

Polysulfide Epoxy Coat T-48 Chip Seal

T-48 Chip Seal is a premium quality, two-component, polysulfide epoxy based sealer used for restoring concrete bridges, steel orthotropic bridge decks and other pavements. It is a completely impervious membrane that will prevent any ingress of moisture, chlorides, salts, and other corrosion inducing substances. It will add less than 2 pounds of deadweight load per square foot of deck area, an important consideration for older structures.

Application Procedure

Transpro T-48 Chip Seal is applied using a Broom-and-Seed method. It is recommended that the ambient and deck temperature be between 50 °F and 100 °F at the time of application. There are four steps involved in the application process.

Surface Preparation: It is strongly recommended that all surfaces that are to receive T-48 Chip Seal be thoroughly clean and free of all dirt, grease, rust and other contaminants that might interfere with the proper adhesion of the polymer overlay. All damaged or deteriorated concrete shall be removed, cut back to sound concrete, and repaired with appropriate materials and methods. All surfaces, including those that are patched, must be thoroughly shot-blasted or sandblasted to ICRI concrete surface profile (CSP-5). Steel bridge decks (orthotropic) should be shot-blasted to steel structures painting council SSPC-SP5 (white metal) finish. To verify that the surface preparation is adequate, ACI 503R tensile adhesion tests should be performed.

Mixing: Transpro T-48 resin comes in two components (T-48A resin and T-48B hardener). Thorough and complete mixing of these two components is vital for uniform curing and performance. Mix parts A & B together in a 2:1 volume for 2-3 minutes using a Jiffy mixer (or equal) powered by low speed (400-650 rpm) electric drill until blend is uniform.

Resin Application: Temperature of T-48 resin must be above 50 °F for mixing. T-48 resin is applied using 1/8" notched squeegees at the rate of 40 square feet per gallon.

Broadcast: Immediately after resin application, a very light broadcast is applied to break any air bubbles that may have formed during the resin application process. A heavy broadcast can then be applied after 15-20 minutes (depending on temperature) until refusal. Standard basalt (having a Mohs Hardness of 6 or above) or any other similar material can be used as a cover aggregate. Broadcasting can be accomplished either by hand or by the use of numerous spreading machines. After cure, the excess aggregate can be broomed off for reuse.

Packaging

	Part A	Part B
55 Gallon Drum		
Gross Weight (lbs.)	537	430
Net Weight (lbs.)	500	393
Nominal Volume (gal.)	50	50
5 Gallon Pail		
Gross Weight (lbs.)	53.1	42.4
Net Weight (lbs.)	50	39.3
Nominal Volume (gal.)	5	5

Properties*

Property	Unit of Measure	Test
Neat Resin		
Mix Ratio	2:1 by volume	
Viscosity	1200 - 1600 cps (MPa-sec)	Brookfield
Density	8.8 lbs/gal (1.05 gms/ml) min.	ASTM D2849
Pot Life (@ 70 °F)	15 - 30 minutes	AASHTO T237
Flash Point	200 °F (93 °C) min.	ASTM D1310
Solids Content	100%	ASTM D1644
Compressive Strength	5000 psi (34 MPa) min.	ASTM D695
Tensile Strength	1800 psi (12 MPa) min.	ASTM D638
Tensile Adhesion (to concrete)	250 psi (1.7 MPa) min.	ACI 503R
Tensile Elongation	45% min.	ASTM D638
Shore D Hardness	60 min.	ASTM D2240
Chip Seal		
Bond Strength	100% substrate failure	ACI 503R
Coefficient of Thermal Expansion	20-24 x 10 ⁻⁶ in./in./°F (11-13 x 10 ⁻⁶ mm/mm/°C)	ASTM C531
Freeze-Thaw Resistance	Pass (no change)	ASTM C666
Wet Skid Resistance	50 min.	ASTM E274

* To be used as general guidelines only

Storage

Transpo T-48 should be stored in tightly sealed containers in a dry location and at normal room temperatures (50°F - 85°F). Some epoxy materials may crystallize during storage at low temperatures. The epoxy can be used once it has reached desired application temperatures.

Caution

Transpo T-48B (hardener component) contains an alkaline amine. Prolonged or repeated contact may cause sensitivity in some individuals. It is recommended that all persons involved in mixing and application wear protective clothing such as goggles, rubber boots, rubber gloves. As with all chemicals, read MSDS prior to use.

Warranty

The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of either product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product that proves to be defective. Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.

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