

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

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

DESCRIPTION:

SIB ECO CRETE is an advanced, professional grade self levelling topping made using selected additives, aggregates and special cements. It is suitable for use in both chemical and heavy traffic industrial environments.

SIB ECO CRETE does not suffer from shrinkage and has very high abrasion resistance. 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 on site application of 250 m²+ per hour, using a mixer/pump applicator.

Its formulation is based on harmless, VOC-free non-hazardous raw materials. This permits its use in the food processing industry without any further protective measures.

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)
- Extremely high resistance to abrasion
- Easy application
- Pumpable application
- For use both Indoors and outdoors
- For areas with high mechanical loads and chemical usage such as garages, warehouses, production areas, airports and power plants
- Applicable in layer thicknesses of between 3mm to 50 mm



TECHNICAL PROPERTIES AND CHARACTERISTICS

SIB ECO CRETE	WHITE BASE NW	LIGHT GREY LG	GREY BASE NG
Composition	Special Cements, binders & 0-1.2 mm aggregates		
Compressive strength (N/mm ²)	40 N/mm ²	38 N/mm ²	40 N/mm ²
Flexural strength (N/mm ²)	11 N/mm ²	10 N/mm ²	12 N/mm ²
Abrasion Resistance	BCA AR 1.5	BCA AR 1.0	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	Min. +5 °C, max. +35 °C	Min. +5 °C, max. +35 °C
Application thickness	3 - 30 mm	3 - 40 mm	3 - 40 mm
Consumption	1,9 kg/m ² /mm	2,0 kg/m ² /mm	2,0 kg/m ² /mm
Mixing rate	19-19,5% water (3,8-3,9 lts per 20 kg bag)	17-17,5% water (3,4-3,5 lts per 20 kg bag)	17-17,5% water (3,4-3,5 lts per 20 kg bag)
Opening time:	The opening time depends on a lot of factors such as wind and the air and floor temperatures. Furthermore, drying time is dictated by the product temperature and the water used. For these reasons we always recommend to test a small area prior to starting full coverage.		
Test sample:	Light sanded and after treated with 100 ml of Sibduro 360/m ²		

Notes:

SIB ECO CRETE NW is created from a neutral off white base. It can be pigmented to create white and very light colours. SIBECOCRETE LG cover light grey colors. SIB ECO CRETE NG is a Natural Grey cement base to create natural cement grey colours and dark colours.

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

ANTI SLIP SURFACES

SIB ECO CRETE can be seeded with aggregates to create anti-slip surfaces. Consult our technical department for further information.

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 and repaired. 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 ECO 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 ECO 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 ECO CRETE should be applied within 2-6 hours of the application of the primer.

SIB ECO CRETE is often applied in very thin layers. If you apply thin it requires a very well levelled base and even base.

MIXING AND APPLICATION:

The surface has to be pre-levelled and even to obtain a uniform colouring. SIB ECO CRETE is applied with a toothed trowel or a gauge rake and then passed over with a Spike roller. The finer and longer the spikes are the better result you will get.

The layer thickness should be minimum 3 mm. For application of the second layer the pre-levelled underground 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, humidity in the air and substrate, influence on the product's workability and drying time. 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, followed by the powder material that is added while stirring.

We recommend the use of a HIPPO MIXER or mixerpump. 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 sieving the dry mix through a mesh with 2-2,5 mm holes and another sieve with 2-3 mm holes after mixing. That will eliminate the risk of lumps caused by exposure to moisture during transport, storage or mixing.

We recommend the use of mixer pump or a semi-automatic charge mixer for large areas. Mixing time for 100kg of powder requires 4 - 6 min. After mixing, pour SIB ECO 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 fine spiked metal spike roller. Make sure that the spikes are long enough, so you do not push the material.

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 or direct sunlight) for the first 24 hours. Do not cover the finished surface with foils or other materials.

FINISHING

To achieve a higher abrasion and chemical resistance we recommend an application of SIBDURO 360. Before the application of Sibduro 360 the floor must be sanded or grinded to open the pores and take of the soft surface layer from the curing.

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.

The colours of floors made using Eco Crete are not always uniform which is a typical feature of cementitious-based products. Apart from the inherent nature of this kind of product, differences in the various colours and marks may also be caused by the way the product is applied. In order to guarantee a uniform appearance, it must be cast continuously without long gaps.

Wait 5-7 days till you are sure that the sealer and floor is fully cured, till you start cleaning the floor with water.

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 ECO CRETE is sold in 20kg (44.1 lb) 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.



Sociedad Industrial
de Britagem de Pedra

PRODUCT DATA SHEET

Sib Eco Crete

self levelling topping

July 2020
1st edition

There is no mandatory hazard labeling for SIB ECO 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.