

Sikaflex®-290DC

Weatherproof deck caulking sealant

Technical Product Data (typical values)

Chemical base		1-C polyurethane
Color		Black
Cure mechanism		Moisture-curing
Density (uncured)		10.8 lb/gal
Non-sag properties		Semi-self leveling
Tack free time ¹⁾		70 min
Curing speed		(see diagram 1)
Shrinkage		3%
Shore A-hardness (ASTM D 2240)		40
Tensile strength (ASTM D 412)		435 psi
Elongation at break (ASTM D 412)		600%
Tear propagation resistance (ASTM D 624)		57pli
Movement Accomodation Factor		10%
Service temperature	permanent	-40°F to 194°F (-40°C to 90°C)
Shelf life (storage below 77°F (25°C))	Unipacs	12 months

¹⁾ 73°F (23°C) / 50% r.h.

Industry

Description

Sikaflex®-290DC is a one-component UV-resistant polyurethane-based joint sealing compound specially formulated for caulking joints in traditional timber marine decking. The compound cures to form a flexible elastomer which can be sanded. Sikaflex®-290DC meets the requirements of the International Maritime Organization, and is manufactured in accordance with the ISO 9001/14001 quality assurance system and the Responsible Care Program.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Product Benefits

- One-component
- Non-corrosive
- Sandable
- Semi-self leveling
- UV and weather resistant
- Resistant to seawater and fresh water

Areas of Application

Sikaflex®-290DC is used for joint caulking in traditional timber decking for boat, yacht and ship construction.

Cure Mechanism

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

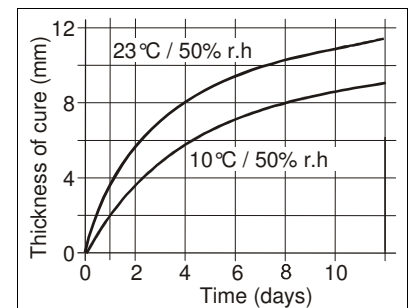


Diagram 1: Curing speed Sikaflex®-290DC



Chemical Resistance

Sikaflex®-290DC offers excellent long-term resistance to fresh water, seawater, and aqueous cleaning agents. It is not resistant to solvents, acids, caustic solutions and chlorine-containing cleaners. Brief contact with fuels and lubricants have no significant effect. 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 and dry, free of oil, grease, dust, and of sound quality. As a rule the surfaces must be prepared in accordance with the instructions given in the current Sika® Primer Chart. Use of an electronic moisture meter to assure less than 15% moisture content of the wood is recommended. Typical surface preparation will include the use of bond breaker tape and Sika®Primer-215. Advice on specific applications is available from the Technical Service Department of Sika Industry at 888-832-7452.

Application

Place unipac in the application gun and snip off the closure clip. Cut the tip of the nozzle to the desired opening. Once opened, packs should be used up within a relatively short period of time. For cool weather application, condition units at approximately 70 °F and remove just prior to use. The optimum temperature for substrate and sealant is between 60 °F and 77 °F. Use at very high temperatures or under direct sunlight may result in bubbling of the sealant. Detailed instructions may be obtained by calling Sika Technical Service at 888-832-7452.

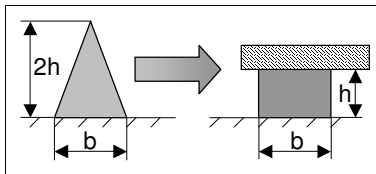


Figure 1: Recommended bead configuration

Tooling and finishing

Sikaflex®-290DC may be tooled immediately by taping the seam edges and using a spatula. Tape must be removed immediately. Conversely, Sikaflex®-290DC may be extruded proud

into the seam and allowed to cure for several days, then sanded using a floor sander.

Removal

Uncured Sikaflex®-290DC may be removed from tools and equipment with Sika®Remover-208 or another suitable solvent. Strictly follow solvent manufacturer's use instructions and warnings. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately after use. Do not use solvents on skin!

Overpainting

Sikaflex®-290DC can be overpainted when tack-free. The paint and paint process must be tested for compatibility before use. The hardness and film thickness of the paint may impair the elasticity of the adhesive and lead to cracking of the paint film with time.

Limitations

- Do not apply over silicones or in the presence of curing silicones.
- Avoid contact with alcohol and alcohol containing solvents during cure.
- Do not apply on frozen surface or through standing water or under water.
- Do not use on surfaces with more than a five degree incline

WARNING:

IRRITANT, SENSITIZER. Contains Polyisocyanate Prepolymer (Mixture), Xylene (CAS 1330-20-7). Causes eye irritation. May cause skin and/or respiratory sensitization after prolonged contact. May be harmful if swallowed. Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Headaches and dizziness may result. **Deliberate misuse by inhalation of vapors may be harmful or fatal. Strictly follow all usage, handling and storage instructions.**

HMIS

Health	*2
Flammability	1
Reactivity	0
Personal Protection	C

First Aid

Eyes – Hold eyelids apart and flush thoroughly with tepid water for 15 minutes. **Skin** – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and tepid water. **Inhalation** – Remove to fresh air. **Ingestion** – Do not induce vomiting. Dilute with water. Contact physician. **In all cases contact a physician immediately if symptoms persist.**

Further Information

Copies of the following publications are available on our website www.sikaindustry.com:

- Material Safety Data Sheets
- Product Data Sheet
- Sika Primer Chart
- General guidelines for bonding and sealing with Sika products

In case of emergency call:

Chemtrec: 800-424-9300
International: 703-527-3887

Health and Safety Information

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety related data. It is highly recommended to read the actual Material Safety Data Sheet before using the product.

- **KEEP OUT OF REACH OF CHILDREN**
- **NOT FOR INTERNAL CONSUMPTION**
- **FOR INDUSTRIAL USE ONLY**
- **KEEP CONTAINER TIGHTLY CLOSED**

Packaging Information

Unipac	600ml
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Value Basis

All technical data stated on this Product Data Sheet are based on the results of laboratory tests only. Actual measured data in the field may vary due to site specific conditions which are not known to Sika and beyond our control.

Handling and Storage

Store in a cool, dry, well-ventilated area. Keep containers tightly closed. Protect from frost. Protect from heat and direct

Further information available at:
www.sikaindustry.com

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sunlight. Protect from atmospheric moisture and water. Sikaflex®-290DC should not be stored at temperatures in excess of 77°F.

Clean Up

Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, remove spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

Limited Material Warranty

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES IMPLIED OR EXPRESS SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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