

TECHNICAL DATA

SPECPOXY BRIDGE OVERLAY



Epoxy Overlay System

DESCRIPTION

SPECPOXY BRIDGE OVERLAY (SBO) is a solvent free, two-component, low modulus, moisture tolerant epoxy adhesive that meets the requirements of ASTM C-881, Type III, . This solvent free, low viscosity epoxy system offers:

- Excellent for skid-resistant overlays on bridges and elevated slabs
- Low modulus, high strength adhesive meeting ASTM C-881 requirements
- More flexible to sustain movement due to thermal changes
- Shock absorbing ability

APPLICATION

Mixing Instructions: ready to use, do not thin with any solvents. Air and surface temperatures must be a minimum of 45° F .Condition material to a minimum of 65°F prior to mixing or installation. Premix each component separately, then mix 1 part of Part A with 1 Part B for three minutes with a low speed drill motor using a Jiffy mixer or paddle. Mix only as much material as can be used within the pot life.

Surface Preparation: Surfaces to be bonded must be clean and structurally sound. Remove all oil, grease, dirt, laitance, curing compounds, and any other foreign material that may cause a problem with bond. Optimum adhesion will be achieved by creating an open profiled/roughened surface similar to coarse sand paper. Shot-blasting or mechanical methods are recommended. Thoroughly vacuum up any remaining dust or debris prior to installation.

Broadcast Overlays: Apply the neat **SPECPOXY BRIDGE OVERLAY (SBO)** with a 3/16" (5mm) notched squeegee. (approx 32 - 64 sq-ft per gal depending on specification) Then broadcast clean, dry aggregate after the epoxy coating has leveled out. A silica sand of 20-40 gradation is recommended for the broadcast aggregate. Apply the aggregate according to the specification or at a rate of 2 pounds per square foot (9.8 kg/m²), or to the point of rejection.

After the **SBO** has cured hard, remove the excess aggregate and apply a second application.

Epoxy Mortar: For epoxy mortar, slowly add from 3.5 - 5 parts clean dry silica sand to 1 part of mixed **SBO** and mix thoroughly, completely wetting out and encapsulating all of the sand with epoxy resin.

For mortar overlays and patching, first clean and prime the prepared substrate with neat **SBO**. Then apply the epoxy mortar by trowel or a vibrating screed while the primer coat is still tacky.

PACKAGING

SPECPOXY BRIDGE OVERLAY (SBO) is available in: 2 gallon units; 10 gallon units; 110 gallon units

STANDARDS/COMPLIANCE

SPECPOXY BRIDGE OVERLAY complies with the requirements of ASTM C 881 Type III, Grade 1 Class B & C

SHELF LIFE

Store **SPECPOXY BRIDGE OVERLAY** in the original tightly closed containers. The shelf life of properly stored product is two years from date of manufacture.

TYPICAL PROPERTIES

Mix Ratio	1 to 1
Mixed Color:	clear/amber
Viscosity:	2000 cps
Gel time (ASTM 881):	25 minutes
Tack-free (70F)	3.5 hours

TYPICAL CURED PROPERTIES

Hardness Shore D	65 to 70
Compressive Modulus (ASTM D 695)	130,000 psi
Compressive Strength (ASTM D-695)	7,000 psi
Tensile Strength (ASTM D 638)	4500 psi
Bond Strength at 14 days (ASTM C 882)	2,450 psi
Elongation @ Break (ASTM D-638)	35%
Water Absorption (ASTM D-570)	< 0.5%
Shrinkage (ASTM C 833)	pass
Permeability (AASHTO T 277)	.9 coulombs

TYPICAL CURED OVERLAY PROPERTIES

Open Time @ 70°F (Foot Traffic)	4-6 hrs
Open Time @ 70°F (Wheeled Traffic)	8-10 hrs



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LIMITATIONS/PRECAUTIONS

Do not thin with any solvents. Surface and ambient air, temperatures must be 45° F or above. Do not expose uncured product to cold or freezing temperatures below 35°F (1°C) or over 90°F (32°C) for any length of time. Uncovered epoxies may yellow, discolor, or chalk upon exposure to strong sources of Ultra-Violet radiation such as from sunlight, and some types of industrial artificial lighting

High temperatures will accelerate the setting time, and cool temperatures will slow down the setting time. As a general rule, the gel time of the epoxy will be cut in half for each 10°-15° increase in temperature above 75°F (24°C).

Prolonged or repeated skin or eye contact may cause irritation. If contact occurs, wash immediately and seek medical help. Use safety glasses and wear protective rubber gloves. In case of ingestion, call a physician. Contact with skin may cause chemical burns. Wash immediately with soap and water. Avoid eye contact. If eye contact occurs, flush immediately with water. Product is a strong sensitizer. Avoid breathing vapors. Use safety glasses and wear protective rubber gloves. In case of ingestion call a physician. **INDUSTRIAL USE ONLY.** Additional precautions, safety and first aid information are contained in the Material Safety Data Sheet.

WARRANTY

NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. **NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.**

INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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