

SIBECO TERRAZZO

Indoor and outdoor terrazzo

AT GLANCE

- Wide color range
- Indoor and outdoor use
- High abrasion resistance
- High flexural resistance
- High chemical resistance
- Environmentally friendly
- VOC and APEO-free
- 100% mineral
- Fast application and no shrinkage
- Water resistance
- Easy application



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DESCRIPTION

SIBECO TERRAZZO is an advanced, professional-grade Terrazzo topping made using selected additives, aggregates and special cements. It is made to match SIBEXTREME AG STYLE on outside areas.

SIBECO TERRAZZO has high mechanical resistance and low shrinkage, allowing it to be applied without traditional shrinkage joints (respecting the base joints). In outdoor areas exposed to direct sunlight, a maximum joint of 25 m² is always recommended, taking into account the normal expansion/contraction of the product resulting from sudden differences in temperature.

SIBECO TERRAZZO is fast to apply, it is water resistant and can be applied on outdoor areas

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.

This product can be produced as a binder to mix with local aggregates (SIBECO TERRAZZO BINDER) or already mixed with aggregates (SIBECO TERRAZZO).

FIELDS OF APPLICATION:

SIBECO TERRAZZO can be used in indoor and outdoor spaces: homes, building entrance halls, museums, cinemas, exhibition halls, offices, general food stores, restaurants, car garages, hotels and hospitals, industrial facilities.

It is ideal for outside areas near pools, with a bush-hammered finish.

TECHNICAL PROPERTIES AND CHARACTERISTICS

Compressive strength (EN 13892-2)	40 MPa*
Flexural strength (EN 13892-2)	10 MPa*
Abrasion resistance (EN 13892-4)	BCA AR 0.5 – AR 2*
Chemical resistance	pH 3 - 14
Application temperature	Min. +5°C (41°F) - max. +35°C (95°F) – Avoid application under direct sunlight
Application thickness	7 – 50 mm (minimum 5 mm after grinding) Depends on the aggregates
Consumption (SIBECO TERRAZZO BINDER)	0,95 kg/m ² /mm (2,1 lbs/m ² /mm)
Consumption (SIBECO TERRAZZO with mixed aggregates)	2,1 – 2,2 kg/m ² /mm (4,6 – 4,9 lbs/m ² /mm)
Mixing rate (water)	11 – 14% water (2,2 – 2,8 l per 20 kg/44 lbs of SIBECO TERRAZZO) Water mixing ratio depends on the type and size of aggregates
Mixing rate (SIBECO TERRAZZO BINDER)	40 – 45% SIBECO TERRAZZO BINDER (20 kg/44 lbs) + 55 – 60% aggregates (25 – 30 kg/55 – 66 lbs)
Opening time	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.

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

Ambient temperature, support and product: 5 to 35°C (41 to 95°F) – Outside of this range, a test must be carried out, especially to check the open time for application.

The application of SIBDURO 360 is an essential treatment to maintain the correct level of abrasion and water resistance.

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 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.

Mechanical preparation of the surface is recommended, using a diamond, milled and/or sandblasted mechanical process. Cracks, holes and other deeper defects must be filled and repaired. The surface must be free of vibrations and cracks. Cracks in the base must be professionally repaired before applying SIBECO TERRAZZO.

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

Apply a coat of SIBPRIMER A3, adjusting the dilution in water according to the porosity of the support. After drying, a second coat should be applied. The application of the primer allows the absorption of the support to be adjusted to guarantee uniform drying and to avoid air bubbles in the final product. Apply an additional coat of primer if necessary and if the first coat dried too fast. 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 TERRAZZO between 2 and 6 hours after applying the primer. Consult the SIBPRIMER A3 Technical Data Sheet for more information.

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.

SIBECO TERRAZZO can be applied in thin coats (>7 mm), so a well-prepared and levelled surface is ideal for proper application.

NOTE: turn off heated floors, 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 mixer. Fill with the required amount of water, then add the powdered material while mixing (SIBECO TERRAZZO or SIBECO TERRAZZO BINDER and aggregates).

It is recommended to use a mixer (PORTAMIX type) or a concrete mixer. The material must be intensively mixed for 2 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.

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

Insulate vertical surfaces (walls, columns, etc.) using perimeter gaskets, foam or flexible tapes with a minimum of 3 mm.

After mixing, pour SIBECO TERRAZZO onto the prepared surface at the desired thickness. The product must be well-leveled.

Roll over the fresh surface with a metal spiked roller to level the surface and remove air bubbles. Roll only on the surface to avoid burry the aggregates. It is advisable to sprinkle the same aggregates used in the mixture over the still fresh mortar, in order to fill in any missing space, using the spiked roller again. It is essential that the aggregates are distributed evenly and without gaps in the mortar. A more uniform application is obtained if the product is applied continuously.

If the support does not have joints, SIBECO TERRAZZO can be applied without retraction joints. The joints of existing floors must be respected in the new application. The thickness after polishing must be at least 5 mm. The greater the thickness, the easier it will be to correct any defects during the polishing steps.

Before application, a small test should be carried out to adjust the amount of water to be used in the mixture and to test the setting time. The wind, temperature and humidity of the air and of the base influence the workability and drying times of the product. There may also be slight variations in the shade of the mix, depending on the color and pigments used.

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 non-breathable materials. Outdoors, prefer an early morning or late evening application, the setting time may vary according to external temperatures, the sun, and the wind.

GRINDING AND POLISHING

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

Grinding and polishing any coating requires a high degree of experience and skill. SIBECO TERRAZZO is polished with diamond tools – Several polishing steps are required to obtain a polished surface. Consult our technical department for more information on the polishing protocol.

After grinding, the pores must be filled with SIBECO FILLER. Before application, the surface must be well-cleaned and vacuumed. Apply SIBECO FILLER manually or with grout-disc. 4 to 12 hours after application, the excess can be removed by polishing. Consult the Technical Data Sheet for more information.

SIBDURO 360

For higher resistance to abrasion and chemical products, the application of SIBDURO 360 before polishing the floor is mandatory. SIBDURO 360 can be applied between 4 and 6 hours after application.

SIBDURO 360 can be applied 4 to 6 hours after applying SIBECO TERRAZZO. On decorative surfaces made with products from the SIBECO range, the floor must be moistened with a mist of water before applying SIBDURO 360. Do not leave puddles. SIBDURO 360 must be spread evenly with a microfiber cloth. A very high concentration of SIBDURO 360 can stain the floor and cause efflorescence. After application, the floor must dry for 1 to 2 hours. Wet polishing is not recommended until the floor is fully cured.

ANTI-SLIP FINISH

SIBECO TERRAZZO can be treated with antislip treatments or bush hammered/textured after application. Consult the technical department for more information.

SEALING

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

OUTDOOR

In outdoor applications, due to the exposure to atmospheric agents (high and low temperatures, snow, ice, rain and movements that occur on outdoor floors), make 5 by 5 m cuts/joints with 6 to 10 mm thickness.

PRODUCTION, PACKAGING, STORAGE AND EXPIRY DATE:

SIBECO TERRAZZO is available in:

- SIBECO TERRAZZO (base + aggregates) - 20kg (44,1 lbs) bags.

Or

- SIBECO TERRAZZO BINDER (base) - 20kg (44,1 lbs) bags.
- MIX AGGREGATES - 25kg (55,1lbs) bags

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 end result.

If there are non-homogeneous surfaces, with differences in absorption, it is recommended to apply a coat of epoxy primer (SIBQUAPOX or SIBPRIMER E-100) 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 TERRAZZO 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 a 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.

Wait between 5 to 7 days before starting to clean the floor with water, so that the finish and the floor are completely dry.

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 the 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.