Spec Component: 09 97 00 Sika® Armatec® 10ZR 10/17/2018



Section 09 97 00 Finishes

SIKA SPECIFICATION NOTE: This guide specification includes test methods, materials and installation procedures for **Sika® Armatec® 10ZR**, reinforcement corrosion protection. **Sika® Armatec® 10ZR** is a one component primer, moisture-cured, modified with zinc to provide protection against corrosion for steel and iron structures. It is prepared in CSI Master Format and should be included as a separate section under Division 9 - Finishes.

Part 1 - General

1.01 Summary

This Specification shall be read as a whole by all parties concerned. Each Section may contain more or less the complete Work of any trade. The Contractor is solely responsible to make clear to the Subcontractors the extent of their Work and coordinate overlapping Work.

1.02 System description

This specification describes the use of a 3-component, epoxy-modified, cementitious, anti-corrosion coating for reinforcing steel in concrete restoration.

1.03 Related sections

09 97 13 Steel Coatings

1.04 Quality Assurance

- A. <u>Manufacturing qualifications:</u> The manufacturer of the specified product shall be ISO 9001 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis.
- B. <u>Contractor qualifications:</u> Contractor shall be qualified in the field of grouting with a successful track record of 5 years or more. Contractor shall maintain qualified personnel who have receiveed product training by a manufacturer's representative.
- C. Store and apply materials in accordance with all safety and weather conditions required by manufacturer or as modified by applicable rules and regulations of local, state and federal authorities having jurisdiction. Consult Material Safety Data Sheets for complete handling recommendations.

1.05 Delivery, Storage, and Handling

- A. All materials must be delivered in original, unopened containers with the manufacturer's name, labels, product identification, and batch numbers. Damaged material must be removed from the site immediately.
- B. Store all materials off the ground and protect from rain, freezing or excessive heat until ready for use.
- C. Condition the specified product as recommended by the manufacturer.



1.06 Job Conditions

- A. <u>Environmental Conditions</u>: Do not apply material if it is raining or snowing or if such conditions appear to be imminent. Minimum application temperature 35°F (2°C) and rising.
- B. <u>Protection:</u> Precautions should be taken to avoid damage to any surface near the work zone due to mixing and handling of the specified material.

1.07 Submittals

- A. Submit two copies of manufacturer's literature, to include: Product Data Sheets (PDS), and appropriate Safety Data Sheets (SDS).
- B. Submit copy of Certificate of Approved Contractor status by manufacturer.

1.08 Warranty

Provide a written warranty from the manufacturer against defects of materials for a period of one (1) year, beginning with date of substantial completion of the project.

Part 2 - Products

2.01 Manufacturer

Sika® Armatec® 10ZR, as manufactured by Sika® Corporation, is considered to conform to the requirements of this specification.

2.02 Materials

Sika® Armatec® 10ZR shall be:

- A. One Component, polyurethane, solvent base.
- B. The material shall not contain asbestos.

2.03 Performance Criteria

Typical Properties of the product:

1.	Yield	70-100 ft ² /3 mils (DFT) coat (6.5-9.3 m2) per unit

2. Color Greenish-gray liquid

3. Application Thickness 20 mils

4. Application Temp 35–120 °F (2–49 °C)

5. Overcoating time (50% RH) 75°F (24°C) - 1:30 hours

65°F (18°C) - 2:45 hours

55°F (13°C) - 5 hours

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- 6. Pot life
- 7. Salt spray fog (ASTM B117)

24 hours at 77°F (25°C) and 50% R.H. 10,250 hrs No cracking or delamination of Film. No more than 3% rusting on plane

Note: Tests above were performed with the material and curing conditions @ 71°F – 75°F and 45 - 55% relative humidity.

The polyurethane adhesive shall not produce a vapor barrier.

Material must be proven to prevent corrosion of reinforcing steel when tested under the procedures as set forth by the Federal Highway Administration Program Report No. FHWA/RD86/193. Proof shall be in the form of an independent testing laboratory corrosion report showing prevention of corrosion of the reinforcing steel.

Part 3 – Execution

3.01 Mixing and Application

- A. It must be stirred thoroughly before and during application.
- B. Apply to prepared steel surface with a 3/8" nap roller or a round brush at 5 mils minimum thickness onto a dry surface. Properly coat the underside of the totally exposed steel. Allow to dry (approx. 1 hour and 15 minutes) before the repair mortar or concrete is applied.
- C. Adhere to all procedures, limitations and cautions printed in the manufacturer's current Product Data Sheet (PDS) and literature.

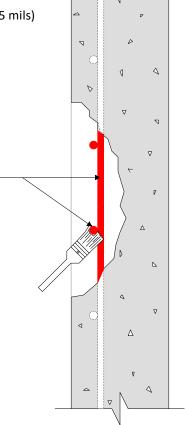
3.02 Cleaning

- A. The uncured polyurethane can be cleaned from tools with Xylene. The cured product can only be removed mechanically.
- B. Leave finished work and work area in a neat, clean condition without evidence of spill overs onto adjacent areas.



Sika® Armatec® 10ZR Anti-corrosion

- 1. Apply Sika Armatec 10 ZR with a 3/8" nap roller or a round brush. Apply one coat (5 mils) onto a dry surface. Cure to tack-free 1 hour and 30 minutes.
- 2. Allow to dry before applying repair mortar or concrete.



Concrete Restoration Systems by Sika Corporation, 201 Polito Avenue, Lyndhurst, NJ 07071

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