



Specification Document
Product: RepCon® 928 FS

Section 03 01 00 - Maintenance of Concrete
Section 03 99 20 - Concrete Patching & Resurfacing

Part 1 - General

1.01 Summary

- A. This Specification integrates the complete scope of work across trades. It is the Contractor's responsibility to clarify work scopes for Subcontractors and ensure seamless integration of overlapping tasks.

1.02 System Description

- A. This specification encompasses the patching or resurfacing of interior/exterior horizontal, vertical, and overhead surfaces using RepCon® 928 FS, adhering to ASTM C928 and AASHTO T260 standards.

1.03 Quality Assurance

- A. Manufacturer qualifications: SpecChem must have an ongoing quality assurance program, independently audited regularly.
- B. Comply with all safety and environmental conditions as recommended by SpecChem and local, state, and federal regulations. Refer to Safety Data Sheets (SDS) for safety and handling practices.

1.04 Delivery, Storage, and Handling

- A. Materials should be delivered in original, sealed packaging, stored off-ground in a dry area, and handled according to manufacturer's instructions.



1.05 Job Conditions

- A. Apply only in dry conditions with temperatures above 40°F and rising. Protect the work area from environmental damage.

1.06 Submittals

- A. Submit technical data sheets, safety data sheets, and certificates of compliance.

Part 2 - Products

2.01 Materials

A. RepCon® 928 FS, as produced by SpecChem, meets the requirements of this specification. It is a one-component system, fiber-reinforced, with an integral corrosion inhibitor, suitable for horizontal and vertical applications.

2.02 Performance Criteria

- Meets ASTM C928 for rapid-hardening mortar
- Compressive Strength:
 - 2500 psi at 1 hour
 - 10000 psi at 28 days
- Working time: 10-15 minutes
- Application thickness: 1/2" to 2" without extension
- Application temperature range: 40°F to 90°F

Part 3 - Execution

3.01 Surface Preparation

- A. **Ensure Surface Cleanliness:** The concrete must be sound and devoid of oil, grease, dust, laitance, or other surface contaminants. Saw cut the perimeter of the repair area 1/8" deeper than the repair depth for a notched edge, improving durability.



- B. **Abrasive Surface Preparation:** Mechanically abrade the surface to a minimum Concrete Surface Profile (CSP) of 5, following ICRI 310.2 guidelines, ensuring a saturated-surface-damp (SSD) condition with no standing water.
- C. **Steel Reinforcement Treatment:** Remove rust from exposed steel reinforcing and coat with SpecPrep SB. The prepared concrete should be SSD and primed with a spray or brush application of SpecPrep SB, following the repair mortar application wet on wet or within the recommended open time.

3.02 Mixing and Application

- A. **Mixing Procedure:** Add 4.75 to 5.0 pints (up to 5.25 pints for non-DOT applications for greater flow) of clean water per 50-pound bag of RepCon® 928 FS. Use a low-speed drill or mortar mixer, adding water to the container first, then gradually the RepCon® 928 FS powder. Mix for 2-3 minutes until homogeneous.
- B. **Application Thickness:** Apply in thicknesses from 1" to 2" without extension. For applications over 1" in DOT and heavy traffic areas, extend with clean, SSD 3/8" aggregate up to 60% by weight (30lbs) or up to 100% by weight (50 lbs) for applications over 4". Pre-dampen the aggregate and adjust the total mixing water accordingly.
- C. **Placement Technique:** Firmly trowel or screed RepCon® 928 FS into the area, ensuring complete contact with the surface. Level the material with the surrounding concrete and allow for initial set. After initial set and once the surface is hard, finish by hand troweling. Avoid excessive troweling.
- D. **Finishing and Curing:** Match the repair material texture with the surrounding concrete without adding water during finishing. Utilize SpecFilm as a finishing aid for polymer-modified mortars. RepCon® 928 FS is self-curing under most conditions. In DOT applications or severe drying conditions, use an ASTM C309 compliant SpecChem curing compound.



3.03 **Cleaning** Clean tools and spills with water before the material sets. Cured material can only be removed mechanically.