BUILDING TRUST

# Section 09 97 00
# Finishes

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***SIKA SPECIFICATION NOTE:*** *This guide specification includes test methods, materials and installation procedures for* ***Sika® Armatec®-1C****, reinforcement corrosion protection.* ***Sika® Armatec® 1C*** *is a cementitious, one-component, coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection. It is prepared in CSI Master Format and should be included as a separate section under Division 9 - Finishes.*
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## 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 one-component, cementitious, anti-corrosion coating for reinforcing steel in concrete restoration.

### 1.03 Related sections

09 97 13 Steel Coatings

### 1.04 Quality Assurance

A. Manufacturing qualifications: 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. Contractor qualifications: 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 receivced 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. Environmental Conditions: Do not apply material if it is raining or snowing or if such conditions appear to be imminent. Minimum application temperature 45°F (7°C) and rising.

B. Protection: 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® 1C, as manufactured by Sika® Corporation, is considered to conform to the requirements of this specification.

### 2.02 Materials

The Portland cement adhesive shall be Sika® Armatec® 1C:

A. shall be a blend of selected portland cements and sands.

B. The material shall not contain asbestos.

### 2.03 Performance Criteria

Typical Properties of the mixed polymer-modified, portland cement mortar:

| | | |
|---|---|---|
| 1. | Yield | 45 lin.ft/ #4 bar (13.7 m) |
| 2. | Color | Red/orange color |
| 3. | Mixing Ratio | 1 qt of water |
| 4. | Application Thickness | 1/32” |
| 5. | Application Temp | 45–95 °F (7–35 °C) |
| 6. | Contact Time | 6-24 hours |
| 7. | Pot life | ~ 60 minutes |
| 8. | Resistance to saline fog 120 hours (ASTM B-117) | Excellent |

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

The cement 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. Mixing: Mix the entire bag with 1 quart of water. Mix with a low speed drill (<300 rpm) and a jiffy paddle. Mix for 3 minutes until uniform with no lumps. Mix only that quantity that can be applied within its pot life.

B. Placement procedure: Apply to prepared steel surface with a stiff-bristle brush, or spray at 1/32" minimum thickness. Properly coat the underside of the totally exposed steel. Allow to dry (approx. 2 - 3 hours) then apply a second coat at 1/32" minimum thickness. Allow drying again before placing repair mortar.

A. 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 Portland cement adhesive can be cleaned from tools with water. The cured Portland cement adhesive 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.

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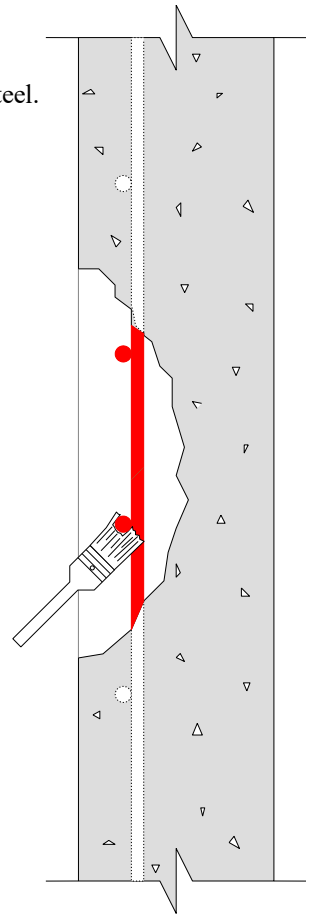
# Sika® Armatec® 1C Anti-corrosion

1. Apply Sika Armatec 1C with stiff bristle brush or spray 1/32” thick, covering all exposed steel. Cure to tack-free 2-3 hours.

2. Apply a second coat at 1/32” Allow to dry again before applying repair mortar or concrete.



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