TECHNICAL DATA

RAPID FLEX 90

Rapid-curing, Semi-rigid Polyurea control joint filler



DESCRIPTION

RAPID FLEX 90 is an industrial, high durometer, 100% solids, two-component, UV resistant, semi-rigid, rapid-curing, polyurea for filling control and construction joints in heavy duty industrial concrete floors.

RAPID FLEX 90 allows for joints to be shaved quickly for fast turnaround. RAPID FLEX 90 has been designed for use in compliance with ACI 302, section 4.10 recommendations for joint fillers used in saw cut/control joints with a Shore A Durometer of 90.

RAPID FLEX 90 can also be used for the repair of damaged or spalled joint nosing and filling random cracks. RAPID FLEX 90 is available in 4 additional architectural colors. (see RapidFlex Colorant System)

USES

- Industrial & Commercial Floors
- Control & Construction Joints
- Crack & Joint repair
- Pick-proof sealant in security facilities

FEATURES/BENEFITS

- Easy 1 to 1 mix ratio, pourable/pumpable consistency
- UV Resistant, Colorfast High elongation (100%) to resist tearing due to excessive movement
- Semi-rigid flexibility that does not weld slabs together or become brittle with age
- Optimum hardness (Shore A = 90) to transfer wheel loads while allowing moderate movement
- Can be applied and cures down to −20° F
- Quicker turnaround/less downtime than epoxy joint fillers
- Superior moisture resistance compared to traditional polyurea fillers Preserves uniform color appearance
- · Effectively resists color degradation or discoloration

SPECIFICATIONS/COMPLIANCES

- Accepted for use in USDA, FDA and CFIA regulated facilities - Authorized for use in federally inspected meat & poultry plants.
- Complies with ACI 302 guidelines and PCA Concrete Floors on Ground for "Floor Joint Filler"
- 100% Solids, contains no VOC's, LEED compliant

APPLICATION

Joint preparation Joints must be clean, dry and free of curing compound, densifiers, sealers and any other foreign substances. To remove the above, use a vacuum equipped, dry cut abrasive blade and oil-free compressed air to remove any water or dust prior to applying RAPID FLEX 90.

Per ACI and PCA guidelines, Rapid Flex 90 should be installed full depth in sawcut control joints and a minimum of 2" in joints greater than 2"deep. Do not use compressible backer rod to reduce volume. Rapid Flex 90 should be applied to a minimum depth of 1".

APPLICATION (con't)

Stain Protection Since Rapid Flex 90 sets so quickly, the potential for any overfill to stain the sides of the joint is unlikely. In applications where aesthetic and decorative or architectural finishes are critical, we recommended using **Spec CJ Guard** as a stain protectant and also to facilitate shaving.

Mixing instructions

Temperature of RAPID FLEX 90 must be 50°F or above at the time of mixing. Stir/shake each component before dispensing. Use a 1:1 low pressure duplex/plural component metered pump with a 3/8" x 24" element static mixer.

Application

When using a cartridge or a plural component pump, dispense mixed material into a waste container to assure a uniform color and a consistent 1:1 ratio. Then dispense properly mixed RAPID FLEX 90 into the prepared joint.

Joints should be overfilled and allowed to cure for approximately 1 hour and up to 6 hours before shaving flush with a floor razor scraper. Depending on temperature, shaving after 6 hrs may require more effort to achieve a smooth finish. The cut joint must be flush with the floor to effectively transfer wheel loads.

If RAPID FLEX 90 is installed in a floor before maximum shrinkage has occurred, a crack may appear either adhesively or cohesively. This should not be considered a failure of the RAPID FLEX 90, which will continue to support the joint edge and transfer wheel loads. To remedy the situation, clean out the crack, wipe clean with SpecChem Solvent 100 and refill with RAPID FLEX 90.

TYPICAL TEST DATA

Color (mixed)	Standard Gray	
Mix Ratio	1 to 1 by volume	
Gel Time at 75°F	45 seconds	
Tack-free at 75F	8-12 minutes	
Shave Time at 75°F	20-25 mins	
Return to Traffic @ 75F	1 hour	
Adhesion to Concrete	255 psi	
Tensile ASTM D 638	1175 psi	
Shore A Hardness (ASTM D-2240)	90	
Shore D Hardness (ASTM D-2240)	35	



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PACKAGING

22 fl oz cartridges and 10 gallon units

CLEANING

Tools and Equipment: Uncured material can be removed with SpecChem Solvent 100 or other approved solvent. Dispose of in accordance with local, state, and federal disposal regulations. Mechanical removal is necessary for cured material.

COVERAGE RATE Lineal feet per gallon: Theoretical						
	WIDTH					
D	inches	3/16	1/4	3/8	1/2	
E P T H	1"	100	76	50	36	
	2"	50	38	25	18	

SHELF LIFE

Store Rapid Flex 90 in its original containers and keep tightly closed between 55-90° F. Do not allow the accumulation of water, dirt or other contaminants. The shelf life of properly stored Rapid Flex 90 is one year from date of manufacture.

LIMITATIONS/PRECAUTIONS

Joint should be clean and dry for optimum adhesion.

Cold temperatures will delay set, cure, and shaving time. To facilitate applications in cold temperatures, condition the product to 75°F and if possible warm the area to be repaired to help accelerate set/cure time.

RapidFlex 90 is designed for low adhesive strength to encourage separation when exposed to excessive concrete slab shrinkage.

Always test a small amount of RAPID FLEX 90 to verify that the product has been thoroughly mixed and will harden properly before proceeding.

RAPID FLEX 90 should not be installed on new concrete floors until maximum shrinkage has occurred. ACI 302 recommends a minimum of 30 days and preferably 90 days for all semi-rigid polyureas and epoxies. The longer the time period allowed for curing the concrete prior to installation of RAPID FLEX 90, the better the performance.

RAPID FLEX 90 should not be installed until the building is under permanent temperature control.

Do not thin RAPID FLEX 90 with solvents. Do not use exterior or as an expansion joint sealant.

Although UV resistant Rapid Flex 90 may slightly discolor if exposed to strong and constant sources of ultra-violet radiation.

Keep away from food and food containers.

WARRANTY

NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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