



DURAPATCH HIWAY™

DS-174.1-0417

A product brand of LATICRETE International, Inc.



1. PRODUCT NAME

DURAPATCH HIWAY™

2. MANUFACTURER

LATICRETE International, Inc.
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Toll Free: 1.800.243.4788, ext. 235

Fax: +1.203.393.1684

Website: www.laticrete.com

3. PRODUCT DESCRIPTION

DURAPATCH HIWAY is a one-component, rapid strength-gaining cement based patching system. This durable cement patch contains the necessary ingredients to assure rapid strength, sulfate resistance, elevated temperature stability, superior bondability, and increased flexural and tensile strengths for exterior applications.

Uses

The time-proven benefits of DURAPATCH HIWAY assure trouble-free, precise patch repairs of parking decks, bridge decks, utilities, highways, bridge structures and ramps. The non-metallic, non-staining, and rapid strength assure a concrete repair patch for humid, cool, and wet conditions.

Advantages

- 1-3" neat can be extended with aggregate.
- Rapid strength gain.
- Fast turnover of repair area.
- Durable freeze/thaw properties.
- Flowable consistency.

Suitable Substrates

- Existing Concrete

Packaging

50 lb (22.7 kg) bag

Approximate Coverage

Nominal Thickness	Approximate Coverage
1" (25 mm)	4.9 ft ² (0.5 m ²)
2" (50 mm)	2.5 ft ² (0.2 m ²)
3" (75 mm)	1.6 ft ² (0.1 m ²)

Shelf Life

DURAPATCH HIWAY bags are to be kept in dry storage to prevent water contamination. Shelf life is one (1) year in unopened bags when properly stored.

Limitations

- For best results, surface temperature should be between 35°F (2°C) and 85°F (29°C).
- Do not install over painted surfaces.
- Do not exceed recommended mixing ratio as indicated in mixing instructions. Over watering will weaken product properties.
- Never mix with cement or admixtures.
- Do not re-temper.
- After placing, protect from direct heat and sun.

Cautions

- Refer to Safety Data Sheet (SDS) before using.
- Protect finished work from traffic until fully cured.
- Contains Portland cement and silica sand.
- May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally.
- Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

Mock-ups and field test areas are required in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti-dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction) to ensure system performance as specified for the intended use, and to determine approval of the decorative flooring system.

4. TECHNICAL DATA

Applicable Standard & Test Methods

ASTM C387

ASTM C666

ASTM C928

ASTM C191

ASTM C230

ASTM C109
ASTM C78
ASTM C882

Physical and Working Properties

Property	Observed
Flow ASTM C230	Plastic
Min. Depth	1"
Set time, ASTM C191	Initial: 10-15min Final: 15-20min
Compressive Strength ASTM C109 2 hours	2 Hours – 2100 psi (14.5 MPa) 1 Day – 3400 psi (23.4 MPa) 28 Days – 4900 psi (33.8 MPa)
Flexural Strength ASTM C348 24 hours	24 Hours – 600 psi (4.1 MPa) 7 Days – 900 psi (6.2 MPa) 28 Days – 1000 psi (6.9 MPa)
Freeze Thaw ASTM C 666 300 cycles	99.9
Adhesion, Shear ASTM C882	3000 psi (20.7 MPa)

Specifications are subject to change without notification. Technical data shown in product data sheets are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions. Field test results will vary due to critical job site factors. All recommendations, statements and technical data contained in this data sheet are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind. Satisfactory results depend upon many factors beyond the control of LATICRETE International, Inc. User shall rely on their own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from their direct use, indirect use or consequential to their use of the product. LATICRETE shall not be liable to the buyer or any third party for any injury, loss or damage directly or indirectly resulting from use or inability to use the product.

5. INSTALLATION

Surface Preparation: Prepare surface in accordance with ICRI Technical Guideline No. 03730. Saw cut a minimum of 1" (25 mm) deep to form patch boundaries. Remove all concrete not bonded to the rebar down to 3/4" (19 mm) below the rebar. Remove rust and scale from rebar by sandblasting. Abrade concrete surface to CSP 5 or greater per ICRI 03732. Flush with water to remove all dust. Remove standing water before placing patch. Leave surface damp (saturated surface dry - SSD).

Addition of Aggregate: For patches over 3" (76 mm), use washed, 1/2" (13 mm), hard, rounded aggregate or non-calcareous, crushed angular aggregate. Extend each bag by up to 60%, by weight.

Mixing: For best results on large and medium sized projects, use a gas powered mortar mixer. For small batches, use a minimum 1/2" slow speed drill fitted with a mixing paddle. Do not mix by hand.

Locate the mixing operation close to the repair areas. At 70°F (21°C) mix no more than can be placed and finished within 10 minutes. Warmer temperatures will reduce working time. Proper water content is critical. Add 3-3 1/2 quarts (2.8-3.3 L) of water per bag depending on consistency desired.

Pour clean water into mixer. Add damp aggregates for deep patches. Add powdered DURAPATCH HIWAY™; mix until uniform in consistency, approximately 3 minutes, and place immediately.

Placing: Immediately place in prepared area. Work firmly into bottom and sides of void to remove air and assure proper bond. Level and screed to elevation and finish to match existing concrete.

Cold Weather: For temperatures below 35°F (2°C): Heat the concrete until warm. Pre-condition DURAPATCH HIWAY to 70°F

(21°C) before use. Use warm water to increase rate of hardening. Do not use accelerators or antifreeze.

Hot Weather: For temperatures over 85°F (29°C): Use ice water to keep patch cool. Do not place on hot, dry substrate.

Curing: In extreme heat and windy conditions keep patches covered and damp if possible. At 70°F (21°C) the patch will hold up to traffic within 2 hours.

6. AVAILABILITY AND COST

Availability

L&M™ and LATICRETE® materials are available worldwide.

For Distributor Information, Call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line distributor information, visit LATICRETE at

www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

039920: Concrete Patching and Resurfacing: Rapid set, cement-based, repair mortar, minimum 2500 psi (17 mpa) in two (2) hours.

7. WARRANTY

See 10. FILING SYSTEM:

DS 230.13: LATICRETE Product Warranty

8. MAINTENANCE

Non-finish LATICRETE and LATAPOXY installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, ext. 235

Fax: +1.203.393.1948

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at www.laticrete.com.

10. FILING SYSTEM

Additional product information is available on our website at www.laticrete.com. The following is a list of related documents:

DS 230.13: LATICRETE Product Warranty

L&M Construction Chemicals
A product brand of LATICRETE International, Inc.
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