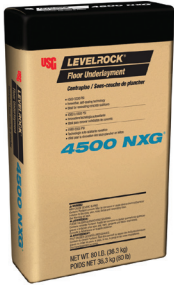


Levelrock® Floor Underlayment 4500 NXG®



Premium poured underlayment products

- Innovative, self-sealing technology
- Fast application, fast-setting allows for return of light trade traffic within hours
- High compressive strength—stands up to commercial and institutional use
- Ideal for renovating concrete subfloors—can be applied at various thicknesses
- Smooth, crack-resistant surface
- Meets the criteria of ASTM E136-04 for use in all types of noncombustible construction
- Applied by USG LEVELROCK authorized applicators

Description

LEVELROCK® 4500 NXG® floor underlayment is a cementitious underlayment designed by USG for interior use in commercial, institutional and rehab construction. It provides a smooth, hard underlayment surface over concrete slabs, pre-stressed concrete and concrete planks at thicknesses from featheredge (with proper sand) to 2 in. Suitable for a variety of floor coverings, LEVELROCK 4500 NXG floor underlayment exceeds commercial vinyl floor-covering requirements as a high-performance underlayment with compressive strengths of up to 5500 psi.

Quick set times and high production rates allow for traffic within hours of installation. The exceptional surface hardness of LEVELROCK 4500 NXG floor underlayment resists indentation from trade traffic. LEVELROCK 4500 NXG floor underlayment features an innovative self-sealing technology that typically permits the floor covering to be installed without the need to seal the underlayment—minimizing installation cost and time. Once LEVELROCK 4500 NXG floor underlayment is dry, floor coverings of any type may be applied directly to the underlayment surface.

USG poured underlayment products are mixed with sand and water at the job site to yield a lightweight underlayment with a smooth and monolithic surface. A 1/2 in. thick underlayment weighs approximately 5 lbs./sq. ft. and has an approximate dry density range of 123-130 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 on wood subfloors.
5. Structure shall be designed so that deflection does not exceed L/240 from combined dead and live loads and L/360 from live loads. Certain floor coverings such as marble, limestone, travertine and wood may have more restrictive deflection limits. Consult the appropriate floor-covering manufacturer.
6. Do not install in below-grade applications.

Installation

During the entire installation process, the building must be enclosed and temperature maintained at 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 5-7 days at a 1/2 in. thickness.

Cracks in the existing concrete subfloor must be inspected to determine if the crack is due to typical concrete “shrink” or if it is a result of a structural movement. In the case of the latter, remediation of the crack must be addressed or eventually the crack will telegraph through LEVELROCK 4500 NXG floor underlayment. To minimize potential telegraphing from large cracks, cracks should be grouted prior to application of LEVELROCK 4500 NXG floor underlayment. Adhere to the grouting manufacturer’s requirements regarding when a surface may be

applied over grout. It is recommended that the use of LEVELROCK™ perimeter isolation strip be applied around the room perimeter as well as around all protrusions.

Application of LEVELROCK™ floor underlayment concrete primer to the subfloor is necessary to provide maximum bond between the underlayment and the subfloor. For rehab work, cracks that are present in the subfloor may telegraph through the underlayment. Building movement and severity of cracks will be a factor in their reappearance. LEVELROCK 4500 NXG floor underlayment is not a structural element and will not remediate structural issues. Pre-treatment of minor cracks (1/8" or less) with DUROCK™ tile membrane or a high-quality grout can help minimize their reoccurrence in the surface of LEVELROCK 4500 NXG floor underlayment. For cracks wider than 1/8" or telegraphing of cracks, a premium-grade epoxy grout may minimize reoccurrence. Consult the grout manufacturer. USG makes no claims regarding grout performance.

Concrete subfloors receiving cementitious underlayment systems must be cured properly (generally for a minimum of 28 days) prior to the underlayment installation. For on- or above-grade applications on concrete subfloors or concrete planks, measure the Moisture Vapor Emission Rate (MVER) using ASTM F1869. MVER should be below 5 lbs./1000 sq. ft./24 hrs. Contact USG for further information. The typical minimum thickness of LEVELROCK 4500 NXG floor underlayment over concrete subfloors is ½ in. For thicknesses less than ½ in., consult USG.

LEVELROCK 4500 NXG floor underlayment is specially formulated with a built-in sealer. Thus, for most floor coverings, the application of a primer or sealer to LEVELROCK 4500 NXG floor underlayment is not necessary or recommended. However, the recommendations of the floor-covering manufacturer will always take precedence over those presented here. If a floor-covering manufacturer's primer is used, a bond test for compatibility should be conducted.

For further details on installation requirements, specifications and the most up-to-date product information, please see levelrock.com.

Product Data

Approximate Compressive Strength (aggregated) ASTM C472 (modified): 4500-5500 psi*
Approximate Dry Density (aggregated): 125 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-accredited 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 Designation Type HSLRK

G230, G516, G535, G556, G562, G569, J917, J919, J920, J924, J927, J931, J957, J991, J994, K906, L206, L501, L502, L505, L506, L508, L510, L511, L512, L513, L514, L515, L516, L518, L521, L523, L524, L525, L526, L528, L529, L530, L534, L536, L537, L539, L541, L542, L543, L547, L549, L550, L551, L552, L555, L556, L557, L559, L560, L562, L563, L565, L568, L569, L570, L573, L574, L577, L583, L588, L592, M502, M503, M504, M506, M508 and M510.

For the most up-to-date UL Designation Type HSLRK, contact your USG representative.

Type HSLRK is rated BICW – Noncombustible building material (tested in accordance with ASTM E136). Also rated BICW – Noncombustible building material (tested in accordance with CAN/ULC-5114).

Submittal Approvals

Job Name			
Contractor		Date	

Product Information
 See levelrock.com for the most up-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 limb. Dust can be corrosive to eyes, skin, and respiratory

tract. Contact can cause severe chemical burns. Avoid breathing dust. Dust can contain silica. Frequent breathing of silica dust can cause lung damage and/or cancer. Wear eye, skin and respiratory protection as necessary per working conditions. If eye contact occurs flush immediately with water for 30 minutes. Do not ingest. If ingested, call physician. Product safety information: 800-507-8899 or usg.com.
KEEP OUT OF REACH OF CHILDREN.

Trademarks
 The following trademarks used herein are owned by United States Gypsum Company or a related company: DUROCK, LEVELROCK, NXG, USG, USG in stylized letters.

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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