

## AT A GLANCE

### Manufacturer

SIB, Sociedade Industrial  
De Britagem De Pedra, LDA



Natural look	High Performance
Matt to high-gloss finish	No Shrinkage
Joint free flooring	High Strength
Only constructive movement joints	5800 psi (40 Mpa-N/mm <sup>2</sup> ) in 7 days.
CE mark	7000 psi (60 Mpa-N/mm <sup>2</sup> ) in 28 days
Tested and Certified products	High Flexibility
Architectural freedom	1160 psi (8 Mpa-N/mm <sup>2</sup> ) in 7 days
Custom colour range	1885 psi (13 Mpa-N/mm <sup>2</sup> ) in 28 days
Patent Pending	High Abrasion Resistance

## DESCRIPTION:

**EXTREME FLOW** is an advanced, professional grade, two-component, self levelling topping based on selected aggregates and special cements. It must be ground and polished to the desired appearance.

Extreme Flow sells on its high strength and flexibility and outstanding abrasion resistance. It makes it possible to make high performance durable seamless floors.

Extreme flow levels easily with a gauge rake and maintains workability for up to 30-60 minutes, giving the applicator time for correct application

## FIELDS OF APPLICATION:

Renewal and application of new domestic, commercial and industrial flooring. Where you wish a high abrasion resistance.

Can be used in schools, airports, warehouses and logistic centres, retail, restaurants, lobbies, and more.

## PATENT PENDING:

SIB EXTREME is unique patent pending technology

## ENVIRONMENTAL ADVANTAGES:

Use Extreme Flow to reduce your carbon footprint and lower your environmental impact. You achieve strong floors with low material consumption and little environmental impact.

### TECHNICAL PROPERTIES AND CHARACTERISTICS

Pumpable

Fire proof

Durable

Polishable

Easy to screed and work with

No shrinkage/contraction

No need for curing agents

Long opening time 60 min+

No cracks or micro spalling

High performance

Superior mechanical and abrasion  
resistance

High Compressive strength  
and flexural strength

Custom colour range

Slip resistant

Open to heavy traffic in 4-5 days

Aesthetic – natural look

Description	Values	Compare
Mixing rate Component A & B:	25 kg/55lb mortar A to 5.50-6.0 litres/1.45-1,60 gallons liquid B	
Consumption	16-18 kg A and 4,50-5.25 litres B per cm thickness/m2 3,75 lb A (powder) to 1/8 gallon per 3/8" thickness/ sq. Feet.	
Opening time (22°C/72°F)	Approx. 60-90 minutes	
Compressive strength	C 60 N/mm2 (8700 psi/60 Mpa) - 28 days	
Flexural Strength	F 13 N/mm2 (1885 psi/13 Mpa) - 28 days	
Abrasion resistance	Böhme A5 to A1,5	
Thickness of application	10-20 mm : 3/8 – 3/4 inch	
Open to traffic	Light 2 days – heavy 5 days	

#### PREPARATION:

The concrete or other floor base must be clean, free of dust and grease. The base must be consistent, without loose particles and disaggregation. The support should have a minimum tensile strength of 1.5 MPa. The base must be visually dry with a maximum moisture content of 4% without possibility to increased moisture by capillary action.

If you have doubts about moisture, you may take precautions using special primers. Cracks in the base should be repaired. Weak bases, which cannot sustain the contraction of coating must be removed or restored.

The support should be grinded or blasted and subsequently aspirated. Use primer SIBPRIMER EPOXY broadcasted with sand aggregates 1-1,8/2,0 mm till refusal. Then leave to dry. The drying time depend on the weather conditions. Can be up to 24 hours. After drying, the surface should be vacuum to remove loose sand particles.

Foam, special tapes or other flexible separators should be used to avoid direct contact with the self levelling material and walls, columns or tubes or other objects going through the floor. Surface and ambient temperatures shall be between 10°C to 32°C (50°F to 90°F).

# Extreme Flow

High Performance Overlay

JANUARY 2017

## MIXING:

Make sure that the B component (FLOW B- pink coloured buckets) is well stirred before use. Add the indicated measured amount of B compound to each bag of A component to the mixing container. While the mixer is running, add Extreme flow A. Additional liquid may be added if necessary. Multi-bag batches. After the final bag is added to the batch, mix an additional 2 to 3 minutes until the mixture is lump-free.

Once mixing rates have been established make sure that the mixing is always done in the same way with the same amount of liquid and the same amount of time.

Avoid mixers that entrap large amounts of air. The material has to be used right after mixing. If the mixed material is left for more than 5 minutes and settles, the material should be remixed before application.

## APPLICATION:

Arrange work area to permit continuous placement without cold joints. You will get a more uniform application if the material is screeded continuously.

The product can be applied manually or pumped using adapted machines. The pumping machine must be able to provide the right amount of component B to component A. Apply the mortar SIB EXTREME FLOW using minimal thicknesses of 3/8" or 10 mm.

Use a gauge rake to coax the material into place and go over the floor with spike roller specially made for cement based overlays. That will even the surface and take out air bubbles.

If the base has no joints, the mortars can be applied joint free. EXTREME FLOW can be applied without any retraction joints. Joints in existing pavements should be respected in the new application or special precautions should be taken.

## CURING:

Extreme needs to breathe and should not be covered with non breathing materials during or after curing. Do not apply curing agent. It can cause colour change in the material.

Low temperature can extend curing time and high temperature may speed setting time. The floor must be left without traffic during curing.

To protect the floor after application and curing you can do the first steps of grinding . After the pore filling you can apply an extra layer of SIBFILLER IN. When the filler is dry you can cover it with blankets and leave the floor and let other workers finish their work. You grind the SIBFILLER IN off before you finish and polish the floor. The floor should be covered with blankets that permit the material to breathe.

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## POLISHING:

Extreme Flow may be ground and polished after 48-72 hours at normal conditions. To get the right appearance and correct sealing of the floor you need to grind deep to remove the surface film created during the curing.

Polishing any topping requires a high degree of experience and craftsmanship. Contact us and use approved installers.

## SPECIAL PRECAUTIONS WITH EXTREME:

Extreme can cause corrosion in direct contact with some metals. When decorative profiles are used in the floor, problems are avoided applying the primer on the sides of the profiles that are in direct contact with the mortar.

Extreme needs to breathe and should never be covered with non breathing materials. It can cause colour changes in the floor.

Extreme is very sensitive to moist and it is important to take precautions during the application, curing and sealing process. Specially if moist content in the air is very high.

## PRODUCTION, PACKAGING, STORAGE AND VALIDITY

The EXTREME FLOW is sold in two components: - Component A (Mortar) - 25 kg (55lb) bags - Component B (water based solution) - buckets 20 litres (5.25 gallons)

Products can be packed according to individual needs.

Store bags and containers in a dry place and protected from extreme temperatures and direct sunlighth. With the right conditions of storage, the product is valid for six months from the manufacturing date.

## CRACKING AND USER RESPONSABILITY:

There are 3 things that influence on the risk for cracks in a non-structural topping – the substrate, the shrinkage and flexural strength.

Rigid, non-structural toppings crack in corners, around columns and insert and along curved surfaces, because of the shrinkage. It is not possible to predict the appearance of micro-cracking in a non-structural topping and such overlayments are not capable of restraining movement from the substrate. Reflective cracks may appear due to vibration, substrate flexure or existing joints and cracks.

Extreme Flow will never crack on its own and will not crack along curved walls, corners etc. Extreme FLOW does not need contraction joints. The mortars in the EXTREME SERIE have no shrinkage and have very high flexural strength why they can restrain a lot of movements from the substrate and can take a lot more stress than most other cement based products.

Nevertheless - surface preparation and substate conditions are essential for the performance of the topping and SIB cannot be responsible for cracks or other problems cause by bad substrates or wrong surface preparation.

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The EXTREME SERIE is designed as a wear surface for high abrasion. Extreme Flow is designed to have natural concrete appearance and optical variations to the finished floor should be expected. Extreme Flow is not recommended for wet areas or at locations subjected to freezing temperatures or where deicing salts will be used. Before using SIB products, read current technical data sheets, bulletins, product labels and safety data sheets. It is the user's responsibility to review instructions and warnings for any SIB products prior to use.

### WARNING: DO NOT BREATHE DUST. AVOID CONTACT WITH SKIN AND EYES.

Use material in well-ventilated areas only. 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. Eat and drink only in dust-free areas to avoid ingesting 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.

### 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.