



SLABFLEX™ 300

TECHNICAL DATA SHEET

Semi-Rigid Epoxy

PRODUCT DESCRIPTION

SLABFLEX™ 300 is a two-component, 100% solids, semi-rigid epoxy joint sealant and crack filler. SLABFLEX™ 300 is available in three different viscosities, liquid, thixotropic and paste. It features a combination of excellent adhesion and elongation not available in general purpose epoxy. It is formulated to provide concrete joint edges and minimizing the deterioration of concrete joint/crack edge to impact. It is used for embedding detector wire loops for traffic signal, electric gates and robotics. SLABFLEX™ 300 should be used in lieu of elastomeric sealants that meet ASTM C920 Standard Specification for Elastomeric Joint Sealants which do not armor the concrete joint edges. It is used on floors, joints and cracks subjected to heavy foot traffic, forklift traffic and chemical attack, specifically food acids. - It is VOC Compliant in all states and provinces in North America.

CONTROL JOINT COVERAGE RATE

Installation coverage will vary with application method, width and depth of control joint to be filled. There are 231 cubic inches per gallon of SLABFLEX™ 300. (Theoretical coverage does not address wastage.)

APPROXIMATE YIELD PER GALLON

WIDTH PER INCH	DEPTH PER INCH	LINEAR FEET PER GALLON
1/8	1/8	1200
1/8	1/4	600
1/8	1/2	300
1/8	3/4	200
1/8	1	150
1/4	1/8	600
1/4	1/4	300
1/4	1/2	150
1/4	3/4	100
1/4	1	75

WIDTH PER INCH	DEPTH PER INCH	LINEAR FEET PER GALLON
1/2	1/8	300
1/2	1/4	150
1/2	1/2	100
1/2	3/4	75
1/2	1	37
1	1/8	150
1	1/4	100
1	1/2	75
1	3/4	37
1	1	19

TYPICAL USES

- FAA P-606 Runway Sealant for Wires and Lights
- Detector Wire Loops for Traffic Signal, Electric Gates and Robotics
- Control Joints and Crack Semi-Rigid Sealant
- Concrete and Polymer Floor Joint Edge Reinforcement
- Cove Base Mortar Binder

BENEFITS

- Complies with USDA, FDA, Food Safety Modernization Act.
- LEED® and Green Seal® requirements.
- VOC and EPA Compliant in all states and provinces in North America. Cures to an inert finish.
- Chemical and Abrasion Resistance
- Designed for new floors and for resurfacing old floors

LIMITATIONS

- This product is best suited for applications in temperatures between 60°F to 90°F regular cure 45°F to 90°F fast cure. Do not apply when Relative Humidity exceeds 85%.
- Higher temperatures will result in shortened working time and faster drying time.
- Color may vary due to batch to batch variation, always "box" different batches to avoid it.

CONCRETE

Concrete must be structurally sound and free of curing agents, coatings, sealers, densifiers and other bond breakers.

New Concrete:

- Place concrete per ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Floor Materials.
- Water Cement Ratio 0.4 to 0.5, and an approximate 4,000 psi (28 MPa) strength level.
- Requiring a positive side moisture barrier in direct contact with the concrete meeting ASTM E1745 Standard Specification for Plastic Water Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- The moisture barrier needs to be placed per ASTM E1643 Standard Practice for Selection, Design, Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs, Class A 15 mils (0.38mm)

Existing Concrete:

If field tests or laboratory analysis reveals inferior concrete flooring slabs containing contaminants from previously applied unreacted silicate materials that will interfere with the bond, use **SLABLOC® 50 WBC**.

- Contaminants include, but are not limited to: organic hydrocarbon materials, calcium chlorides and aluminum stearates.
- Concrete flooring slab can lose their structural strength over time, caused by conditions beyond the control of the flooring manufacturer or the installation contractor.
- If the concrete substrate deteriorates sufficiently, it will no longer support the bond of the remediation floor system.

Such conditions are detailed in ACI 201.2R “Guide to Durable Concrete” published by the American Concrete Institute.

CHECK CONCRETE MOISTURE

Concrete must be dry before application of this floor coating material. Concrete moisture tests are required, either ASTM F1869 (calcium chloride) or ASTM F2170 (in situ RH probe). Refer to appropriate Technical Data Sheet limits.

PHYSICAL PROPERTIES @ 77°F (25°C)

VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM D3960)	0 gr./lt.
Standard Viscosity, Mixed Epoxy and Hardener	Liquid, sag resistant, paste
Standard Viscosity, Mixed Epoxy and Hardener, at 50°F (10°C)	Liquid, sag resistant, paste
Mix Density Clear, Mixed Epoxy and Hardener	9.23 lbs./gal
Pot Life, Standard Cure, 1 gallon (3.79 liters) Mass, Pot Life is Reduced by Increases in Mass and Temperature*	30 Minutes
Pot Life, Fast Cure, 1 gallon (3.79 liters) Mass, Pot Life is Reduced by Increases in Mass and Temperature*	15 Minutes
*Pot Life is reduced by Increases in Temperature and increased by reductions in Temperature	
Mix Ratio, by Volume	2:1
Dry to Touch 45°F to 90°F	4 to 6 Hours
Recoat Time 45°F to 90°F	12 to 72 Hours
Light Traffic 45°F to 90°F	12 Hour Minimum
Full Cure 45°F to 90°F	4 to 14 Days
Shelf Life (shipped and stored) at 40°F to 100°F (4.4°C to 38°C)	1.5 Years
Packaging 1½, 3 and 15 gal. (5.7, 11.4 and 56.8 liters)	

MECHANICAL PROPERTIES @ 77°F (25°C)

Compressive Strength, ASTM D695, 7 Days	2,500 psi
Tensile Strength, ASTM D638	1,000 psi
Tensile Elongation, ASTM D638	60%
Tensile Elongation, ASTM D412	130%
Adhesion, ASTM D7234, Concrete Failure	>400 psi
Hardness (Shore D) ASTM D2240	55 - 60
Water Absorption, ASTM D570 Resin & Hardener	0.1%
Abrasion Resistance, ASTM D4060 Resin & Hardener	0.04 gr.
500 cycles, Wheel No. CS17, 1000 gr. Load	
Moisture Vapor Emission Rate, ASTM F1869*	3 lbs.
Moisture Relative Humidity, ASTM F2170*	80% RH
*If moisture or relative humidity exceeds the limits consult Desert Polymer Flooring representative .	

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CHECK TEMPERATURE AND HUMIDITY

Floor and material temperature must be at or above the published Technical Data Sheet. Dew Point must be 50F (30F) or more below the surface temperature. Do not apply if humidity is at or above 90%.

SURFACE PREPARATION

Surface preparation in accordance with: ICRI Guideline No. 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair. The pH of the concrete substrate should be at 9 or above. All bond-breaking material must be removed.

MIXING

For ease of mixing and placement, the temperature of the "A" and "B" components should be between 70°F to 80°F. Pre-mix the "A" and "B" component to ensure all raw material and pigments are dispersed uniformly. Combine 2 parts A with 1 part B and mix with a low-speed paddle type mixer for 2 minutes scrape down sides of the mixing container halfway through mixing to ensure no uncatalyzed remains. Place material as soon as mixing is complete.

APPLICATION

After mixing all contents as instructed, immediately pour all liquid material on to the properly prepared concrete substrate or next epoxy lift in ribbons and squeegee the material out evenly. Back-roll and cross rolling of material is critical. Check for desired wet film thickness with a WFT Gauge. For Thixotropic and Paste material immediately divide amongst the installers and use putty knives or trowels to place material.

SKID RESISTANCE

Skid-Resistance – Field (in situ) Wet Dynamic Coefficient of Friction (DCOF), ANSI A326.3.

SHIPPING AND STORAGE

Ship and store material between 40°F to 90°F (4°C to 32°C). Store in a dry environment and out of direct sunlight.

SHELF LIFE

Shelf life is 1 year from the date of manufacturer, provided the containers are unopened.

CLEAN-UP

Clean-up mixing station, tools and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, and health and safety precautions when handling or storing solvents and materials, particularly in confined spaces. Make sure the working areas are well ventilated during placement and curing time.

DISPOSAL

Dispose of empty packaging and other waste in accordance with federal, state, provinces and local regulations.

MAINTENANCE

Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong life of the flooring system, a daily maintenance program is highly recommended to ensure the floor is safe for its intended purposes.

HANDLING AND SAFETY

Warning! Eye and skin irritant. May cause dermatitis and sensitization. Always read and follow the product SDS. Avoid contact with eyes, skin and clothing. Avoid breathing vapors, mist and spray. Use with good ventilation.

TECHNICAL SUPPORT

For questions, contact a Desert Polymer Flooring representative.

LIMITED WARRANTY

Desert Polymer Flooring warrants its products to be free of manufacturing defects and that they will meet Desert Polymer Flooring current published physical and chemical properties. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by Desert Polymer Flooring of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Desert Polymer Flooring shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Desert Polymer Flooring shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Desert Polymer Flooring reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Desert Polymer Flooring makes no claim that these tests or any other tests, accurately represent all environments.

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. KEEP CONTAINERS TIGHTLY CLOSED.

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