

# **NXT® LEVEL DL**

DS-87.5-0321

# Globally Proven Construction Solutions



# 1. PRODUCT NAME

NXT® LEVEL DL

## 2. MANUFACTURER

LATICRETE International, Inc. 1 LATICRETE Park North Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 1235 Toll Free: 1.800.243.4788, ext. 1235

Fax: +1.203.393.1684 Website: laticrete.com

## 3. PRODUCT DESCRIPTION

NXT LEVEL DL (Decorative Leveler) is a polishable cement-based high quality, fast drying, dual purpose, self-leveling, interior wear surface topping that can be accented with a wide variety of coloring systems & finishes. Designed for use as a durable and attractive interior wear surface topping or a high performance underlayment. For application over a wide variety of substrates including concrete, VCT and tile. NXT LEVEL DL can be placed from 1/16" to 1-1/4" (1.5 to 32 mm) in a single lift.

## Uses

- Commercial, retail (malls & shops)
- Health care, hospitals
- Education (schools & universities)
- Residential
- Hotels

## **Advantages**

- Dual purpose; for use as an attractive interior wear surface or as a high performance underlayment
- Can be topically stained or integrally colored to match specific design needs
- Can be pigmented with PermaColor Color Kit, 40 standard colors and even custom
- · Can be polished
- Can be applied directly over concrete testing at RH of 100% or less per ASTM F2170
- Inorganic; will not contribute to mold/mildew growth
- Can be installed from a 1/16" to 1-1/4"
- Can be tapered to zero at edges (when used as a Underlayment)
- · Superior compressive strength formulation
- Direct replacement for DRYTEK LEVELEX DL
- When used as an underlayment, NXT Level DL qualifies for all the same applicable warranties as NXT Level Plus

# Suitable Substrates

- · Cement Backer Board
- Cement Mortar Bed
- Cement Terrazzo
- Ceramic Tile and Stone
- Concrete
- STRATA HEAT Mat
- STRATA MAT
- Vinvl Tile
- Exterior Glue Plywood (Interior Only)

# **Packaging**

55LB (24.9KG) BAG / 56 per pallet / Grey Part: 0907-0055-21

2200LB (1000KG) SACK / 18 per truck / Grey Part: 0907-2200-21

55LB (24.9KG) BAG / 56 per pallet / White Part: 0908-0055-22

2200LB (1000KG) SACK / 18 per truck / White Part: 0908-2200-22

# **Approximate Coverage**

Nominal Thickness	Wear Surface	Underlayment
1/16" (1.5mm)	96 ft² (8.9 m²)	100 ft <sup>2</sup> (9.3 m <sup>2</sup> )
1/8" (3 mm)	48 ft <sup>2</sup> (4.5 m <sup>2</sup> )	50 ft <sup>2</sup> (4.6 m <sup>2</sup> )
1/4" (6 mm)	24 ft <sup>2</sup> (2.2 m <sup>2</sup> )	25 ft <sup>2</sup> (2.3 m <sup>2</sup> )
1/2" (12 mm)	12 ft <sup>2</sup> (1.1 m <sup>2</sup> )	12.5 ft <sup>2</sup> (1.2 m <sup>2</sup> )
3/4" (18 mm)	8 ft <sup>2</sup> (0.7 m <sup>2</sup> )	8.3 ft <sup>2</sup> (0.8 m <sup>2</sup> )
1" (25 mm)	6 ft <sup>2</sup> (0.6 m <sup>2</sup> )	6.3 ft <sup>2</sup> (0.6 m <sup>2</sup> )
1-1/4" (32 mm)	4.8 ft <sup>2</sup> (0.4 m <sup>2</sup> )	5 ft <sup>2</sup> (0.5 m <sup>2</sup> )

Coverage will vary depending on the texture of the surface. A survey is also recommended.

### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored off the ground in a dry area. High humidity will reduce the shelf life of bagged product.

# 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.
- Do not install over particleboard, interior glue plywood, chipboard, hardboard (Masonite®), Luan panels, asbestos, gypsum-based patching materials, asphalt, coal tar, or lightweight insulating concrete or any other dimensionally unstable materials.
- Not recommended for steel-wheeled traffic
- For interior use only
- Do not install when surface temperature is below 40°F (4°C) or above 90°F (32°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 apply over waterproofing or crack isolation membranes. When a waterproofing membrane is required, use a LATICRETE Waterproofing Membrane on top of NXT LEVEL DL.
- Do not use for submerged or continuously wet areas.
- Crack Isolation properties are not applicable when using NXT LEVEL DL over STRATA\_MAT or STRATA\_HEAT Mat.

### Cautions

- Check www.laticrete.com for any technical bulletins or updated information about the product and its application
- Contact your local LATICRETE Technical Sales Representative with any questions
- · Consult SDS for more safety information
- · Protect finished work from traffic until fully cured

- Contains portland cement and silica sand. Causes skin burns and serious eye damage. Wear protective clothing, gloves and eye protection. In case of contact, flush thoroughly with water.
- Silica sand may cause cancer, respiratory irritation or serious lung problems. Do not breathe dust. Wear a respirator in dusty areas.
- Keep out of reach of children

## 4. TECHNICAL DATA











# **Physical Properties**

Test	Test Method	
Pour Depth	1/16" to 1-1/4" ( 1.5 – 32 mm)	
	Consult Technical Services for	
	Depths Over 1-1/4". Can be	
	tapered to zero at edges.	
Walkable	1 - 2 hours at 70°F (21°C)	
Tensile Bond	200 - 300 psi (1.4 – 2.1 MPa)	
Strength		
ASTM C-1583		
Flexural Strength	1100 - 1400 psi (7.6 – 9.6 MPa)	
ASTM C-1708		
Compressive	1 day = 3000 psi ( 20.6 MPa)	
Strength	7 day = 4000 ( 27.6 MPa)	
	28 day = 5100 psi (35.1 MPa)	
ASTM C-1708		
Set Time	Initial @ 20 - 30min.	
	Final @ 35 - 70min.	
ASTM C-1708		
Installed Dry Weight	2.4 - 2.5 lbs/ft²	
(per square foot @ ¼"		
(6mm))		

All results are averages.

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

### 5. INSTALLATION

# **Surface Preparation**

 See TDS230 SUBSTRATE PREPARATION AND PRIMER GUIDE for LATICRETE SELF-LEVELING PRODUCTS for more detailed dilution, approximate coverage and application instructions. Use NXT Primer, Prime-N-Bond, VAPOR BAN Primer ER or NXT Epoxy Primer only

## **PRIMING**

- Underlayment Applications When applying NXT Level DL as an underlayment to receive floor coverings, apply LATICRETE NXT Primer. See DS 502.0 and TDS230 SUBSTRATE PREPARATION AND PRIMER GUIDE for LATICRETE SELF-LEVELING PRODUCTS for more detailed dilution, approximate coverage and application instructions.
- Wear Surface Applications When applying NXT Level DL as a wear surface over concrete, apply NXT Epoxy Primer with sand broadcast before application takes place. See DS-029.3 NXT Epoxy Primer for approximate coverage and application instructions. When applying over substrates other than concrete, consult LATICRETE Technical Services.
- Primer is not required when using NXT LEVEL DL over STRATA\_MAT or STRATA\_HEAT Mat.

**NOTE:** If moisture is present, a moisture barrier must be used. See DS 502.0 and TDS230 SUBSTRATE PREPARATION AND PRIMER GUIDE for LATICRETE SELF-LEVELING PRODUCTS for more detailed information.

- NXT Vapor Reduction Coating (sand broadcast required, cure time of 12 hours)
- VAPOR BAN Primer ER (sand broadcast required, cure time of 3 hour

# **Mixing**

When used as an underlayment, NXT LEVEL DL should be mixed with 5.6-6 qts (5.3-5.7 L) of water per 55 lb (25 kg) bag. When used as a decorative wear surface NXT LEVEL DL should be mixed with 4.5-5.5 qts. (4.3-5.2 L) of water per 55 lb (25 kg) bag. Do not over water. For manual application, add product to water and mix for 2-3 min. with a heavy duty drill (650 rpm) to obtain a lump free mix. NXT LEVEL DL can also be used in most pump equipment. Consult with a LATICRETE representative to verify equipment compatibility.

**Note:** When being used as an overlayment, NXT Level DL can be used with PERMACOLOR® Select color packets. It is recommended to start with 2 color packets. Increase the amount based on your desired color. Additional water is needed, 0.5 gts. for every 2 color

packets added. A sample application is always recommended to determine finish.

A flow test should always be performed to ensure that mix is homogenized and free from separation for multiple bag mixes increase mixing time as needed. The ideal flow range for NXT LEVEL DL is 11" to 12" (or 140mm to 152mm) for underlayment. 10 to 11" (or 127mm to 140 mm) for wear surface using a NXT Flow Test Kit. See TDS 235N Flow Test Method for more detailed instructions on conducting flow tests.

## **Application**

Substrate temperature should be between  $40-90^{\circ}F$  ( $4-32^{\circ}C$ ) during application and air temperature maintained between  $50-90^{\circ}F$  ( $10-32^{\circ}C$ ). 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  $1/16^{\circ}-11/4^{\circ}$  (1.5-32mm) for most surfaces except: Can be tapered to zero at edges when used as a underlayment.

- Wood substrates minimum 1/2" (12mm)
- Minimum <sup>3</sup>/<sub>4</sub>" (19mm) pour thickness over top of STRATA\_MAT or STRATA\_HEAT Mat when NXT LEVEL DL is used as a wear surface.
- Minimum ½" (12mm) pour thickness over top of STRATA\_MAT or STRATA\_HEAT Mat when NXT LEVEL DL is used as an underlayment.

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. Do not expose NXT self-leveling underlayments to rolling dynamic loads, such as forklifts or scissor lifts, for at least 72 hours after installation. Minimum of 1/2" thickness for polished applications. 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.

Application tools offered by LATICRETE:

- 7316-LVPG-25 / LATICRETE Elevation Pins
- 7317-NIVC-HS / LATICRETE Electronic Survey Tool
- 7319-TOOL-CR / Self-Leveling Underlayment & Overlayment Tool Kit

# Flooring Installation

Always refer to finished floor manufacturer's recommendations regarding installation instructions, surface prep, moisture conditions and compatibility. Always test performance suitability and compatibility of finished floor systems prior to their application. Sample surfaces should be installed as a field test so as to be

representative of entire surface and tested for intended use.

In good drying conditions (ambient air temperature 65 - 75°F (18 - 24°C) / 40 - 60% RH) finished floor covering may be installed 6 hours after installation of NXT LEVEL DL, when used as a self-leveling underlayment. Non-moisture sensitive tile and stone can be applied once self-leveling underlayment is walkable, approximately 3 hours. Lower temperatures, higher RH, poor ventilation, and thicker self-leveling application will extend self-leveler dry time.

NXT self-leveling products are not a vapor barrier and will allow passage of moisture vapor. Prior to installing NXT self-leveling products, the concrete must be tested for moisture conditions. If the concrete moisture conditions exceed the floor covering manufacturer's requirements for the finished flooring a moisture mitigation epoxy must be applied before installing NXT self-leveling. Use NXT Vapor Reduction Coating or Vapor Ban Primer ER prior installing NXT self-leveling products.

# Sealing

When NXT LEVEL DL is used as a decorative wear surface a guard or topical sealer is needed to help protect the floor from stains. Note that most sealers will help protect from staining however spills must be thoroughly cleaned as soon as possible. When spills are left to dwell they will eventually penetrate and cause staining.

## **Polishing**

NXT LEVEL DL can be polished after 24 hours. Refer to TDS 238N Polishing Guide for NXT LEVEL DL for more detailed information about polishing. Consult with polishing concrete contractor as there are many methods, levels of polish, unlimited color, and other design aspects that must be considered. Minimum recommended thickness for polished topping is 1/2" inch (12mm). Polishing requires a high degree of experience and craftsmanship. A suitable sized mock-up is required for obtaining owners acceptance prior to installation.

# 6. AVAILABILITY AND COST

## **Availability**

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

laticrete.com

#### Cost

Contact a LATICRETE Distributor in your area.

## 7. WARRANTY

See 10. FILING SYSTEM:

• DS 230.13: 1 Year Product Warranty

## 8. MAINTENANCE

Some cleaning products/processes may alter the color of the installed floor. Test cleaning product and process in a small area prior to applying to the entire floor. Refer to TDS 184N Maintenance of NXT Cementitious Decorative Toppings, available at www.laticrete.com for more information.

## 9. TECHNICAL SERVICES

## **Technical Assistance**

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235 Telephone: +1.203.393.0010, ext. 1235

Fax: +1.203.393.1948

## **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at <u>laticrete.com</u>.

# **10. FILING SYSTEM**

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

- DS 230.13: LATICRETE 1 Year Product Warranty
- DS 502.0: NXT Primer
- DS 029.3 NXT Epoxy Primer
- DS 507.0: NXT Vapor Reduction Coating
- DS 26.1: STRATA HEAT Mat
- DS 26.0: STRATA MAT
- DS-307 PRIME N BOND
- DS-35222 VAPOR BAN PRIMER ER
- TDS 230: SUBSTRATE PREPARATION AND PRIMER GUIDE for LATICRETE SELF-LEVELING PRODUCTS
- TDS 235N: NXT Flow Test Method
- TDS 238N: Guide for Polishing LATICRETE Self-Leveling Overlayments
- TDS 184N: Maintenance of NXT Decorative Toppings
- TDS 185N: NXT Wear Surface Variation