Industry

Sikaflex®-290 DC PRO

The Professional Deck Caulking Compound

Typical Product Data

Chemical base		1-C polyurethane
Color (CQP[1] 001-1)		Black
Cure mechanism		Moisture-curing
Density (uncured) (CQP 006-4)		1.3 kg/l
Application temperature		5 – 35 °C
Skin time[2] (CQP 019-1)		90 minutes
Curing speed (CQP 049-1)		(see diagram)
Shrinkage (CQP 014-1)		3 %
Shore A-hardness (CQP 023-1 / ISO 868)		40
Tensile strength (CQP 020-3 / ISO 8339)		3 MPa
Elongation at break (CQP 020-4 / ISO 8339)		600 %
Tear propagation resistance (CQP 045-1 / ISO 34)		10 N/mm
Service temperature (CQP 513-1)		-40 – 90 °C
Shelf life (storage below 25 °C)	cartridge / unipack pail / drum	12 months 9 months

[1] CQP= Corporate Quality Procedures [2] 23 °C / 50 % r.h.

Description

Sikaflex®-290 DC PRO is a 1 component polyurethane based joint sealing compound, specifically formulated for caulking joints in traditional timber marine decking. It exhibits excellent weathering resistance and is therefore well suited for highly exposed open joints within the maritime environment. The sealing compound cures to form a flexible elastomer which allows a fast and easy sanding process.
Sikaflex®-290 DC PRO meets the requirements set out by the International Maritime Organisation (IMO).

Product Benefits

- Excellent weathering resistance
- Robust and durable
- Easy and fast sandable
- Ideal flow behavior for application
- Long toolability
- Unique aspect
- Resistant to seawater and fresh water

Areas of Application

Sikaflex®-290 DC PRO is designed for caulking of joints in traditional timber decking for boat-, yacht and commercial ship constructions.
This product is suitable for experienced professional users only. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Cure Mechanism

Sikaflex®-290 DC PRO cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds some-what slower (see diagram).

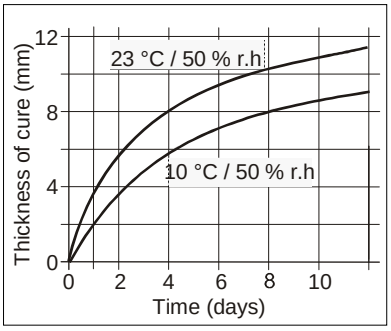

Diagram 1: Curing speed for Sikaflex®-290 DC PRO

Chemical Resistance

Sikaflex®-290 DC PRO offers effective long-term resistance to fresh water, seawater and mild aqueous cleaning agents. The sealant is not resistant to solvents, acids, caustic solutions and chlorine containing cleaners. A brief contact with fuels or lubricants has no significant effect on the durability of the sealant.
The above information is offered for general guidance only. Advice on specific applications will be given on request.

Method of Application

Surface preparation

Surfaces must be clean, dry and free from grease, oil and dust. In case of timber the use of an adequate Primer, e.g. Sika® Primer-290 DC, is mandatory. Additional surface treatment, for example for deck perimeter sealing, depends on the specific nature of the substrates. Therefore all recommendations must be determined by preliminary tests.
Advice on specific applications is available from the Technical Department of Sika Industry.

Application

For satisfactory results the adhesive must be applied with adequate equipment such as pump, dosing units or piston operated application guns.
Sikaflex®-290 DC PRO can be processed between 5 °C and 35 °C but changes in reactivity as well as application properties need to be considered. The optimum process temperature (substrates, climate and product) is between 15 °C and 25 °C.
Advice on specific applications is available from the Technical Department of Sika Industry.

Removal

Uncured Sikaflex®-290 DC PRO can be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.
Hands and exposed skin should be washed immediately using Sika® Handclean towels or a suitable industrial hand cleanser and water. Do not use solvents on skin!

Further Information

It is highly recommended using the Sika® Teak Maintenance System to preserve the teak deck.
Copies of the following publications are available on request:

- Sika Marine Application Guide, Section 4.1
- Sika Pre-Treatment Chart for Marine Applications
- General Guidelines Bonding and Sealing with Sikaflex®
- Safety Data Sheets

Packaging Information

Cartridge	300 ml
Unipack	600 ml 1000 ml
Pail	23 l
Drum	195 l

Basis of Product Data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Disclaimer

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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