



**Specification Document
Product: Rapid Flex CJ**

**DIVISION 3 - CONCRETE
Section 03930 - Control Joint Fillers**

Part 1 - General

1.01 Summary

A. This section describes sealing saw-cut, control, and construction joints in concrete with a semi-rigid polyurea resin adhesive sealant, specifically SpecChem Rapid Flex CJ.

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, unopened containers with labels.
- B. Storage: Keep materials off the ground, protected from weather.
- C. Conditioning: Follow manufacturer's recommendations for product temperature conditioning.



1.04 Job Conditions

- A. Environmental Conditions: Apply in dry conditions with a temperature above - 20°F and rising.
- B. Surface Protection: Shield all surfaces adjacent to repair areas to prevent damage and contamination.

1.05 Submittals

- A. Documentation: Provide Technical Data Sheets (TDS) and Safety Data Sheets (SDS).

Part 2 – Products

2.01 Manufacturers

- A. SpecChem Rapid Flex CJ, manufactured by SpecChem, conforms to this specification's requirements.

2.02 Materials

- A. Polyurea Joint Filler: Two-component, self-leveling, semi-rigid polyurea resin with a 1:1 mix ratio.

2.03 Performance Criteria

A. Mix Ratio:

- 1:1 by volume

B. Gel Time at 75°F:

- 30 seconds

C. Tack-Free Time at 75°F:

- 3-4 minutes

D. Shave Time at 75°F:

- 20-25 minutes

E. Return to Traffic at 75°F:



- 1 hour

F. Adhesion to Concrete:

- 275 psi

G. Tensile Strength (ASTM D638):

- 1,225 psi

H. Elongation (ASTM D638):

- 200%

I. Shore A Hardness:

- 85

J. Shore D Hardness:

- 30

K. Application Temperature Range:

- Down to -20°F

L. Color:

- Dovetail Gray (additional colors available)

Part 3 – Execution

3.01 Surface Preparation

- A. Joint Cleaning: Ensure joints are clean, dry, and free of curing compounds, densifiers, sealers, or any other foreign substances. Use a vacuum-equipped dry-cut abrasive blade and oil-free compressed air to remove water or dust before application.
- B. Joint Depth: Install Rapid Flex CJ full depth in sawcut control joints and at least 2 inches deep in joints greater than 2 inches. Avoid using compressible backer rod in sawcut control joints. In construction joints, dry sand or backer rod can be used to reduce volume while maintaining a minimum 2-inch depth.



3.02 Mixing and Application

- A. **Mixing Instructions:** Ensure Rapid Flex CJ components are at least 50°F for mixing. Stir or shake each component before dispensing. Use a 1:1 ratio, low-pressure duplex/plural component metered pump with a 3/8" x 24" static mixer.
- B. **Application Process:** For cartridge or plural component pump applications, dispense mixed material into a waste container first to ensure uniform color and consistent 1:1 ratio. Then, dispense properly mixed Rapid Flex CJ into the prepared joint. Overfill joints and allow to cure for about 1 hour, up to 24 hours before shaving flush with the floor using a razor scraper.
- C. **Curing and Shaving:** Rapid Flex CJ sets quickly, reducing the risk of staining joint sides. If installed before maximum concrete shrinkage, a crack may appear, which can be refilled with Rapid Flex CJ after cleaning with SpecChem Solvent 100.

3.03 Cleaning

- A. Remove uncured material using SpecChem Solvent 100 or equivalent. Cured material must be mechanically removed.
- B. Ensure cleanliness and remove any spillover from adjacent areas immediately.