

TECHNICAL DATA SHEET

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SIBECO Self levelling topping for indoor and outdoor use

## **AT GLANCE**

Natural look Wide color range Indoor and outdoor use Matte and polished finish High abrasion resistance High flexural resistance High chemical resistance Environmentally friendly VOC and APEO-free 100% mineral Fast application and no shrinkage Easy application Pumpable 3 to 50 mm thickness







www.sibland.pt geral@sibland.pt



## DESCRIPTION

SIBECO is an advanced, professional grade self-levelling product, produced using selected additives, aggregates and special cements. It is suitable for domestic, industrial, and heavy traffic floors.

SIBECO does not shrink and has very high abrasion resistance. These characteristics allow this product to be used for the execution of high performance and durable continuous floors.

Due to its unique low-thickness resistance (>3 mm), it allows for quick application. Through pump application, it is possible to execute up to  $250 \text{ m}^2$  per hour.

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.

#### FIELDS OF APPLICATION:

SIBECO can be used on indoors and outdoors spaces: homes, building entrance halls, museums, cinemas, exhibition halls, offices, general stores, food industry, restaurants, car garages, hotels and hospitals, industrial facilities.

	White base (NW)*	Grey base (NG)*		
Composition	Special cements, binder	Special cements, binders e fine aggregates (0 a 1,2 mm)		
Compressive strength (EN 13892-2)	40 MPa (N/mm <sup>2</sup> )**	40 MPa (N/mm <sup>2</sup> )**		
Flexural strength (EN 13892-2)	11 MPa (N/mm <sup>2</sup> )**	12 MPa (N/mm <sup>2</sup> )**		
Abrasion resistance (EN 13892-4)	BCA AR 1.5**	BCA AR 1.5**		
Chemical resisatance	pH 3 - 14			
Application tempreature	Min. +5°C (41°F) - max.	Min. +5°C (41°F) - max. +35°C (95°F)		
Consumption	1,9 kg/m²/mm (4,2 lbs/m²/mm)	2,0 kg/m²/mm (4,4 lbs/m²/mm)		
Mixing rate	19 - 19,5% water (3,8 - 3 per 20 kg/44 lbs of SIBE			
Application thickness	Anti-slip finish : 3 - 5 m	m		
Application thereas	Polished finish : 3 - 50 n	Polished finish : 3 - 50 mm		
Opening time	support and air temperative of the	The opening time depends on many factors, from wind to support and air temperature. In addition, it also depends on the temperature of the product and the water. We always recommend performing a sample on a small area before application.		
Light trafic	Indoor	Outdoor		
24 hours	4 days	7 days		

## TECHNICAL PROPERTIES AND CHARACTERISTICS



\*SIBECO NW is produced from a neutral off white base. It can be pigmented to create white and very ligth colors. SIBECO NG is produced from a natural grey cement base. It can be pigmented to create natural cement grey colors and dark colors.

\*\*Technical results may vary depending on site conditions, age of SIBECO and pigments used. In addition, the percentage of water influences the final strength of the material.

Ambient temperature, support and product: 5 to  $30^{\circ}$ C (41 to  $86^{\circ}$ F) - Outside of this range, the application, aesthetic or mechanical properties of the product, as well as its adhesion can be altered.

The application of SIBDURO 360 is an essential treatment to maintain the correct level of abrasion resistance. Test sample: lightly sanded and after treated with 100 to 150 ml of SIBDURO 360 per  $m^2$ .

#### SUPPORT PREPARATION

Before application, ensure that the surface is stable and has a tensile strength of at least 1.5 MPa.

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

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.

The surface must be dry, clean and free of dust and loose particles to be primed with SIBPRIMER A3\*\*\* or SIBECOPRIMER A6 (see product data sheet for more information).

Apply a coat of SIBPRIMER A3, adjusting the dilution according to the porosity of the support. Apply an additional layer of primer if necessary. The reapplication of the primer and/or the application of the material must be done between 2 and 6 hours after the first application. Apply SIBECO between 2 and 6 hours after applying the primer. Consult the SIBPRIMER A3 Technical Data Sheet for more information.



#### \*\*\*SIBPRIMER A3



Non-solvent primer	
Density	1
pH	8
Application temperature	Min +5°C (41°F) - Max +35°C (95°F)
Aspect	White (transparent when dry)

SIBECO is applied in very thin coats (>3 mm), so a well-prepared and levelled surface is ideal for proper application.

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

Mix the material with a mechanical electrical mixer ("HIPO MIX" type). First, fill with the required amount of water, then add the powdered material while mixing.

The material must be intensively mixed for 3 to 6 minutes, until a homogeneous mixture without lumps is obtained. Let it rest for 1 minute and then mix again for another 1 minute. At the beginning of the mixing process, the mortar is slightly creamy. Do not add water at this stage as the material will become more liquid.

During application, and whenever the mixture remains in the container for a long time, remix a little before reapplying.

Before pouring the mix on the floor, we recommend to sleev it through a 2 to 3 mm mesh to eliminate the risk of lumps.

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

#### APPLICATION

After mixing, pour SIBECO onto the prepared surface and spread using a pin trowel or gauge rake in the desired thickness.



Let the material sit for 1 minutes after mixing to release air bubbles prior to application, which minimizes air bubble formation in the material and helps provide a better finish.

Roll over the fresh surface with a metal spiked roller. The spikes should be long enough not to move the material and not to create a curl.

The layer thickness must be at least 3 mm. For an anti-slip finish, the application thickness is 3 to 5 mm. For a polished finish, the application thickness is 3 to 50 mm.

The floor must be protected from drying too quickly (no drafts or direct sunlight) within the first 24 hours. Do not cover the finished surface with plastic or other materials. Outdoor, during high temperatures, prefer an early morning or late evening application. Do not apply during windy days and during too high temperatures, the setting time may vary according to external temperatures, the sun, the wind.

If it is necessary to apply a second coat again, prepare the surface again and reapply a coat of SIBPRIMER A3 to prevent SIBECO from quickly setting.

#### POLISHING

SIBECO can be grinded and polished after 48 to 72 hours under normal conditions.

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

#### ANTI-SLIP FINISH

SIBECO can be seeded with aggregates to create non-slip surfaces. Consult the technical department for more information.

#### SIBDURO 360

Apply SIBDURO 360\*\*\*\* after polishing to obtain greater resistance to abrasion. If polishing is not carried out, apply SIBDURO 360 when SIBECO is completely dry (6 hours after application or later).

Uniformly moisten the floor with water applied with a microfiber mop, before applying SIBDURO 360. Do not allow puddles to form. SIBDURO 360 must be sprayed on substrates without being diluted. Apply with the roller or microfiber mop on the surface. Apply at least 2 coats to ensure that the entire floor is saturated and impregnated, without the formation of puddles. High concentrations of SIBDURO 360 can stain the floor and cause efflorescence. Each application must fully penetrate the surface. The application must be repeated until the surface is saturated. Excess must be avoided and, if it occurs, it must be cleaned. The surface must be protected from rain and moisture for 24 hours after application. Consult the technical data sheet for more information.



#### \*\*\*\*SIBDURO 360



Base	Water based, odorless
рН	11,5
Air humidity	Max 80%
Density	1,1
Viscosity	100 mPa.s <sup>-1</sup>
Application temperature	Min +5°C (41°F) - Max +35°C (95°F)
Consumption	100 - 150 ml/m <sup>2</sup> in 2 layers depending on the support porosity
Application	Min. 2 layers

#### SEALING

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

For greater resistance to stains, the application of PROSIB 330\*\*\*\*\* is recommended. Apply a first coat of PROSIB 330 diluted between 20 to 30% - Spray and mix the product with a short-haired roller. Apply continuously (without interruption) and allow to dry for 1 to 3 hours. If there are application marks, pass the monobrush equipped with sandpaper (1500 grit). Apply a second pure coat in the same way and allow to dry between 1 to 3 hours. Allow to dry for at least 7 days before cleaning with water.

Several variants can be used. Consult the technical department for more information.



#### \*\*\*\*\*PROSIB 330



Aqueous product	pH 7,9 - 8,6
Density	1,06
Application temperature	Min +5°C (41°F) - Max +35°C (95°F)
Consumption	50 - 150 gr/m² (0,11 - 0,33 lbs/m²) per layer
Light trafic	12 h
Drying time	72 h
Dry extract	35%
Aspect	White liquid
VOC	95 gr/l
Packaging	5, 10 and 20 l jerrican

# PRODUCTION, PACKAGING, STORAGE AND EXPIRY DATE:

SIBECO is available in 20kg (44,1 lbs) bags.

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

#### COMPLEMENTARY INFORMATION:

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

Note that this product is a mineral product. The colors of floors made with SIBECO 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 brands 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 <u>www.sibland.company</u>.



#### 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.

