



DURACRETE™

DS-174.4-0415

A product brand of LATICRETE International, Inc.



1. PRODUCT NAME

DURACRETE™

2. MANUFACTURER

LATICRETE International, Inc.

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3. PRODUCT DESCRIPTION

DURACRETE is a single component, polymer-reinforced, high-strength, cement-based patching and resurfacing mortar. DURACRETE is designed to repair, slope, and level structurally sound interior and exterior concrete surfaces that are pitted, worn, scaled or spalled. In addition, this product can be shaped to patch concrete members and deep voids. DURACRETE offers ideal set times with an easily trowelable consistency.

Uses

The excellent workability, wear resistance, and polymer-reinforced bond strength of DURACRETE make it ideal for patch repairs of existing concrete such as commercial warehouse and industrial floors, sidewalks, stair walls, curbs and gutters, driveways, and concrete parking decks. Additional uses of DURACRETE include stamped concrete overlays and decorative finishes, in conjunction with integral or topically applied colors. DURACRETE is available in standard concrete gray.

Advantages

- May be placed as a repair mortar or an overlay
- High abrasion resistance
- Excellent bond strength
- May be mixed with coarse aggregate
- Suitable for both interior and exterior use
- Featheredge
- Horizontal and vertical installations

Suitable Substrates

- Existing Concrete

Packaging

50 lb (22.7 kg) plastic pail

50 lb (22.7 kg) bag

Approximate Coverage

Nominal Thickness	Approximate Coverage
1/8" (3 mm)	42 ft ² (3.9 m ²)
1/4" (6 mm)	21 ft ² (2.0 m ²)
1/2" (13 mm)	11 ft ² (1.0 m ²)
1" (25 mm)	5.2 ft ² (0.5 m ²)
2" (51 mm)	2.6 ft ² (0.2 m ²)
3" (76 mm)	1.7 ft ² (0.2 m ²)
Slurry Coat	50 ft ² (4.6 m ²)

Shelf Life

DURACRETE units are to be kept in dry storage to prevent water contamination. Shelf life is one year in unopened pails or bags when properly stored.

Limitations

- Not recommended to repair moving cracks
- Do not use material at temperatures below 45°F (7°C) or above 100°F (38°C)

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

ASTM C387

Physical and Working Properties

Property	Observed
Consistency	Highly Flowable
Max depth	3" (76mm)
Working Time	20 min
Set time, ASTM C191	Initial: 1 hr. Final: 3 hr.
Compressive Strength ASTM C109 1 day	1000 psi (6.9 MPa)
Compressive Strength ASTM C109 3 day	2450 psi (16.9 MPa)
Compressive Strength ASTM C109 7 day	3250 psi (22.4 MPa)
Compressive Strength ASTM C109 28 day	5000 psi (34.5 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: Concrete surfaces must be structurally sound, free of loose or deteriorated concrete, dust, dirt, paint, efflorescence, oil, and other possible contaminants. Do not place over painted or sealed surfaces. Remove rust and scale from rebar in accordance with ICRI guideline number 03730. Profile the surface mechanically to ICRI 03732 CSP 5 or greater. Properly clean the profiled area.

Bonding Slurry for Deep Spalls and overlays: Prime damp surface to be repaired with a liquid slurry bond coat using DURACRETE™ powder mixed with 4.5 qts (4.3 L) of water per bag just before the placement of DURACRETE mortar. Uniformly apply bonding slurry with a stiff broom. Broom out puddles. Do not allow slurry bond coat to dry out before installing DURACRETE. Re-prime areas that dry before installation.

MIXING WATER REQUIREMENTS: When used as a large area overlay, mix with approximately 4 qts (3.8 L) of potable water per 50 lbs (22.7 kg). When DURACRETE is being used as a small area patch (curb and gutters, pot holes, etc.) reduce total water slightly to attain a trowelable or stiff consistency. Do not dry pack. Do not use less than 2.8 qts (2.5 L) of water per bag.

MIXING: On small area repairs, mix with a variable-speed electric drill fitted with a paddle or "jiffy" mixer. On larger installations, use a properly vented, gas powered, paddle-type mortar mixer. When mixing to overlay consistency, place 3/4 of specified water into an empty container and then, while mixing, slowly add all DURACRETE powder. Mix for 3-5 minutes and then add the remaining water to attain desired placement consistency. Continue mixing for a total of 5 minutes. Do not mix more than can be placed in 20 minutes.

PLACING: Immediately place DURACRETE onto wet slurry mixture of DURACRETE. Level and screed to elevation or slope desired. Do not re-temper. DURACRETE may be placed at depths of near feather edge to 3" (75 mm). Allow to set and stiffen for a few minutes and then finish or texture as desired. In hot and windy conditions use E-CON™ to minimize plastic shrinkage cracks.

Finish top coat: For a more uniform appearance on spalled exterior concrete driveways, pavements, and walkways, allow installed DURACRETE to cure a minimum of 4 hours. Apply a final finish top coat of DURACRETE mixed with 4 qts (3.8 liters). water per bag to produce a uniform color and desired texture. Allow to cure overnight before subjecting to traffic.

Curing: To protect installation from high winds, heat, or sun, use E-CON. Do not water cure. Allow DURACRETE to harden before applying decorative sealing compounds.

Crack and Joint Repair: Extend all joints through the total thickness of the overlay system. Use expansion joint material where necessary and saw cut to full depth as required. Over time, cracks in the substrate will continue through the DURACRETE repair and may need additional protection.

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.lmcc.com

Cost

Contact a LATICRETE Distributor in your area.

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
DS 172.9: E-CON™