

AT A GLANCE

Manufacturer

SIB, Sociedade Industrial
De Britagem De Pedra, LDA

Hard Wearing

Eco- Binder Technology

Environmentally Friendly

100% Mineral-Based

VOC and APEO-free

Moist Tolerant

Salt Water Resistant

Chemical Resistant

Easy Application - only 1 layer

Micro Cement Effect

Indoor and Outdoor Use

Strong Bond



DESCRIPTION:

SIB HARD CRETE is a cement based micro coating for floors, furnitures and walls.

HARD CRETE has a higher wear and impact resistance than other traditonal micro cement systems.

It is ideal for the refurbishment of floors and despite of being very thin the arbasion resistance is apt for industrial applications and comply with BCA AR 0.5.

SIB HARD CRETE offers texture and variegation in shade and colour to interior and exterior floors and walls which paint can only dream of matching. Worktops, furniture, shop counters and reception desks are increasingly given the design of SIB HARD CRETE.

One of the most important design features is that it offers the interior and exterior spaces in a seamless applications.

SIB HARD CRETE is a technical product made from chemical additives and special cements, mixed with selected aggregates. It is flexible and ideal for facades and other vertical surfaces. It can be finished in many different ways to create everything from a dense, colour uniform and smooth and easy to clean concrete surface to a custom designed stained, rough and effect full finish.

SIB HARD CRETE can be created in all colours in the SIB Colour range and can also be custom designed.

FIELDS OF APPLICATION:

SIB HARD CRETE is used for residentia, commercial and industrial use, both Indoor & Outdoors. SIB HARD CRETE is very abrasion resistant and is apt for micro cement applications on floors, even with high wear requirements and industrial use.

SIB HARD CRETE highlights on flexibility and good adhesion on almost any surface and its many architectonic applications from uniform and smooth till nuanced colours and textures, makes SIB HARD CRETE a highly versatile product.

ENVIRONMENTAL ADVANTAGES: Use SIB HARD CRETE to reduce your carbon footprint and lower your environmental impact. No or little demolition is needed to use SIB HARD CRETE and the use of materials is limited.

TECHNICAL PROPERTIES AND CHARACTERISTICS

| | |
|---|--|
| Composition | Special Cements, binders & fine aggregates |
| Compressive strength (N/mm ²) | 30 N/mm ² |
| Flexural strength (N/mm ²) | 10 N/mm ² |
| Abrasion Resistance | BCA AR 0.5 |
| Application temperature | Min. +5 °C, max. +35 °C |
| Adhesion | 1,85 Mpa - 28 days on Concrete |
| Application thickness | 1 - 4mm |
| Consumption | 1,8 kg/mm/m ² Minimum thickness 1-2 mm |
| Mixing ratio | 19-21 % water in volume/weight to kg |
| Opening time: | Approximately 30-60 min at 20° C. The opening time depends on a lot of factors such as wind, air and substrate 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: | Test made with 19.60 % water in standard grey. Aftertreated with 100 ml of Sibdu-ro 500/m ² |

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

PROPERTIES AND AREAS OF APPLICATION:

- Eco- Binder technology
- Low in chromate according to TRGS 613
- High resistance to salt water and chemicals
- Resistant to sulfate according to DIN 4030, exposure class XA2
- Can be in contact with drinking water according to DVGW W 270 and W 347
- Environmentally friendly
- 100% mineral based
- VOC and APEO-free
- Fast stress-free curing
- Salt water resistant
- High chemical resistance (pH 3 – 14)
- Easy application
- For use both Indoors and outdoors

SUBSTRATE PREPARATION

Prior to application, ensure that the surface is stable and has sufficient surface tensile strength. The surface should also be clean and free from old coatings, lime, laitance from the cure of mortars, dust and loose particles.

Mechanical surface preparation like shot blasting, sanding, rough grinding or milling is recommended. The substrate must have open pores to secure adhesion.

SIB HARD CRETE is moist tollerant and can be applied on moist surfaces, but be aware that moist may affect the aesthetics. The surface must be dry enough to accept the SIB Primer A3.

All substrates should be primed with SIB Primer A3. We recommend to prime in two coats.

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 HARD CRETE. SIB HARD CRETE is normally installed in thin layers, why a smooth and even surface is mandatory for a nice application.

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 HARD CRETE HARD CRETE should be applied within 2-6 hours of the application of the primer.

SIB HARD CRETE HARD CRETE is often applied in very thin layers. If you apply thin it requiere a very well leveled base. Walls should be prepared in the same way as if painted and primed with Sibprimer A3.

MIXING AND APPLICATION:

Material is best applied between 10-30 °C. Mix the material using a mechanical mixing machine. Fill with the required amount of water; (19-21 %) per kg powder material, followed by the powder material that is added while stirring. DO NOT MIX SIB HARD CRETE with anything but clean water.

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.

We recommend the use of HIPPO MIXER or similar. Smaller quantities applied on walls can be mixed with a drill mixer. The material has to be mixed intensely for 2 minutes, left to set for 3-5 minutes and then mixed again for 1 more minute. Mix the material till it homogenous and lump free. Pot life is approximately 30 min to 1 hour.

ON FLOORS:

Apply the SIB HARD CRETE with a tooth trowel in the desired thickness. It can be applied in one layer and can be applied standing on your feet. Go over the fresh material with a finishing trowel to level and finish the product.

ON WALLS AND FURNITURE:

The material is applied directly on the walls with a hand trowel.

After 4/6 hours the floor is dry enough to receive the hardener SIB DURO 500.

This treatment provide the material with abrasion resistance. It is essential for floors, but is not always necessary on walls.

The material is left to dry for 24 hours. The material should not be covered and should not be exposed to direct sunlight, rain or heavy draft/wind during curing.

Curing

Leave the material to cure over night (without being exposed to direct sunlight, rain, draft/wind).

FINISHING

To achieve a higher abrasion and chemical resistance an application of SIBDURO 500 is mandatory. Apply in one layer with 80 - 100 gr/m².

The material can be sanded or lightly grinded.

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).

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 SIB PRIMER A3 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.

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

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 SIB HARD 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.

TOOLS AND CLEANING

Mixing device (drill mixer or pump), trowel, spiked shoes and other tools should be washed with clean water and dried before and after application.

PRODUCTION, PACKAGING, STORAGE, SAFETY AND VALIDITY

SIB HARD CRETE is sold in 10 and 20 kg 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 HARD 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.