USG
Tile &
Flooring
Solutions

USG DUROCK™ BRAND MULTI-USE

SELF-LEVELING UNDERLAYMENT

Versatile, superior poured underlayment 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

DESCRIPTION

USG Durock™ Brand Multi-Use Self-Leveling Underlayment is a high-quality, presanded, versatile cementitious floor underlayment for interior use in light-commercial and renovation construction. It can be easily applied over wood and concrete subfloors at a thickness of up to 3 in. (76 mm). Its high compressive strength at low thicknesses provides superior underlayment performance for higher traffic areas. USG Durock™ Multi-Use Self-Leveling Underlayment is the ideal substrate for a variety of floor coverings, ranging from vinyl to wood to tile. High production rates, lightweight with high compressive strength, and exceptional sound and fire resistance make USG Durock™ Multi-Use Self-Leveling Underlayment an ideal underlayment.

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 sound attenuation products. Contact USG for more information.

VOC EMISSIONS

USG Durock™ Multi-Use Self-Leveling Underlayment has been tested and qualifies 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 contributes towards USGBC's LEED® v4 emission requirements.

EXTENDED WARRANTY

An extended warranty may apply when using USG Durock™ Multi-Use Self-Leveling Underlayment in a system application. Please contact USG for further details.

SUBFLOOR PREPARATION

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.

CONCRETE SUBFLOORS

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.

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SUBFLOOR PREPARATION CONT.

CONCRETE SUBFLOORS CONT.

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.

When the MVER exceeds 5 lbs. (2.3 kg)/1,000 sq. ft. (92.9 m^2)/24 hours or an RH greater than 80% per ASTM F2170, treat the concrete subfloor with an approved moisture vapor reducer. USG Durock® Multi-Use Self-Leveling Underlayment is not a vapor or moisture barrier. Transmission of excessive water vapor or moisture from the concrete subfloor through the floor underlayment can interfere with floor coverings and/or floor-covering adhesives, thus compromising their performance. For on-grade concrete applications, use an approved moisture vapor reducer. A moisture mitigation system 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 m^2)/24 hours or has an RH less than 80% per ASTM F2170. If the concrete subfloor has been treated with an approved moisture vapor reducer, it must be primed with USG Durock® Primer-Sealer prior to application of the USG Durock® Multi-Use Self-Leveling Underlayment.

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 Self-Leveling Underlayment. 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 Self-Leveling Underlayment. 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-repair material designed for concrete flooring applications. To ensure superior resistance to crack growth, use injection 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 Self-Leveling Underlayment. Growth of existing cracks or formation of new cracks in the concrete subfloor can lead to cracks telegraphing through USG Durock™ Multi-Use Self-Leveling Underlayment. Respect existing expansion and control joints (see *Notes/Limitations* #8, pg. 6).

USG Durock™ Multi-Use Self-Leveling Underlayment 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.

WOOD SUBFLOORS

USG Durock™ Multi-Use Self-Leveling Underlayment 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 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 Self-Leveling Underlayment can be applied over wood subfloors without lath when poured to a minimum thickness of 3/4 in. (19 mm) depth. For UL fire-rated assemblies, a 3/4 in. minimum thickness is required.

Differential or excessive movement of the wood subfloor may lead to development of cracks in USG Durock™ Multi-Use Self-Leveling Underlayment at the wood subfloor joints and adjacent areas. See *Notes/Limitations*, #19, pg. 6 for subfloor deflections.

SUBFLOOR PREPARATION CONT.

GYPSUM UNDERLAYMENTS

Existing compromised gypsum underlayments must be solid. Loose, debonded gypsum underlayment must be completely removed until a sound bonding surface remains. See *USG Rehabilitation Guidelines for Damaged Gypsum Underlayments* (CB822) at usgperformanceflooring.com. 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.

STRUCTURAL CONCRETE PANELS

USG Durock™ Multi-Use 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.

Differential or excessive movement of the wood subfloor may lead to development of cracks in USG Durock™ Multi-Use Self-Leveling Underlayment at the wood subfloor joints and adjacent areas. See *Notes/Limitations* #19, pg. 6 for subfloor deflections.

RADIANT HEAT

For radiant heat applications, USG Durock™ Multi-Use Self-Leveling Underlayment should be applied at a minimum thickness of 3/4 in. (19 mm) over the top of the electrical cables or hydronic tubes. Hydronic tubes are typically 3/4 in. (19 mm) thick (o.d.), resulting in a total USG Durock™ Multi-Use Self-Leveling Underlayment thickness of 1-1/2 in. (38 mm) (as measured from the subfloor to the top of the USG Durock™ Multi-Use Self-Leveling Underlayment); electrical cable systems are typically 1/8 in. (3 mm) to 1/4 in. (6 mm) thick, resulting in a total underlayment thickness of 7/8 in. (22 mm) to 1 in. (25 mm) (as measured from the subfloor to the top of the USG Durock™ Multi-Use Self-Leveling underlayment). At 1-1/2 in. (38 mm) thickness, the dry time for USG Durock™ Multi-Use Self-Leveling Underlayment will be 14–17 days depending on environmental conditions. After 48 hours, the radiant heat system may be turned on at low temperature to help accelerate the drying process. However, good ventilation remains critical to speed the drying process.

EXISTING FLOOR COVERINGS

For the application of USG Durock™ Multi-Use 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 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*, pgs. 1-2). Depending on the MVER ratings, the subfloor may need to be treated with a USG Durock™ Brand Moisture Vapor Reducer. For on-grade applications, see *Notes/ Limitations* #10, pg. 6.

See *Guidelines for Covering Asbestos Containing Materials (ACM)* (CB5378) at usgperformanceflooring.com.

PRIMING

Use USG Durock™ Primer-Sealer for preparing the concrete, wood or gypsum subfloor prior to application of USG Durock™ Multi-Use Self-Leveling Underlayment. 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 Self-Leveling Underlayment 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, during and after application.

CONTINUOUS MIXER AND PUMP

Contact USG to determine the appropriate mixing equipment required.

MIXING

TOOLS

- Mixing drum (15 gallons)
- Gauge rake
- Smoother/spreader
- Nonmetallic cleated shoes
- Measuring bucket
- Mixing drill type 2 through 7—as outlined in the Technical Guidelines, prepared by the International Concrete Repair Institute, *Pictorial Atlas of Concrete Repair Material Mixing Equipment* (Guideline No. 320.5R-2014)
- Mixing paddle type 2, 3, 4, 8 or 9—as outlined in the Technical Guidelines, prepared by the International Concrete Repair Institute, *Pictorial Atlas of Concrete Repair Material Mixing Equipment* (Guideline No. 320.5R-2014)
- 2 in. x 4 in. (51 mm x 102 mm) brass or plastic cylinder
- 12 in. x 12 in. x 1/4 in. (305 mm x 305 mm x 6 mm) Plexiglas® sheet
- Minimum 2 in. (51 mm) putty/drywall taping knife
- Ruler or tape measure
- Personal protective equipment

INSTRUCTIONS

When opening bags, use engineering controls—including local exhaust—to reduce exposure to dust. Wear NIOSH-recommended respirator if needed. It is important that the mixing water for the total number of bags to be mixed is in the barrel prior to adding the dry material.

Determine the number of bags needed. Add 4.0 to 4.8 quarts (3.75 to 4.5 liters) of cool, clean potable water for each bag (50 lbs.) of USG Durock™ Multi-Use Self-Leveling Underlayment powder to the dry mixing barrel. Next, slowly add one bag to the barrel while mixing. Mix for 30 seconds, making sure that all material is wetted out thoroughly. Slowly add the second and any additional bags to the mixing barrel while continuing to mix. Make sure the barrel sides are thoroughly scraped free of dry powder and that there is no unmixed material on the bottom of the barrel. Mix for an additional 90 seconds and ensure the material is uniform and lump free.

Perform a slump test on the material before application. See *Test Procedures* for instructions.

Do not add additional water until the two-minute mixing cycle has been completed. Do not overwater the material. If additional water is required, add no more than 0.4 quarts per bag and mix for 30 seconds or until mix is uniform. Do not overmix (more than three minutes), as this may induce air into the material.

The presence of bleed water on the surface and/or material segregation (settling of sand) indicates overwatering. Adjust the amount of water added to the mix to prevent bleed water and material segregation.

TEST PROCEDURES

SLUMP TEST

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 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.

APPLICATION

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 5–7 days at a 3/4 in. (19 mm) thickness.

During application and until the USG Durock™ Multi-Use 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.

APPLICATION CONT.

USG Durock™ Multi-Use Self-Leveling Underlayment—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 Self-Leveling Underlayment.

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 Self-Leveling Underlayment has a flow time of approximately 15 – 20 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 Self-Leveling Underlayment to desired thickness and finish using a gauge 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 Self-Leveling Underlayment 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 Self-Leveling Underlayment 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 Self-Leveling Underlayment over a concrete subfloor is 3/8 inch (10 mm).

USG Durock™ Multi-Use Self-Leveling Underlayment 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 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 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. This may cause the protected areas to take longer to dry. Check for dryness in these areas before installing floor coverings.

Protect the surface of USG Durock™ Multi-Use Self-Leveling Underlayment from contaminants and water until installation of floor covering is accomplished. Different types of sealers and coatings can be used for this purpose. USG Durock™ Primer-Sealer is a particularly suitable sealer for this purpose as its application enhances wear resistance and durability of USG Durock™ Multi-Use Self-Leveling Underlayment prior to floor covering installation.

DEEP FILL

Contact USG for deep fill application information.

FLOOR-COVERING INSTALLATION

Prior to floor covering installation, prime the surface of USG Durock™ Multi-Use Self-Leveling Underlayment 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, do not prime the surface.

- Floor coverings can be installed after USG Durock™ Multi-Use Self-Leveling Underlayment is dry. Based on a 3/4 in. (19 mm) thickness at 70 °F (21 °C), 50 % RH, the typical drying time is 5-7 days. 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 Self-Leveling Underlayment.
- Perform field bond test to determine adhesive/flooring performance over USG Durock™ Multi-Use Self-Leveling Underlayment. 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.

NOTES/LIMITATIONS

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 Self-Leveling Underlayment. 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 m^2)/24 hours or an RH greater than 80% per ASTM F2170, treat the concrete subfloor with a USG Durock™ Brand Moisture Vapor Reducer. USG Durock™ Multi-Use Self-Leveling Underlayment is not a vapor or moisture barrier. Transmission of excessive water vapor or moisture from the concrete subfloor through the USG Durock™ Multi-Use Self-Leveling Underlayment can interfere with floor coverings and/or floor-covering adhesives, thus compromising their performance. Moisture mitigation system 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 m^2)/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 sweeping compounds to clean and prepare the concrete subfloor. Use of such sweeping compounds leaves a 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 Self-Leveling Underlayment application.
13. The use of adhesive-removing chemicals or solvents to eliminate contaminants from the concrete subfloor can transport oil, grease and other contaminants further into the concrete pores. These chemicals can leech back to the surface over time thus compromising the bond performance of flooring adhesives to 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.
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 Self-Leveling Underlayment.
17. Do not use wet curing or curing compounds.
18. Do not mix with other cementitious products or self-leveling materials.
19. 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.

NOTES/LIMITATIONS CONT.

20. 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.

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

22. Adhere to the Radiant Panel Association (RPA) Guidelines for Hydronic Radiant Floor Heating regarding temperature and fluid temperatures. Fluid temperatures of radiant systems shall not exceed 140 °F (60 °C)at the exit of the heating device. To limit risk, floor temperatures shall not exceed 100 °F (38 °C) in general and shall be limited to 85 °F (29 °C) in areas of direct contact by building occupants. To minimize any potential of shocking the USG Durock™ Multi-Use Self-Leveling Underlayment, the radiant heat system should be ramped up slowly over several days until the underlayment is fully dry. Startup of radiant systems shall be in accordance with manufacturers' and RPA-recommended startup procedures.

23. For wood subfloors, install only on tongue-and-groove edge plywood or OSB, or square-edge wood subfloor with back-bracing.

PRODUCT DATA

USG Durock™ Multi-Use Self-Leveling Underlayment is sanded at the factory. Job site addition of sand is not recommended and will void the warranty. USG Durock™ Multi-Use Self-Leveling Underlayment is mixed with water to yield a self-leveling slurry.

Approximate Compressive Strength (aggregated) ASTM C472 (modified):
3500-4500 psi (24.1-31 MPa)[1]

Approximate Dry Density: 118-124 lbs./cu. ft. (1890-1986 kg/m^2)[1]

Mixing Ratio: 4.0–4.8 quarts (3.75 to 4.5 liters) of water per 50 lb. (22.7 kg) bag

Approximate Coverage:
7 sq. ft. (0.6 m^2) per batch at 3/4 in. (19 mm) thickness
14 sq. ft. (1.3 m^2) per batch at 3/8 in. (10 mm) thickness

Approximate Flow Time: 15–20 minutes at 70 °F (21 °C)

Approximate Final Set ASTM C191: 60-90 minutes[1]

Approximate Walkable (light foot traffic): 2 hours (after set)

Thickness Range—Over Wood Subfloor without Wire Lath: 3/4 in. - 3 in. (19-76 mm)

Thickness Range—Over Wood with Wire Lath: 1/2 in. - 3 in. (13-76 mm)

Thickness Range—Over Concrete Subfloor: 3/8 in. - 3 in. (10-76 mm)

Packaging: 50 lb. (22.7 kg) multi-wall paper bags

Notes
1. Results published herein were achieved under controlled laboratory conditions. Actual field results may differ due to environmental conditions, inconsistent proportioning of field-applied water and USG Durock™ Brand Multi-Use Self-Leveling Underlayment, as well as differences in mixing/pumping equipment.

UL DESIGNATION TYPE LRK

L501, L502, L503, L504, L505, L506, L507, L508, L509, L510, L511, L512, L513, L514, L515, L516, L517, L518, L519, L520, L521, L522, L523, L524, L525, L526, L527, L528, L529, L530, L532, L533, L534, L535, L536, L537, L538, L539, L540, L541, L542, L543, L545, L546, L547, L549, L550, L551, L552, L556, L557, L558, L559, L562, L563, L564, L565, L568, L569, L570, L571, L573, L574, L577, L579, L581, L583, L585, L587, L588, L589, L590, L592, L593, M500, M501, M502, M503, M504, M505, M506, M508, M510, M511, M513, M515, M517*, M521*, M522*.

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

Note *UL Design requires greater minimum pour depths and compressive strengths and/or additional requirements. See individual UL Designs for specifics.

STORAGE

USG Durock™ Multi-Use Self-Leveling Underlayment 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 Self-Leveling Underlayment has a shelf life of 12 months from the manufactured date.

SUBMITTAL APPROVALS

Job Name	
Contractor	**Date**

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

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.

NOTE
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NOTICE
We shall not be liable for consequential, incidental or special damages, directly or indirectly sustained, nor 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 the replacement of defective goods or a refund of the purchase price, at USG's option, and does not include costs of labor, floor-covering materials, or any other costs associated with material replacement. 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 applicable SDSs and literature before specification and installation.

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