

## Technical sheet - SIBDUROFLEX 400

Flexible thin-film coating with natural aggregate Outdoor Application

Description:	SIBDUROFLEX 400 is a flexible thin-film coating system. It is based on a complex formulation of methylmethacrylate monomers (MMA) saturated with natural hard wearing or decorative aggregates. Depending on the aggregates the coating can be adapted to resist all types of traffic, including very hard and intense road. SIBDUROFLEX 400 is used to renew and beautify a wide range of surfaces like asphalt, concrete and natural stone.
Properties and Fields of Application:	It is applied in one coat with 2 to 8mm thickness depending on the aggregates applied. It is ready for traffic in 60 minutes after application. Exceptional Impact, Chemical and Abrasion Resistance. Resistant to frost and sudden temperature changes. Slip resistant, and flexible. SRT sliding coefficient: 0.65 to 0.75 depending on the aggregates used. Architectural freedom given the possibility to combine color of resin and aggregates, custom stone mixes combined with colored glass, mirror etc. For roads and industrial areas we recommend hard wearing aggregates like: Bauxite, quartz, basalt, granit and others. For walkways, public squares, parks and promenades decorative aggregates like marbles and crystals can be used. It is possible to create spaces that are pleasing to the eye. Softer aggregates are suitable for light grinding and polishing and more aesthetic for use with pedestrian traffic.
Technical specifications:	Open time after mixing (20°C)15-18 minFull Resistances (20°C)60-120 minApplication Temperature-5°C to +35 °CTraction Strength11 MpaTraction Elongation (0°C)21 MpaRupture Elongation (0°C)158%Modulus of elasticity (20°C)83 MpaModulus of elasticity (0°C)407 MpaNote: Specific abrasion test are available on request. For more information ask the SIB Technical Department.
Application Instructions:	Concrete and Stone Bases: Surface must be clean, free of dust, grease and consistent with no loose particles and disaggregated areas. The support should have a minimum tensile strength of 1.5 MPa. Big Cracks in the foundation must be repaired. The surface must be grinded, shot blasted and then vacuumed. The support is prepared with SIBPRIMER EPOXI with sand (1-2mm) and left to dry. The drying time depends on weather conditions, may be up to 24 hours. Vacuum to remove excess of aggregates. On concrete surfaces with risk of negative hydrostatic pressure (water rise), use SIBMONOPOX as a primer (see the technical data sheet). Asphalt Bases: The asphalt should be in good conditions. If not it must be repaired. The surface being treated must be clean, dry and free of dust, grease and contamination. If the asphalt is wet it can be heated to make water disappear.
Application:	<ul> <li>Before using SIBDUROFLEX 400, the resin must be stirred carefully in order to obtain a uniform distribution of the paraffins in the product.</li> <li>SIBDUROFLEX 400 is carefully mixed with the reactant (50% dibenzoyl peroxide), explained below.</li> <li>Note the amount of catalyst powder (reactant) needed to add the resin, will depend on the temperature.</li> <li>At 30°C, add 1% reactant to resin weight</li> <li>At 20°C, add 2% reactant to resin weight</li> <li>At 10°C, add 5% reactant to resin weight</li> <li>Below 0° C, add 5% to resin weight + accelerating agent.</li> </ul> A uniform film of resin is applied over the primed surface: 3,5kg to 6kg depending on the substrate. The aggregates are spread over the resin instantly as the application of the resin move forward. It is important to spread a good quantity of aggregates to create a uniform surface appearance. Different colors of resin and aggregate can be used to create effects and different geometric shapes. When the product is dry the excess of aggregates should be removed by vacuum or sweeping. Diamond grinding and polishing process can be used to cut the irregularities on the aggregates.
Packaging, Storage and Validity:	Packaging: 25 kg steel containers. Storage in original closed containers in a dry place and protected from extreme temperatures and direct sunlight. Optimal storage temperature is 15-20°C. With the right conditions of storage, the product is valid for minimum 12 months from production date.
Health and Safety:	Use suitable protective clothing, gloves and safety goggles while mixing and applying SIBDUROFLEX 400. In the event of contact with eyes, rinse immediately with clean water for a prolonged period and search medical advice. In the case of contact with the skin, wash immediately with soap and water. SIBDUROFLEX 400 is highly flammable, keep away from heat and ignition sources and do not smoke. The stirrer as well as all other equipment used in the application site must be explosion-proof. For more information, request safety data sheet.



