



**Specification Document
Product: SpecPoxy 1000**

**DIVISION 3 - CONCRETE
Section 03930 - Concrete Rehabilitation
Section 03550 - Concrete Toppings
Section 03930 - Rehabilitation**

Part 1 - General

1.01 Summary

A. This specification describes the use of an epoxy resin adhesive binder for patching or overlay of interior horizontal surfaces, specifically SpecPoxy 1000 by SpecChem.

1.02 Quality Assurance

- A. Manufacturer qualifications: SpecChem must have an ongoing quality assurance program, independently audited regularly.
- B. Contractor qualifications: Must have successful experience in concrete construction.
- C. 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.

1.03 Delivery, Storage, and Handling

- A. Delivery: Products must arrive in original, sealed containers with clear labels.
- B. Storage: Keep materials off the ground, protected from weather.
- C. Conditioning: Follow manufacturer's recommendations for product temperature.



1.04 Job Conditions

A. Environmental Conditions: Apply in dry conditions, above 40°F and rising. B. Surface Protection: Prevent damage to adjacent areas due to material handling and mixing.

1.05 Submittals

A. Documentation: Provide product data and safety data sheets for SpecPoxy 1000.

Part 2 – Products

2.01 Manufacturer

A. SpecPoxy 1000 as produced by SpecChem is specified.

2.02 Materials

A. Epoxy Resin Adhesive Binder: Two-component system with a 2:1 mix ratio, clear amber in color.

2.03 Performance Criteria

A. Adhere to ASTM C881 Type I, II, IV, and V, Grade 1, Classes B & C. Typical cured properties to include:

- Compressive Strength: Minimum 11500 psi.
- Tensile Strength: Minimum 7195 psi.
- Bond Strength: Minimum 2350 psi at 2 days.
- Viscosity: 700 CPS.

Part 3 – Execution

3.01 Surface Preparation

A. Clean Surfaces: Ensure all surfaces are structurally sound, clean, and free of oil, grease, dirt, laitance, curing compounds, and foreign matter. For concrete, achieve a



surface profile of CSP 3 or greater through sandblasting or mechanical abrasion.

Surfaces must be dry prior to application.

B. Crack and Joint Preparation: For pressure injection repairs, prepare the surface adjacent to cracks to expose clean, sound concrete.

3.02 Mixing and Application

A. Mixing Instructions: Ensure all materials and surfaces are at least 40°F.

Precondition materials to 75°F for easier mixing and application. For bulk applications, mix two parts of component A with one part of component B by volume for three minutes using a low-speed drill and Jiffy mixer. For cartridges, ensure the resin and hardener are dispensed and mixed through a mixing nozzle.

B. Crack Injection: Attach injection ports (spaced 6" to 24" apart depending on crack width and concrete thickness) using SpecPoxy 3000 FS. Seal the crack surface with SpecPoxy 3000 FS, overlapping the crack by about 1-1/2" on both sides. After curing, inject SpecPoxy 1000 using pressurized equipment or cartridges.

C. Bonding: Apply SpecPoxy 1000 at a rate of 80 sq ft per gallon (about 20 mils thickness), ensuring the material is worked into the substrate. Place fresh concrete while SpecPoxy 1000 is still tacky. If not tacky, clean the surface and apply another coat of SpecPoxy 1000.

D. Curing: SpecPoxy 1000 typically reaches initial cure in 24 hours and final cure in 7 days, achieving a compressive strength of 11,500 psi.

3.03 Cleaning

A. Clean tools and uncured materials with SpecChem Citrus Cleaner or equivalent solvent.

B. Ensure the worksite is clean and free from spills or excess materials upon completion.