USG DUROCK™ BRAND
MULTI-USE PRO Series
SELF-LEVELING UNDERLAYMENTS

Versatile, superior poured underlayments for multiple applications
• UL Classified and specified for use in 130+ assemblies
• Fast application and fast setting allows for return of light traffic within hours
• No mechanical preparation required for most applications
• Ideal for wood frame, renovation and light commercial construction and radiant heat installations
• Meets resilient floor industry specifications for underlayment under commercial goods (ASTM F710)
• Exceptionally smooth, crack-resistant surface
• Helps maximize sound isolation between floors/units

USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments
• Provides improved impact resistance
• Enhances crack reduction and reduces further propagation
• Cost-effective reinforcement solution with improved load distribution

USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments (USG Durock™ Multi-Use Pro, Pro FR, Pro Green & Pro Green FR) are cementitious floor underlayments designed by USG for interior use in commercial, multi-family and rehab construction. They provide a smooth, hard underlayment surface at thicknesses from 3/8 in. (10 mm) to 3 in. (76 mm). Suitable for a variety of floor coverings, USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments exceed commercial vinyl floor-covering requirements as a high-performance underlayment. Properly prepared slabs typically yield compressive strengths ranging from 3500-4500 psi (24.1-31 MPa).

Quick set times and high production rates allow for light trade traffic within hours of installation. The exceptional surface hardness of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments resist indentation from trade traffic. USG Multi-Use Pro FR & Pro Green FR Self-Leveling Underlayments are reinforced with fibers that improve impact strength. It is a cost-effective solution for interior use in new and renovation construction in residential and commercial applications.

USG Durock™ Multi-Use Pro and Pro Green Self-Leveling Underlayments are 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 USG Durock™ Pro Green and Pro Green FR Floor Underlayments may assist in obtaining LEED credits.

All USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments are mixed with sand and water at the job site and may provide additional LEED credits. A 3/4 in. (19 mm) thick underlayment weighs approximately 7.5 lbs./sq. ft. (36.6 kg/m²) and has an approximate dry density range of 118-124 lbs./cu. ft. (1890-1986 kg/m³).

USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments achieved GREENGUARD Gold Certification and qualify as a “Low Emitting” material per California Department of Public Health CDPH/EHLB/Standard Method (CA Section 01350) for school classroom and private office modeling scenarios, and meet USGBC’s LEED® v4 emission requirements.

An extended warranty may apply when using USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments in a system application. Please contact USG for further details.
All subfloors must be structurally sound, stable and solid. If there is any question about the structural soundness of the subfloor, consult with the engineer on the project or request the services of a professional structural engineer. Shot blasting is not required in most situations.

Subfloors must be clean and free of dirt, tar, wax, oil, grease, latex compounds, sealers, curing compounds, release agents, asphalt, water-soluble adhesives, paint, chemicals, loose old cementitious products, joint compounds from drywall installation or any other contaminant that might prevent proper bonding of the underlayment to concrete. Seal off floor drains before starting to pour underlayment to prevent drain pipes from clogging.

A weak or degraded concrete surface layer must be removed mechanically to provide a solid base. To decide whether mechanical preparation of substrate is required or not, the concrete substrate must be thoroughly assessed for its quality over the entire pour area. Simple visual appearance of concrete substrate as strong and solid does not necessarily guarantee that the concrete substrate is free of impurities and has the right tensile strength.

Concrete exhibiting signs of laitance (a layer of weak material on the concrete surface either visible or invisible), scaling, spalling, crumbling or delamination must be mechanically removed to achieve a solid and clean substrate. Prior to installation of the underlayment, remove weak or degraded concrete (as described above) with hammer, chisel or other simple means. It is not required to mechanically profile the concrete subfloor with methods such as shot blasting, scarifying or diamond grinding.

Concrete subfloors receiving cementitious underlayment systems must be cured properly (generally for a minimum of 28 days) prior to underlayment installation. Subfloor Moisture Vapor Emission Rate (MVER) exceeding 5 lbs. (2.3 kg)/1000 sq. ft. (92.9 m²)/24 hours per ASTM F1869 or a relative humidity (RH) greater than 80% per ASTM F2170 must be treated with USG Durock™ RH-100™ Moisture Vapor Reducer. USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments are not a vapor barrier. Transmission of excessive moisture vapors from the concrete subfloor through USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments can interfere with floor-covering adhesives and compromise their performance. If sand broadcasting is not required during the installation of the moisture mitigation system, the surface must be primed with USG Durock™ Primer-Sealer prior to application of USG Durock™ Self-Leveling Underlayments. Contact USG Technical Service at 800 874-4968 for further information regarding suitable moisture mitigation products and systems for use with USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments.

To minimize the effect of expansion and cracking, wrap USG Levelrock Perimeter Isolation Strip 2.5 (1/4 in. (6 mm) thick) around all door jambs, columns and pipes. For outside corners, the strip should extend a minimum of 24 in. (610 mm) from the corner on both sides. For more information on perimeter isolation strip installation, see USG Levelrock® Brand Perimeter Isolation Strip Submittal (IG1874) at usgperformanceflooring.com.

Fill deep areas and holes prior to final application. Contact USG for further information.

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 USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments. Consult with the engineer on the project or request the services of a professional structural engineer for all suspected structural cracks.

Repair all non-structural cracks in old and new concrete to minimize and control their ability to telegraph through the layer of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments. First remove the weak concrete along the length of the cracks by chiseling or other suitable means. Next, remove accumulated dust and debris from the crack cavities using a HEPA filtration industrial vacuum or other suitable means. Various cracks present in the concrete subfloor, including shrinkage cracks, must be filled with a suitable commercially available crack-fill epoxy adhesive designed for concrete flooring applications. To ensure superior resistance to crack growth, use injection epoxy crack-repair techniques per industry guidelines to repair cracks that are active or deep. Note that repair of existing cracks in the concrete subfloor only subdues, but does not completely prevent, their ability to telegraph through USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments. Growth of existing cracks or formation of new cracks in the concrete subfloor can lead to cracks telegraphing through USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments. Respect existing expansion and control joints (see Notes/Limitations #8, pg. 5).
USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments can be installed over non-water-soluble adhesives on concrete only. The adhesive residue must first be tested to make certain it is non-water-soluble. Any water-soluble adhesive residues must be mechanically removed down to clean concrete. Non-water-soluble adhesive residues should be prepared to a thin, well-bonded residue using the “wet-scraping” technique as recommended by the Resilient Floor Covering Institute (rfci.com) to remove thick areas and adhesive buildup, as well as any areas that are weak or not well bonded to the concrete. Any existing patches below the adhesive must be completely removed.

USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments can be applied with metal lath over engineer-approved, APA-Rated exterior glue plywood or oriented strand board (OSB) (i.e., APA-Rated Exterior or Exposure 1 panels) wood subfloors following the Tile Council of North America’s F185-14 specification at a minimum 1/2 in. (13 mm) depth. Subfloor must be properly prepared and primed with USG Durock™ Brand Primer-Sealer. USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments can be applied over wood subfloors without lath when poured to a minimum thickness of 3/4 in. (19 mm) depth. See Notes/Limitations, #20, pg. 6 for subfloor deflections.

Existing compromised gypsum underlayments must be solid. Loose, debonded gypsum underlayment must be completely removed until a sound bonding surface remains. Using a stiff bristle broom, sweep the old gypsum surface while wearing proper dust protection. This will help to remove the old gypsum “scale” from the surface. It is highly recommended that a HEPA filtration industrial vacuum be used after sweeping to remove as much dust as possible. Next, prime the surface with either USG Durock™ Primer-Sealer or Fusion™ Primer per the application instructions.

USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments can be applied over USG Structural Panel Concrete Subfloors. For joist spacing up to 24 in. (610 mm) o.c., a minimum 1/2 in. (13 mm) depth is required. Subfloor must be properly prepared and primed with USG Durock™ Primer-Sealer per the non-porous application instructions. For more information, see USG Structural Panel Concrete Subfloor Submittal (SCP3) at usgperformanceflooring.com. See Notes/Limitations #20, pg. 6 for subfloor deflections.

For the application of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment over existing floor coverings on concrete subfloors such as ceramic tile, vinyl composition tile (VCT), cement terrazzo and thin cutback adhesive, the surface needs to be well bonded, sound and clean.

Tiles that exhibit a bubbled surface or that are debonding from the substrate are not suitable surfaces for receiving USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment. These floor-covering surfaces need to be removed and the substrate inspected for potential water damage. If water damage is detected, the source of the moisture needs to be identified and addressed. These areas should be checked for MVER using the ASTM F1869 test method (see Subfloor Preparation/Concrete Subfloors, pg. 2). Depending on the MVER ratings, the subfloor may need to be treated with USG Durock™ Brand RH-100 Moisture Vapor Reducer.

Contact USG for applications over vinyl asbestos tile (VAT).
Use USG Durock™ Primer-Sealer for preparing the concrete prior to application of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments. Proper use of USG Durock™ Primer-Sealer enhances the bond of the underlayment and effectively seals the subfloor and prevents formation of pinholes, domes and craters in USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments due to the upward migration of air bubbles from the subfloor. Refer to submittal sheet USG Durock™ Brand Primer-Sealer (CB519) at usgperformanceflooring.com for installation instructions and application rates.

Floors to be primed must be dry, structurally sound and clean. Remove any dirt, tar, wax, oil, grease, latex compounds, sealers, curing compounds, release agents, asphalt, water-soluble adhesives, paint, chemicals, loose topping, joint compounds from drywall installation or any other contaminant that might interfere with development of good bond.

For primer application, the temperature of the USG Durock™ Primer-Sealer, subfloor and room must be maintained between 50 °F and 95 °F (10 °C and 35 °C) for a period of 48 hours before and after application.

Contact USG to determine the appropriate mixing equipment required.

When opening bags and mixing, use engineering controls, including local exhaust, to reduce exposure to dust. Wear NIOSH-recommended respirator if needed.

USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments are mixed with a USG-approved sand and potable water at the job site. Use QUIKRETE® Commercial Grade Sand (No. 1962)—Medium or a sand that has been approved by USG. Note—The US sieve range for this sand product is 20-50 mesh (0.8 mm-0.3 mm). 80 lbs. (36.3 kg) of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment will require 80 – 100 lbs. (36.3 – 45.4 kg) of sand. Add sand and 80 lbs. (36.3 kg) of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment powder to 3.5 to 4.0 gallons (13.25 to 15.1 liters) of cool, clean potable water and mix for a minimum of 45 seconds, but no longer than 3 minutes as this may induce air into the mixture.

Set Plexiglas® sheet on a level, stable surface, away from foot traffic. Ensure that the 2 in. X 4 in. (51 mm X 102 mm) cylinder is clean and dry. Place the cylinder in the middle of the Plexiglas sheet. Pour the USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment slurry into the cylinder, slightly overfilling it. Screed off the excess material from the top of the poured cylinder away from the Plexiglas sheet. Lift the cylinder up smoothly to form the patty. Do not shake any excess slurry from the cylinder. Wait one minute and measure the patty in two directions 90° apart and calculate the average of the two measurements +/- 1/8 in. (3 mm). Ensure that the average patty diameter is within the 9 in. to 10 in. (229 mm to 254 mm) range.

During the entire installation process, the building must be enclosed and temperature maintained at a minimum of 50 °F (10 °C) until permanent heating is available. Adequate ventilation must be provided to ensure uniform drying of the installed floor underlayment, which typically occurs within 3–5 days at a 1/2-in. (13 mm) thickness.

During application and until the USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment is firmly set (typically the first two hours immediately following the pour), close all doors, windows and other openings in the building and turn off HVAC systems to prevent air drafts. Protect installation areas from direct sunlight exposure for at least 24 hours. Thereafter, normal operation of the HVAC system can resume, as well as the use of doors, windows and other openings.

USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments—either mixed or in powdered form—subfloor and room temperature must be between 50 °F and 95 °F (10 °C and 35 °C) at the time of application and for 72 hours after installation of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments.

When uncertain or unknown construction conditions are present on the job site, it is recommended to pour a small test area before conducting full installation. The test area must also include finish flooring to establish suitability of the complete system for intended use.
USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments have a flow time of approximately 15 minutes at 70 °F (21 °C). At higher temperatures the flow time is shortened; at lower temperatures the flow time is extended. Work as a team to obtain a satisfactory installation. Ensure continuous flow of slurry and promptly spread the USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment to desired thickness and finish using a gage rake and a smoother. Perform these operations promptly to avoid trapping air bubbles, prevent formation of cold joints and achieve a satisfactory finish surface.

Apply USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments in an even ribbon along the short dimension of the room or area to be poured. Maintain a continuous wet edge. If pouring USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments against an edge that has been allowed to set, the edge of the previous pour should be treated with USG Durock™ Primer-Sealer.

The average minimum thickness of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments over a concrete subfloor is 3/8 inch (10 mm). For thicknesses less than 3/8 in. (10 mm), consult USG.

USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments will set within two hours under normal conditions. Light foot traffic can occur after this time; normal trade traffic can resume the next day. After USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment is firmly set (typically two hours after the pour), provide adequate ventilation to ensure uniform drying of the installed USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment. High ambient humidity and higher thicknesses will delay the drying process. Protect floors from heavy trade traffic loads (i.e., loaded drywall carts, heavy tool cabinets, etc.) with plywood.

Prior to floor covering installation, we recommend priming the surface of USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments with USG Durock™ Brand Primer-Sealer. However, the recommendations of the floor-covering manufacturer will always take precedence over those presented here. If a floor-covering manufacturer’s sealer is used, a bond test for compatibility should be conducted. When installing high-solids floor-covering adhesives, we do not recommend priming the surface.

- USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments can be walked on two hours after installation.
- Floor coverings can be installed after USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment is dry. Drying time will vary depending on underlayment thickness and ambient climate conditions.
- Check with floor-covering and adhesive manufacturers for installation guidelines and suitability of their manufactured products over USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments.
- Perform field bond test to determine adhesive/flooring performance over USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments. Install floor covering with adhesive and perform field bond test approximately 72 hours after installation.
- Follow floor-covering manufacturers’ recommendations for surface-sealing requirements. If the floor-covering or adhesive manufacturer requirements are more stringent, their requirements take precedence.

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

1. Do not use in exterior applications.
2. Do not use as a wear surface.
3. Do not install where continuous exposure to moisture is a possibility.
4. Do not install over dimensionally unstable, improperly prepared, weak subfloors.
5. Do not install over concrete subfloor less than 28 days old. For untreated (without an approved moisture mitigation system) concrete subfloors less than 28 days old, contact USG.
6. For below-grade applications, contact USG.
7. Contact USG for use over sound mats.
8. Do not use over expansion or isolation joints. Continue all movement joints in the concrete slab up through the layer of underlayment. In areas where the expansion or isolation joints are not present in the floor or where the concrete slab has developed systematic cracks in response to slab movement, consult with an engineer on the project or request services of a professional structural engineer to provide such joints as part of the system in accordance with engineering requirements and industry standards.
9. Existing cracks in the new and old concrete must be repaired with an appropriate crack-repair material in accordance with industry recommendations prior to installation of the underlayment. Note that repair of existing cracks in the concrete subfloor only subdues but does not completely prevent their ability to telegraph through USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments. Growth of existing cracks or formation of new cracks in the concrete subfloor can lead to cracks telegraphing through the poured underlayment.

10. When the MVER exceeds 5 lbs. (2.3 kg)/1,000 sq. ft. (92.9 m²)/24 hours or an RH greater than 80% per ASTM F2170, treat the concrete subfloor with either USG Durock™ CST or RH-100 Moisture Vapor Reducer. USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments are not a vapor or moisture barrier. Transmission of excessive water vapor or moisture from the concrete subfloor through the USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment can interfere with floor coverings and/or floor-covering adhesives, thus compromising their performance. For on-grade applications, use USG Durock™ RH-100 Moisture Vapor Reducer over concrete. Moisture mitigation may not be needed if a vapor retarder is installed below the concrete slab in accordance to industry specifications and practice (ASTM E1745, ASTM E1993, ASTM E1693) and the MVER value of the concrete slab is below 5 lbs. (2.3 kg)/1,000 sq. ft. (92.9 m²)/24 hours or has an RH less than 80% per ASTM F2170.

11. Do not use acid etching as a method of cleaning and preparing the concrete subfloor. Profiling the concrete surface with USG Durock™ LSP Liquid Surface Profiler should be used in lieu of acid etching solutions.

12. Do not use oil-based sweeping compounds to clean and prepare the concrete subfloor. Use of such sweeping compounds leaves an oil film on the surface of the concrete that will interfere with the underlayment’s bond development. Use a HEPA filtration industrial vacuum to remove the dust and debris and prepare the subfloor for USG Durock™ Multi-Use Pro Series Self-Leveling Underlayment application.

13. Do not use adhesive-removing chemicals or solvents to eliminate contaminants from the concrete subfloor. Use of such chemicals can transport oil, grease and other contaminants further into the concrete pores. These chemicals can be released back to the surface at a later time to interfere with the floor-covering adhesives thus compromising the bond performance with USG Durock™ Multi-Use Series Self-Leveling Underlayments. To remove contaminants from the concrete subfloor, use USG Durock™ LSP™ Liquid Surface Profiler to clean and prepare the surface. See USG Durock™ Brand LSP™ Liquid Surface Profiler Submittal (CB5246) at usgperformanceflooring.com for more information. Use mechanical removal methods such as shot blasting, scarifying or diamond grinding to clean and prepare the concrete subfloor contaminated with adhesives, asphalt or oil.

14. Contact USG for applications of USG Durock™ gypsum-based cement self-leveling underlayments over asbestos tiles. Do not mechanically remove organic adhesives, asphalt, coal-tar-based adhesives or other materials containing asbestos.

15. Do not overwater or over mix.

16. Do not add any chemical additives or polymers to USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments.

17. Do not use wet curing or curing compounds.

18. Do not mix with other cementitious products or self-leveling materials.

19. Differential or excessive movement of the wood subfloor may lead to development of cracks in USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments at the wood subfloor joints and adjacent areas.

20. Structure shall be designed so 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.

21. Existing gypsum underlayments must be solid and dust free. Gypsum underlayment must be sealed with USG Durock™ Primer-Sealer or Fusion Primer. First test surface hardness by scratching existing underlayment with a coin. If surface can be gouged, please see USG Rehabilitation Guidelines for Damaged Gypsum Underlayments (CB822) at usgperformanceflooring.com for alternative repair methods.

22. For thicknesses greater than 1 in. (25 mm), contact USG for special application instructions.
PRODUCT DATA

PRODUCT INFORMATION
See usgperformanceflooring.com for the most up-to-date product information.

GREENGUARD INFORMATION
GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg.

DANGER
Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer by inhalation of respirable crystalline silica. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use only in a well-ventilated area, wear a NIOSH/MSHA-approved respirator. Wear protective gloves/protective clothing/eye protection. If swallowed, inhaled, or skin irritation occurs get medical attention. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Dispose of in accordance with local, state, and federal regulations. For more information call Product Safety: 1-800-507-8899 or see the SDS at usg.com

KEEP OUT OF REACH OF CHILDREN.

UL DESIGNATION TYPE HSLRK

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

STORAGE
USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments should be stored in an enclosed shelter providing protection from damage and exposure from the elements at a temperature of 50-90 °F (10-32 °C). During winter, dry mix material should be stored in a heated room before application. Remove damaged or deteriorated materials from the job site. USG Durock™ Multi-Use Pro Series Self-Leveling Underlayments have a shelf life of 12 months from the manufactured date.

SUBMITTAL APPROVALS

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<tr>
<th>Job Name</th>
<th>Contractor</th>
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