

LEVELROCK™ Brand Floor Underlayment

For Finished Floors

From commercial to multi-family projects, renovation to new construction, LEVELROCK™ Brand Floor Underlayment from USG pours on the strength. The strong, fast-applying gypsum cement offers the industry's highest compressive strength with exceptional acoustical performance to reduce noise between floors and units. LEVELROCK Brand Floor Underlayment provides a smooth, crack-resistant surface that accepts virtually all types of floor coverings, including vinyl, composition tile, ceramic tile, wood laminate, glue-down hardwood, and carpeting.

Installation

Adequate ventilation must be provided to ensure uniform drying of the installed gypsum floor underlayment, which typically occurs within five to seven days.

Surface Requirements

Test for Dryness

Tape a 24" x 24" (609 mm x 609 mm) section of plastic to the surface of the underlayment; or lay a flat, 24" x 24", high-density, smooth rubber mat weighted down on the underlayment surface to make sure it is dry. A piece of 6 mil vinyl plastic weighted and sealed at the edges can also be used to test check dryness. After 24 hours if there is no evidence of discoloration (darkening) or condensation, the underlayment is considered dry. Perform additional tests if necessary. Then, proceed to next step below.

Note: If nicks and gouges result from construction traffic, contact your LEVELROCK Brand Floor Underlayment dealer for repair instructions.

Seal the Underlayment

Use LEVELROCK Brand Floor Underlayment TOPSEAL (one application) to seal the underlayment prior to installation of glue-down floor material. Do not overseal. Before applying primer, all surfaces must be clean and free of oil, paint, chemicals, wax, grease, or other contaminants. Surface must be sound and completely dry.

Use a mixture of 4 parts water to 1 part LEVELROCK Brand Floor Underlayment TOPSEAL. Spray or roll the mixture at a rate of 400 sq. ft. (37.2m²) per gallon. Apply 1 coat only. For best results, apply primer 1 to 2 hours prior to floor covering adhesive application. Surface must be completely dry for latex adhesives to achieve maximum bond.

Recommended Adhesives

Laminated Hardwood and Parquet Flooring. USG recommended wood flooring adhesives include: BOSTIK® ULTRA-SET™ Hardwood Premium Wood Flooring Urethane Adhesive, BOSTIK's Best Adhesive Wood Flooring Urethane Adhesive, or BOSTIK's Fast-Tack Wood Flooring Urethane Adhesive (all from Bostik Findley, Inc.). Or use Franklin 811 (Urethane) or Franklin 211 (High Solids Water-Based) adhesive from Franklin International. Other adhesives may be compatible as well.

Carpet. PL400® Heavy Duty Structural and Subfloor Adhesive from OSI Sealants, Inc. or CHEMREX® 948 Urethane Adhesive/Sealant from Chemrex, Inc. is recommended for carpet installations.

Note: The underlayment should be clean and completely dry before being sealed with LEVELROCK Brand Floor Underlayment TOPSEAL. Allow the LEVELROCK Brand Floor Underlayment TOPSEAL to dry 1 to 2 hours prior to floor covering adhesive application. The adhesive should be applied to a clean, sealed underlayment surface. Carefully follow and adhere to floor goods manufacturers' recommendations. Prior to installation, conduct a sample test to confirm bond compatibility. For hardwood and parquet flooring, allow test area to set for 72 hours before installing the flooring. For carpet, wait 24 hours before installing carpet after adhesive application.

Carpet and Pad

A variety of carpets, carpet pads, and adhesives can be used with LEVELROCK Brand Floor Underlayment.

Tackless Strips. It is only necessary to apply LEVELROCK Brand Floor Underlayment TOPSEAL in a 4" band along the perimeter of the wall where the adhesive will be applied.

Carpet Installation. Follow the Surface Requirements on Page 1. Use PL400 Heavy Duty Structural and Subfloor Adhesive from OSI Sealants, Inc. or CHEMREX 948 Urethane Adhesive/Sealant from Chemrex, Inc. Wait 24 hours before installing carpet after PL400 Heavy Duty Structural and Subfloor adhesive application. Wait 2 to 3 hours before installing carpet after CHEMREX 948 Urethane Adhesive/Sealant application. Apply adhesive in a minimum 3/8" bead, which equates to 300 lineal ft./10 oz. tube. Do not install more than 30 ft. before applying the tackless strip.

Glue-Down Attachments

Follow the Surface Requirements on Page 1 to prepare the underlayment. Also, adhere to and follow floor goods manufacturers' adhesive recommendations. Prior to installation, conduct a sample test to confirm bond compatibility.

Free-Lying Carpet Modules. Follow the Surface Requirements above to prepare the underlayment. The second step (Seal the Underlayment) is essential. Install carpet modules with 100% adhesive coverage.

Mechanical Attachment

Mechanical attachment of tackless strips are not recommended when LEVELROCK Brand Floor Underlayment has been poured over expanded or extruded polystyrene or over a soundmat.

Tackless Strips Over Wood Subfloors. When LEVELROCK Brand Floor Underlayment has been applied to a wood subfloor for 3/4" (19 mm) thick underlayment, use Capitol Tackstrip or Tackstrip manufactured by Halex Corporation. For thicker underlayment, install filler nails every 12" to 18" (305 mm to 457 mm) o.c. Filler nail should be long enough to penetrate at least 1/4" (6 mm) into the subfloor.

Tackless Strips Over Concrete. Mechanical attachment of tackless strips are not recommended when LEVELROCK Brand Floor Underlayment has been poured over expanded or extruded polystyrene or over a soundmat. Use an adhesive system.

When LEVELROCK Brand Floor Underlayment has been applied to a concrete subfloor:

- Install standard tackless strips with concrete nails every 18" to 24" (457 mm to 609 mm) o.c. Filler nails should be long enough to penetrate at least 1/4" (6 mm) into the subfloor.
- Install diamond point nails through the tackless strip and underlayment with an air compressor-driven automatic nailer.

Laminated Hardwood and Parquet Wood Flooring

Follow the Surface Requirements on Page 1 to prepare the underlayment.

Mechanical Attachments

Follow and adhere to floor goods manufacturers' general and installation recommendations.

Floating Floors

Follow and adhere to floor goods manufacturers' general and installation recommendations.

Solid Wood Flooring Follow the Surface Requirements on Page 1 to prepare the underlayment.

Mechanical Attachment Attach flooring based on installation recommendations from the National Oak Flooring Manufacturers Association, Inc. (NOFMA). Refer to the Sweet's Catalog section 09550/NAT.

Sheet Vinyl and Vinyl Composition Tiles Follow the Surface Requirements on Page 1 to prepare the underlayment. The second step (Seal the Underlayment) is essential; however, carefully follow and adhere to floor goods manufacturers' recommendations. Prior to installation, conduct a sample test to confirm bond compatibility.

Ceramic, Quarry, and Marble Tile Follow the Surface Requirements on Page 1 to prepare the underlayment. USG strongly recommends the use a crack isolation membrane. It will help waterproof the installation and eliminate tile cracking caused by structural movement. Install membrane according to manufacturer's recommendations.
Movement Joints. Follow and adhere to expansion joint requirements found in the Handbook for Ceramic Tile Installation under EJ171 specification. Contact the Tile Council of America (TCA) at (864) 646-8453 or www.tileusa.com for a copy of the handbook.

Crack Isolation & Waterproof Membrane Manufacturers	Manufacturer	Product	Phone Number
	Badger Cork	STRESSCORK®	(800) 255-2675
	Bostik Findley, Inc.	HYDROMENT® ULTRA-SET	(800) 726-7845
	C-Cure	UNIFLEX® 916	(800) 895-2874
	Laticrete International	LATICRETE® 9235 Membrane	(203) 393-0010 (800) 243-4788
	Mapei	MAPELASTIC™ T	(800) 992-6273
	Mer-Kote Products	MER-KRETE® BFP MER-KRETE HYDRO-GUARD™ 2000	(800) 851-6303
	TEC Specialty Products	TA 329 Crack Isolation Membrane	(800) 323-7407
	Noble Company	NOBLESEAL® TS	(800) 361-3127

Note: All LEVELROCK Brand floor underlayments must be sealed before the installation of crack isolation or waterproof membranes. LEVELROCK Brand Floor Underlayment TOPSEAL can be used to seal the underlayments. For crack isolation and waterproof membrane recommendations, contact the manufacturer.

Radiant Heat Systems The temperature of the radiant heat system should be lowered when applying any floor covering adhesive and floor covering.

Carpet and Pad Select a tackless installation and install system. Achieve appropriate heat transfer by using a low R-value carpet cushion.

Laminated Hardwood and Parquet Wood Flooring These flooring systems are ideal for radiant systems. The systems are very stable and resist expansion and contraction while improving the overall performance of radiant systems. Follow and adhere to floor goods manufacturers' adhesive recommendations.
Laminated Hardwood. During adhesive and floor installation, lower the temperature of the radiant heat system. Higher temperatures may adversely affect the working properties of the adhesive.
Floating Floors. Install boards glued edge to edge and float on a 1/8" (3 mm) foam pad.

Solid Wood Flooring

Nail-Down Sleeper System. Install tubing between 2 x 4 sleepers, which are attached to the subfloor. Pour LEVELROCK Brand Floor Underlayment Radiant Heat (RH) between the spaces around the tubes to provide thermal mass. LEVELROCK Brand Floor Underlayment Radiant Heat (RH) must be a 3/4-inch minimum above the top of the radiant heating tubes. When dry, install a vapor barrier and nail boards to the nailing sleepers. Be careful not to puncture the radiant heating tubes when nailing down solid wood floor. This system offers limited insulation above the radiant system. For best results, refer to the radiant heat system manufacturer's recommendations.

Note: The floor surface temperature should never exceed 85 °F (29 °C) when laminated, parquet, or solid wood floors are installed over radiant systems.

Sheet Vinyl and Vinyl Composition Tiles

The floor surface temperature should never exceed 85 °F (29 °C), according to vinyl industry recommendations. During adhesive and tile installation, lower the floor temperature. Working time and open time of adhesive can be affected by floor temperature.

Trademarks

The following trademarks used herein are owned by USG Corporation or its subsidiaries: LEVELROCK, USG.

Note

Products described here may not be available in all geographic markets. Consult your USG Building Systems representative for information.

Notice

We shall not be liable for incidental and consequential damages, directly, or indirectly sustained, not for any loss caused by application of these goods not in accordance with current printed instructions 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 be have discovered.

SAFETY FIRST!

Follow good safety and industrial hygiene practices during handling and installing of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment needed. Read material safety data sheets and related literature on product before specification and/or installation.