, aggregates and special cements. It is suitable for use where you need more abrasion resistance than offered by traditional micro cements.

SIB MICRO CRETE does not suffer from shrinkage and has a high flexural strength. These characteristics enable this product to be used for the production of high performance and durable seamless floors.

Due to its unique strength at low volume, the material consumption is low and allows application in only 3 mm thickness.

Its formulation is based on harmless, VOC-free non-hazardous raw materials.

SIB MICRO CRETE is for indoor and out door applications.

NOTICE:

SIB MICRO CRETE can be made in all colours from pure white. It can be applied in all ral colours from Ral 9018 - papyrus white outside..

PROPERTIES AND AREAS OF APPLICATION:

- Eco- Binder technology
- Environmentally friendly
- 100% mineral based
- VOC and APEO-free
- Fast stress-free curing
- Salt water resistant
- High chemical resistance (pH 3 – 14)
- High resistance to abrasion
- Easy application
- Pumpable application
- For use both Indoors and outdoors
- For flooring where traditional microcements are too soft
- Applicable in layer thicknesses of between 3mm to 50 mm

TECHNICAL
PROPERTIES
AND
CHARACTERISTICS

Compressive strength (N/mm ²)	40 N/mm ²
Flexural strength (N/mm ²)	12 N/mm ²
Abrasion Resistance	BCA AR 0.5
NB. The application of SIBDURO 360 is an essential treatment to maintain the correct level of abrasion resistance	
Application temperature	Min. +5 °C, max. +35 °C
Application thickness	3 - 50mm
Consumption	2 kg/m ² /mm thickness Minimum thickness 6 kg/m ²
Mixing ratio	4.00/4.5 Ltr. water per 25 Kg powder (16 -18%) Mixing ratio can change depending on the colours

OPEN TO TRAFFIC:

Light load	Fully loadable (Interior)	Fully loadable (Exterior)
24 hr	4 days	7 days

SIB Micro Crete

self levelling topping

MAY 2018

SUBSTRATE PREPARATION

Prior to application, ensure that the surface is stable and has sufficient surface tensile strength. The surface should also be dry or slightly damp, clean and free from dust and loose particles.

Mechanical surface preparation e.g. shot blasting is recommended. Deeper cracks, holes and other defects must be filled with SIBCRETE PRIME. The surface should be permanently vibration free and crack free. Existing cracks in the floor base must be repaired professionally prior to the application of SIB MICRO CRETE.

The substrate has to be dry for priming. By priming the surface the absorbency of the substrate is adjusted, to secure and even cure and avoid air bubbles in the final layer of SIB MICRO CRETE.

Apply a further layer of primer if necessary. Reapplication of the primer must be done within 2 - 6 hours of the first application. Please read the technical data sheet on SIBPRIMER A3 for more information.

SIB MICRO CRETE should be applied within 2-6 hours of the application of the primer. If the substrate is made from different materials or has uneven absorption we recommend an epoxy primer with sand carpet to obtain an even colouring. To obtain uniform appearance and colouring the surface should also be pre leveled and even.

MIXING AND APPLICATION:

The surface has to be pre-levelled and even to obtain a uniform colouring. SIB Micro Crete is applied with a toothed trowel or a gauge rake. After the material has been levelled out on the floor it should be spike rolled. The finer and longer the spikes are the better result you will get. The layer thickness should be minimum of 3 mm. For application of the second layer the pre-levelled foundation has to be primed again.

A small test should be carried out before the application to adjust the correct amount of water to use in the mix and to test the setting time. Air flow, temperature and humidity in the air and substrate influence the product's workability and drying times. There can also be small variations in the mixing rate depending on the colour and pigments used.

Mix the material using a mechanical mixing machine. Fill with the required amount of water; (4.00/4.5 liters per 25kg /powder material (16-18 %)), followed by the powder material that is added while stirring. We recommend the use of a HIPPO MIXER. The material has to be mixed intensely for 2 minutes, left to set for 3 minutes and then mixed again for 1 more minute. At the beginning of the mixing process the mortar is slightly creamy. Do not add water at this stage since the material will become more liquid.

We recommend the use of M-TEC Duo-Mix 2000 or a semi-automatic charge mixer for large areas. Mixing time for 100kg of powder requires 4 - 6 min. After mixing, pour SIB MICRO CRETE onto the primed surface and distribute it with a pin trowel or gauge rake in the intended thickness. Pass over the fresh surface with a spiked roller. Make sure that the spikes are long enough.

With manual application the material needs to rest 5 minutes after the mixing in order to liberate the air bubbles before you pour it on the floor. This minimizes rising of air bubbles in the poured material and helps to give a better and more uniform finish.

The floor has to be protected from drying too quickly (no draft) for the first 24 hours. Do not cover the finished surface with foils or other materials.

OUT DOOR

Manufacturer

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Anti - slip aggregate topping

Weather resistant

100% mineral-based

VOC and APEO-free

Salt-water resistant

Walkways

Pool areas

Easy application

Stairs and platforms

Cycle paths



DECORATIVE OUTSIDE APPLICATION:

SIB MICRO CRETE is weather resistant and can be continued from inside to outside. The material is applied as a thin self leveling top layer. It can be left with a smooth surface like a self leveling overlay.

On outside areas an anti slip surface will often be required. SIB Micro Crete can be textured or rough ground to be slip resistant. Alternatively it can be seeded with aggregates to create a stone carpet surface.

A range of aggregates can be used to make a granite look alike or decorative surfaces. It is an ideal surface for outside pool decks, anti slip walkways or cycle paths.

Due to its unique strength at low volume, the material consumption is low and allows fast and simple application in only 3 mm thickness.

AGGREGATE APPLICATION:

The mortar is applied and leveled out as described in MIXING AND APPLICATION.

While the material is still fresh, aggregates are spread over the surface. The aggregates will embed in the surface and create a rough anti slip surface.

Next day - when the material is dry, any excess aggregates are removed and the floor is cleaned. SIBDURO DW 360 is applied.

To smooth the surface and make it nice to walk on with bare feet the surface can be treated with abrasives. That will keep the anti-slip surface, but eliminate the spikes and sharp corners on the stones.

For more information, consult with our technical department.

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FINISHING

To achieve a higher abrasion and chemical resistance the application of SIBDURO DW 360 is mandatory. However, please contact our technical department for the right sealing system for the correct use in each case. Please refer to the respective data sheets for more information if required.

SPECIAL PRECAUTIONS

The application has to be protected from drying too quickly (due to either drafts or intense heat from the sun) for at least 24 hours. Some minor colour differences are inevitable due to different production batches and this should be taken into account during application.

If you have different absorbent surfaces we recommend priming with an Epoxy Primer which will help achieve a more even application. If a uniform colour is desired, it is necessary to work on those designated sections with the same batch number (see label). The product is cement based and changes in appearance due to changing working techniques, differences in temperature and substrate can cause lighter color shades in the finished surface.

Please take note that this product is a mineral/inorganic product. Product colors do not fully conform to the RAL code and therefore they should only be seen as estimated classifications.

TOOLS AND CLEANING

Mixing device (drill mixer or pump), trowel, spiked shoes, spiked roller and screed rake or pin leveler. All equipment should be washed with clean water and dried before and after application.

PRODUCTION, PACKAGING, STORAGE, SAFETY AND VALIDITY

SIB Micro Crete is sold in 25 kg (55lb) bags

Store bags and containers in a dry place and protected from extreme temperatures (best stored between 5-25°C) and direct sunlight.

With the right conditions of storage, the product is valid for 12 months from the manufacturing date.

There is no mandatory hazard labeling for SIB Micro Crete. Avoid inhaling dust when opening packaging. Protect skin and eyes during the mixing process. Please refer to the Material 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.