

High Toughness Concrete Repair Material

Description

FastPatch® 5000 is a flexible and tough concrete repair composite with excellent physical properties. FastPatch® 5000 is a 100% solids, 2-component urethane designed to perform in installations where 5,000 psi concrete is specified. FastPatch® 5000 is tough, resilient, impervious to freeze-thaw, and has excellent adhesion. Areas repaired with FastPatch 5000 can be re-opened to traffic in one hour or less.

Applications

- Roads/highways
- Bridge headers and bearing pads
- Airports
- Warehouse floors
- Parking decks
- Sidewalks
- Any crack or spall in concrete needing repair

Features/Benefits

- **Rapid Cure** – as little as 1 hour return to service
- **100% Solids** – no odor
- **1:1 ratio by volume** – easy application
- **Excellent concrete adhesion**
- **Minimal equipment requirements**
- **Ideal for concrete repairs where high strength material is required**

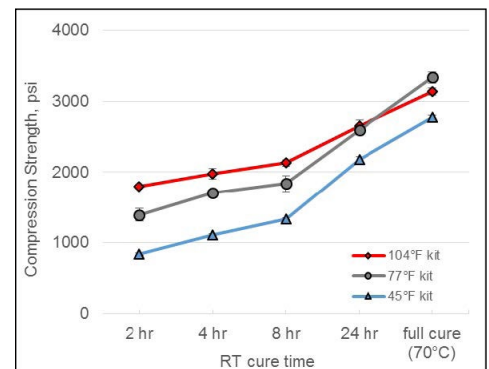


Typical Properties

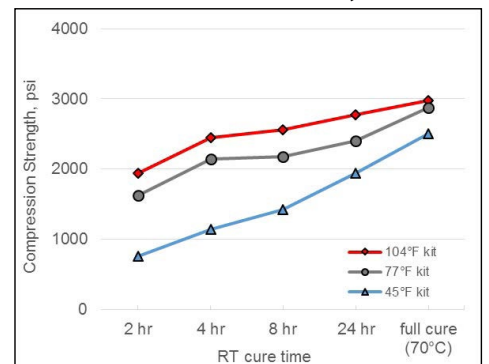
FastPatch® 5000 Kit with recycled glass		
Description		Result
Thermal compatibility to concrete, ASTM C884		pass
Wet bond strength to concrete, ASTM C307, unprimed, psi		200
Kit working time, minutes	Kit tack-free time, minutes	Kit temperature
5-6	15-20	104°F (40°C)
10-12	25-30	77°F (25°C)
25-30	50-60	45°F (25°C)
Compression strength vs room temperature cure time		See charts to right
ASTM C579 compression strength, 2"cube, 24 hour cure, psi		2,180
ASTM C579 compression strength, 2" cube, 24 hour cure, psi		2,780
ASTM C579 compression strength, 2" cube, 7d cure, psi		2,500
ASTM C580 flexural strength, psi		550

Charts note: Bold results indicate certified 3rd party test results. Reports available upon request

FastPatch 5000 Kit Compression Strength: ASTM C579 Method B, 2" cubes



ASTM C579 Method C, 3x6" cylinders



FastPatch® 5000 Kit with gravel aggregate	
Description	Result
Thermal compatibility to concrete, ASTM C884	pass
ASTM C579 compression strength, 2" x 4" cylinder, 7d cure, psi	1,960
ASTM C579 compression strength, 2" cube, 24 hour cure, psi	1,820
ASTM C579 compression strength, 2" cube, 7d cure, psi	2,500
ASTM C580 flexural strength, psi	550

FastPatch® 5000 polymer only properties	
Description	Result
Volatile content, ASTM D2369, weight %	<0.01
Adhesion to concrete, psi (MPa), ASTM D7234, unprimed	475 (3.3)
Wet bond strength to concrete, ASTM C307, unprimed, psi	≥400
Shore hardness, ASTM D2240, full cure	>90 A; 60-70 D
Elongation, %, ASTM D412, full cure	≥ 100
Tensile Strength, psi, ASTM D412, full cure	≥ 2,000
ASTM C5628 impact resistance, mean failure energy, (in*lbs). RT -20°F	> 120, no cracks 44.3

■ Cartridges

- 20-oz. (600 mL) cartridge
- 50-oz. (1500 mL) cartridge

■ Kit Packaging (aggregate included)

- FastPatch® DPR 5000 Kit, 3-gallon (11 liter), 0.4 cubic ft
- FastPatch® DPR 5000 High-Yield Kit, 3-gallon (11 liter), 0.4 cubic ft

■ Bulk Packaging

- 5 gallon (19 liter) pail
- 50 gallon (190 liter) drum
- 250 gallon (946 liter) tote

■ Colors

- Gray, black or tan (bulk only)

■ Shelf Life

- 2 years when properly stored

■ Storage

- Store and ship this product in clean, dry, low-humidity, and shaded or covered environments between 50 and 90°F (10-32°C)

Application Instructions

For instructions on how to handle and apply FastPatch 5000 from cartridges, please refer to: **POLYQuik® Cartridge Instructions**. For handling and applying from kits refer to: **POLYQuik® Kit Instructions**. For applications with WVCO/PPRE-TEC® metering equipment, training will be provided. If you have specific questions related to your dispensing equipment, please contact your WVCO representative or customer support.

For concrete spall and crack repair guidelines, please refer to: **POLYQuik® Concrete Spall and Crack Repair Guidelines**.

For bridge header repair guidelines, please refer to: **POLYQuik® Bridge Header and Joint Installation Guidelines**.

Please contact your WVCO representative or customer support for instruction & guideline documents.

Estimated Coverage

Crack filling (without aggregate)

Crack dimensions	Linear feet (meter) per 20-oz. (600-mL) cartridge	Linear feet (meter) per gallon (3.8 liter)
1/8" x 1/2" (3.2 x 12.7 mm)	14.8 (4.5)	95 (29)
1/4" x 1/2" (6.4 x 12.7 mm)	7.4 (2.3)	47 (14)
1/2" x 1/2" (12.7 x 12.7 mm)	3.7 (1.1)	24 (7.2)
1" x 1/2" (25.4 x 12.7 mm)	1.8 (0.6)	12 (3.6)

Concrete repair yield-volumes are with aggregate. Coverage area assumes 2" (51 mm) average repair depth.

Description	Yield	Coverage Area ft ² (m ²)
20-oz (600-mL) cartridge	90 in ³ (1.5-liters)	0.31 (0.03)
50-oz (1500-mL) cartridge	225 in ³ (3.7-liters)	0.78 (0.07)
1 gallon (3.8 liter) of mixed material	2.5 gallons (9.5-liters)	2.01 (0.19)
FastPatch 5000 Kit	2.5 gallons (9.5-liters)	2.01 (0.19)
FastPatch 5000 High Yield Kit	5 gallons (19-liters)	4.01 (0.373)

Health & Safety

Before handling, you should become familiar with Safety Data Sheet regarding the risks and safe use of this product. To obtain an SDS please email FastPatch@wilvaco.com

Disclaimer of Warranty

Test results are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, no guarantee, warranty, or representation is made, intended, or implied as to the correctness or sufficiency of any information, or as to the suitability of any chemical compounds for any particular use, or that any chemical compounds or use thereof are not subject to a claim by a third party for infringement of any patent or other intellectual property right. Each user should conduct a sufficient investigation to establish the suitability of any product for its intended use. Proper application is the responsibility of the user. As with any product, the use of this product in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability. Testing is the requirement of both engineers and contractors alike. WVCO does not warrant the application under any or all circumstances.