# Levelrock<sup>®</sup> Floor Underlayment



3500 3500 Green

## Premium poured cementitious flooring underlayment products

- Fast application, fast-setting allows for return of light trade traffic within hours
- Ideal for wood frame, renovation, hotel/motel and light-commercial construction
- Meets vinyl industry commercial performance requirements
- UL designs available up to 2-hour fire rating
- Smooth, crack-resistant surface
- Helps maximize sound isolation between floors/units
- Levelrock 3500 Green floor underlayment may assist in obtaining LEED<sup>®</sup> credits
- Applied by USG Levelrock applicators

## Description

Levelrock® 3500 and Levelrock® 3500 Green floor underlayment are high-quality, versatile cementitious floor underlayments for indoor use in light-commercial and renovation construction. They can be easily applied over wood and concrete subfloors at a thickness of up to 3 in. Their high compressive strengths at low thicknesses provide superior underlayment performance for higher-traffic areas and minimize floor damage from trades. High production rates, lightweight with high compressive strength, and exceptional sound and fire resistance make Levelrock 3500 and 3500 Green floor underlayments ideal alternatives to lightweight concrete floor applications.

LEVELROCK 3500 Green floor underlayment is made with recaptured gypsum, from the flue gas desulfurization of the process used to clean combustion gases from fossil-fuel-burning power plants. This process is used to greatly reduce emissions of sulfur dioxide which helps the environment by reduction of harmful acid rain. The use of this recaptured gypsum also eliminates the need to dispose of the material in landfills as a solid waste. In addition, the high recycled content of Levelrock 3500 Green floor underlayment may assist in obtaining LEED credits 4.1, 4.2, 5.1 and 5.2.

USG® poured cementitious underlayment products are mixed with sand and water at the job site to yield a lightweight underlayment with a smooth and monolithic surface. A ¾-in. thick underlayment weighs approximately 7.5 lbs./sq. ft. and has an approximate dry density range of 118-124 lbs./cu. ft.

USG poured cementitious floor underlayment systems provide an economical way to achieve lightweight, fire-resistant, sound-rated, smooth and monolithic floors in residential and light-commercial construction. Typical applications are less labor intensive than many other types of construction and provide high fire ratings characteristic of gypsum systems. Designed sound systems provide for improved STC and IIC ratings when used with Levelrock sound attenuation products.

## Limitations

- 1. Do not use in exterior applications.
- 2. Do not use as a wearing surface.
- 3. Do not install where continuous exposure to moisture is a possibility (for instance, exterior balconies or large commercial/institutional shower rooms).
- 4. Do not install in below-grade applications. Contact USG for on-grade application recommendations.
- 5. Install only on tongue-and-groove edge plywood or OSB, or square-edge wood subfloor with back-bracing.
- Structure shall be designed so that deflection does not exceed L/360 live or dead load. Certain floor coverings such as marble, limestone, travertine and wood may have more restrictive deflection limits. Consult the appropriate floor covering manufacturer.

#### Installation

During the entire installation process, the building must be enclosed and temperature maintained at a 50 °F minimum until permanent heating is available. Adequate ventilation must be provided to ensure uniform drying



of the installed floor underlayment, which typically occurs within 5 to 7 days at a 34 in. thickness. The application of Levelrock™ floor underlayment primer to the subfloor is necessary to provide maximum bond between the underlayment and subfloor.

Concrete subfloors receiving cementitious underlayment systems must be cured properly (generally for a minimum of 28 days) prior to the underlayment installation. For on-grade applications on concrete subfloors, measure the Moisture Vapor Emission Rate (MVER) using ASTM F1869. MVER should be below 3 lbs./1000 sq. ft./24 hrs. Contact USG for further information. Concrete subfloors should be treated properly with LevelRock™ floor underlayment concrete primer, according to USG recommendations. Refer to LEVELROCK Floor Underlayment Finished Floor Installation Guidelines (IG1457) for floor covering installation.

#### **Product Data**

Approximate Compressive Strength (aggregated) ASTM C472 (modified): 3500-4500 psi\*

Approximate Dry Density (aggregated): 118–124 lbs./cu. ft.

Note \*Compressive strengths published herein were achieved under controlled laboratory conditions. Actual field results may differ due to environmental conditions, regional sand variations, inconsistent proportioning of field applied water, sand and LEVELROCK floor underlayment, as well as differences in mixing/pumping equipment.

## **Test Data**

Sound

USG has conducted a variety of sound tests on underlayment systems at NVLAP-certified laboratories. These tests have been in conformance with ASTM E90 and E492. Consult USG publications IG1650 and SA305 for STC and IIC results on a variety of floor coverings meeting current code requirements.

## **UL Designs**

G230, G516, G562, J917, J919, J920, J924, J927, J931, J957, J966, J991, J994, K906, L206, L501, L502, L505, L506, L508, L511, L512, L513, L514, L515, L516, L518, L521, L523, L524, L525, L526, L527, L528, L529, L530, L532, L534, L535, L536, L537, L538, L539, L541, L542, L543, L547, L548, L549, L550, L551, L552, L553, L555, L556, L557, L559, L560, L562, L563, L565, L568, L569, L570, L571, L573, L574, L577 and L588.

Additional UL designs may be available. Contact your USG representative for more information.

## Compliance

New York City Department of Buildings MEA (Material and Equipment Acceptance) MEA 236-01-M; HUD-1314; ICC Evaluation Service Legacy Report No. ER-5885.\*

Note \*ESR pending.

## **Submittal Approvals**

Job Name Contractor Date

#### Product Information

See levelrock.com for the most un-to-date product information. WARNING!

When mixed with water, this material hardens and becomes very hot — sometimes quickly. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of

Portland cement is strongly alkaline. Direct contact can be

corrosive and cause severe damage or chemical burns to the eyes and wet or moist skin. Avoid contact with eves and skin. Wear eve protection, alkaliresistant protective gloves, longsleeved shirts and pants to prevent direct contact. If eye contact occurs, immediately flush thoroughly with water for 30 minutes and seek medical advice. Inhalation of dust may be corrosive or cause chemical burns or irritation to nose, throat and respiratory tract. Avoid breathing dust. Use in a wellventilated area or provide

sufficient local ventilation. If dusty, wear a NIOSH/MSHAapproved dust respirator. Wash thoroughly with soap and water after use. Do not ingest. If ingested, call physician. Product safety information: 800 507.8899 or usg.com.

#### KEEP OUT OF REACH OF CHILDREN.

VOC Content: Zero g/L

#### **Trademarks**

The following trademarks used herein are owned by United States Gypsum Company or a related company: LEVELROCK, USG. USG in stylized letters. LEED is a registered trademark of U.S. Green Building Council. Notice

We shall not be liable for incidental or consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use.

Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

# Safety First!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.



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