



DURAFLOOR HP™

DS-173.9-0116

A product brand of LATICRETE International, Inc.



1. PRODUCT NAME

DURAFLOOR HP™

2. MANUFACTURER

LATICRETE International, Inc.

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3. PRODUCT DESCRIPTION

DURAFLOOR HP is a cement-based high quality, fast drying, dual purpose self-leveling underlayment or interior wear surface topping that can be accented with a wide variety of coloring systems & finishes. Designed for use as a durable and attractive polishable interior wear surface topping or a high performance underlayment. DURAFLOOR HP rapidly gains strength to allow light traffic and mechanical polishing within 24 hours after placing.

Uses

The rapid strength, self-leveling features of DURAFLOOR HP assure an attractive durable concrete repair surface for worn, uneven and pitted concrete floors. Its workability and wear resistance make it ideal for patch repairs that require a durable and polishable repair material. Use DURAFLOOR HP to renovate and correct irregularities in light manufacturing, malls, retail stores, warehouses and lobbies.

Advantages

- Long flow life
- Can be polished
- High abrasion resistance
- Can be dyed or colored
- Rapid strength gain
- Single applications 3/8" – 2" (10-50 mm)
- Can add decorative aggregate

Suitable Substrates

- Existing Concrete

Packaging

50 lb bag (22.7 kg)

Colors:

Grey and Bright White

Approximate Coverage

Nominal Thickness	Approximate Coverage
3/8" (10 mm)	14 ft ² (1.3 m ²)
1/2" (13 mm)	11 ft ² (1.0 m ²)
1" (25 mm)	5.5 ft ² (0.5 m ²)
2" (51 mm)	2.8 ft ² (0.2 m ²)

Shelf Life

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

Limitations

- Potential for cracking is quite common with all cement based products. Therefore, cracks are expected with decorative cement topping projects and are not considered a manufacturing defect. LATICRETE cannot predict if, or to what extent, cracking will occur. Refer to TDS 185D for more info.
- Not recommended to repair moving cracks
- Do not use material at temperatures below 45°F (7°C) or above 90°F (38°C)
- Not for use over gypsum, gypsum based patching compounds, wood, particle board, luan, asbestos or chip board
- Not for use where steel, small or hard plastic wheeled traffic is expected, as indentations can be expected
- Install at minimum 1/2" thickness when forklifts, pallet trucks and other rubber wheeled vehicles are expected to be used

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 C928

ASTM C387

ASTM C109

ASTM C348

Physical and Working Properties

Property	Observed
Max depth	2" (51 mm)
Working Time	20-30 min
Set time	Final: 90-120 min
Compressive Strength ASTM C109 4 hour	2000 psi (13.8 MPa)
Compressive Strength ASTM C109 1 day	3500 psi (24.1 MPa)
Compressive Strength ASTM C109 7 day	6000 psi (41.4 MPa)
Flexural Strength, ASTM C348	1200 psi (8.3 MPa)
Time to light traffic	2-3 hours

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

All concrete surfaces must achieve an ICRI CSP Profile of 3-5.

Clean substrate to eliminate dust, dirt, oil, grease, paint or any contaminants which may inhibit bonding. Do not use chemicals to clean substrate. Remove any loose particles by vacuuming and damp sponging.

Inspect for contraction joints, construction joints and cracks in the substrate which may be subject to movement after installation of a DURAFLOOR HP™. These must be maintained as joints through the DURAFLOOR HP.

Maintain substrate temperature between 40–90°F (4–32°C) during application and air temperature between 50–90°F (10–32°C) during drying. Provide adequate ventilation to ensure uniform drying.

Priming

- Use DRYTEK™ LEVELEX™ Primer with every application of DURAFLOOR HP as an underlayment.
- Use DRYTEK Epoxy Primer with every application of DURAFLOOR HP as a decorative wear surface.

Note: Keep primed surface clean. Do not allow any foot traffic onto surface. Refer to TDS 230D.

Mixing

For best results use 4.5 to 5 qts (4.3-4.7 L) of water for each 50 lb (22.7 kg) bag and a variable speed drill (650 rpm) fitted with an egg-beater type mixing paddle to obtain a lump free mix. Do not over water. Pour the required amount of clean water into the mixing drum and then add powder, mixing a minimum of 2-3 minutes to a smooth and lump free consistency. For multiple bag mixes increase mixing time as needed. Do not mix by hand. Do not mix in portable concrete mixers.

Application

Substrate temperature must be between 40–90°F (4–32°C) during application and air temperature maintained between 50–90°F (10–32°C). Protect areas from direct sunlight. Do not use damp curing methods or curing and sealing compounds. If required to meet level tolerances, survey surface using a digital or electronic leveling device and apply level pegs as required. Adequate ventilation should be provided to ensure uniform drying. Pump or pour blended material onto substrate at an average thickness ranging between 3/8" to 2" (1.5–50 mm). Do not over work the surface. Do not feather edge. For all surfaces except structural lightweight concrete where a minimum thickness of 5/8" (16 mm) and wood substrates minimum thickness of 1/2" (12 mm) must be maintained. Immediately following placement lightly smooth the surface and pour lines, when not using elevation pins the use of a gauge rake will assist in controlling material depth. DURAFLOOR HP is workable for approximately 20 minutes at 70°F (21°C). Temperature and humidity will affect flow, working time and set time. Do not walk on DURAFLOOR HP until it hardens, typically 2-3 hours. Do not expose DURAFLOOR HP to rolling dynamic loads, such as forklifts or scissor lifts, for at least 72 hours after installation. DURAFLOOR HP will accept stains, water-based sealers and coatings in 24 hours. After 24 hours, DURAFLOOR HP surface may be polished to proper specifications (400-1500 grit). Proper application is the responsibility of the user. Field visits by LATICRETE personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

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

The long term performance, appearance, and life expectancy of wear surface products are critically dependent upon a good routine maintenance program designed specifically for the installed wear surface type, traffic, and other conditions. Properly placed walk-off mats, inside and outside will help increase the life of the floor. Some cleaning products and equipment or improper use of products can damage a wear surface appearance over time. Recommended maintenance program consists of frequent and thorough cleanings utilizing FGS CONCRETE CONDITIONER™. Frequency of washing will vary, as it may be necessary daily, weekly or less frequently depending on floor usage and age. A mechanical walk-behind or ride-on scrubber is an efficient and economical means of regularly cleaning concrete floors. Only soft scrubbing or soft brush attachments should be used when mechanically scrubbing your floor. Do not use aggressive abrasive pads or brushes. The use of black scrubbing pads, diamond impregnated pads or carbide impregnated type brushes may dull the surface gloss. Wet mops work well on small floors or places where a mechanical scrubber will not fit.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235
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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 076.0: DRYTEK™ LEVELEX™ Primer
DS 077.0: DRYTEK Epoxy Primer
DS 177.1 FGS CONCRETE CONDITIONER
TDS 230D: DRYTEK Substrate Preparation and Primer Guide