

Technical
Data Sheet



Willamette Valley Company

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Partnering through service,
innovation, and integrity

FastPatch MD/GC

Flexible Concrete Repair

DESCRIPTION

FastPatch MD/GC - MD (Meter Dispensed) / GC (Gravel Component) - is a flexible, two-component urethane designed as a fast curing repair product for concrete. FastPatch is 100% solids and supplied in ready-to-use kits or drums/totes for metered applications. FastPatch MD/GC has excellent adhesion to concrete. Concrete repaired with FastPatch MD/GC can be opened to traffic in as little as an hour. FastPatch MD 180 is available as a 180-second set-time: a faster curing version of FastPatch MD with the same physical properties.

WHERE TO USE

- Roadways - cracks, spalls, broken slabs, construction joints
- Parking Lots - repair damaged areas
- Warehouse - transitions or spalls
- Sidewalks - broken or damaged areas
- Virtually any concrete in need of repair

FEATURES AND BENEFITS

- Cold Applied - easy to use and safe
- Rapid cure - reopen to traffic quickly
- 100% Solids - no odor, environmentally friendly
- Excellent concrete adhesion
- Flexible - absorbs stress and vibrations
- Set Time - faster set times available (MD180)

PACKAGING

5-Gallon (19-Liter) kit
High Yield Kit
5-Gallon (19-Liter) Pail
50-Gallon (190-Liter) Drum
200-Gallon (757-Liter) Tote

COLORS

Gray

SHELF LIFE

1 year 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)

TYPICAL PROPERTIES

VOC, lbs./gal (g/L), ASTM D 2369	0
Viscosity, cps, ASTM D 4878, mixed	2400
Service Temperature, ° F (° C)	-30 to 170 (-34 to 77)
Potlife, min., 70° F (21° C)	5min MD/GC, 2min MD180
Set Time In Mass, 70° F (21° C)	10min MD/GC , 4min MD180
Tack Free Time In Mass, 70° F (21° C)	60min MD/GC , 30min MD180
Hardness, Shore A, ASTM D 2240	85
Concrete Adhesion, ASTM D 7234, psi (MPa)	500 (3.4) 100% cohesive (primed)

MD/GC (not MD180): Effect of temperature on pot life and set time

Temp. °F (°C)	Pot Life (min.)	Set Time (min.)
100 (38)	4	5
70 (21)	5	10
50 (10)	8	45

APPLICATION INSTRUCTIONS

For instructions on how to handle and apply FastPatch MD/GC from kits, please refer to [POLYQuik® Kit Instructions](#). For applications with WVCO/Pre-Tec metering equipment, training may 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 guidelines on header repairs and/or repairs combined with expansion joints, please refer to: [POLYQuik® Bridge Header and Joint Installation Guidelines](#).

SURFACE PREPARATION:

Concrete

1. The concrete should be structurally sound, clean, and the surface should be dry. FastPatch MD/GC can be applied to concrete newer than 28 days and in some cases as soon as 24 hours from when the concrete was poured. Contact your WVCO representative for more details.
2. Concrete surfaces should be free of dirt, moisture, loose particles, oil, asphalt, tar, paint, wax, rust, waterproofing and curing/parting compounds, membranes, and any previously installed materials or other foreign matter. Laitance and efflorescence must be removed prior to installation.
3. Clean concrete surfaces by grinding, abrasive blasting, wire brushing, saw cutting, or other appropriate method.

Steel

1. Steel surfaces must be cleaned before blasting according to SSPC-SP1. Remove any sharp edges and other surface imperfections.
2. Dry abrasive blast surface according to SSPC SP-6/NACE No. 3 Commercial Blast (minimum).
3. Test the surface for non-visible soluble salt contamination according to NACE 6G186. If necessary treat with CHLOR*RID or equivalent salt remover until less than 3ug/cm2 is detected.

PRIMING:

1. Priming all surfaces is always recommended as it will optimize adhesion and durability. Prime with POLYQuik® POLYPRIME or other WVCO primer. Contact WVCO for more details about appropriate primer selection.
2. Refer to the primer Technical Data Sheet and the [POLYQuik Primers Installation Guideline](#) for detailed primer application instructions.

AGGREGATE:

1. Only use WVCO approved aggregates with FastPatch MD/GC. Contact your WVCO representative for details on approved sources.
2. Aggregate is typically 3/8" clean and dry pea gravel. Other aggregate sources may be qualified by request at WVCO R&D.
3. For applications that require aggregate, ensure aggregate is used to the full depth of the FastPatch installation to minimize shrinkage and thermal expansion/contraction.
4. Topping sand may be used for appearance or for more surface traction. Apply topping sand to refusal when the FastPatch surface has started to cure but is still tacky.

PROCESSING:

1. Whenever possible, condition all FastPatch MD/GC components (resin, iso, and aggregate) to 70°F (21°C) before application.
2. At ambient temperatures ≤40°F (5°C), FastPatch components may be conditioned to 100°F (38°C) to aid in cure speed.
3. For applications from high yield kits or meter dispensed from pails/dums/totes: mechanically mix the FastPatch resin component for at least 30 minutes or until well mixed before application. It is particularly important to mix the FastPatch resin if it has been allowed to sit in storage for an extended period of time.
4. Meter dispensed: Test the performance of the meter and FastPatch before applying into the work area. It is recommended a small portion of material is dispensed into a cup and the material cure time and color/mixing monitored for uniformity and conformance at the start of each work period. Do not proceed with application into the work area if the initial test does not cure properly.
5. Meter dispensed: mix tubes should be replaced if application stops for longer than 2 minutes or if material flow is restricted.
6. Minimum recommended repair depth is 1", FastPatch MD/GC is not an overlay material. Maximum recommended repair size is 16ft².
7. Be sure to always honor joints at or around the FastPatch repair area. Failure to honor joints may result in loss of adhesion and/or repair failure. Honor joints with form board/breaker board before installation or saw cut immediately after the FastPatch MD/GC has cured.

NOTE: Material is typically ready for traffic in 1-hour at 70°F (21°C). Colder temperatures and cold gravel will slow the cure. Warmer temperatures will speed the cure.

NOTE: FastPatch MD/GC has aromatic components and discoloration from UV exposure over time may occur; physical properties are typically unaffected.

SKID RESISTANCE: It is the responsibility of the installer to ensure the final product meets skid resistance requirements. Refer to specifications of the project to determine the requirements and test methods. Topping sand may be added or the cured FastPatch MD/GC may be sanded, grinded, grooved or otherwise abraded as necessary to increase skid resistance or traction.

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HEALTH AND SAFETY

Before handling, you should become familiar with the Safety Data Sheet (SDS) regarding the risks and safe use of this product. To obtain an SDS, please call 800-333-9826 or send an email to: msds@wilvaco.com.



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