Powerhold[™]



900P Primer

High quality floor underlayment primer-sealer

- For priming porous and non-porous surfaces and subfloors prior to application of poured underlayment
- Enhances bond between substrate and underlayment
- Low odor
- Effective in treatment of underlayment prior to application of water-based floor-covering adhesives
- No adverse effect on floor-covering adhesives
- Mildew resistant; no staining of finished floor

Description

Most underlayment surfaces tend to be highly porous. Without first priming a subfloor, the bond with and surface smoothness of PowerholdTM underlayments poured on top could be negatively affected. PowerholdTM 900P Primer is a high-solids sealant that can be diluted with water to prime highly porous concrete, precast concrete, APA-Rated exterior glue plywood and OSB (oriented strand board). For the applications 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.

Powerhold 900P Primer may also be used as a sealer for Powerhold™ LP-4K Self-Leveling Underlayment to enhance the bond between the underlayment and the floor-covering adhesive.

Mixing

Equipment

- HUDSON®-type sprayer
- Paint roller
- Push broom
- Electric drill
- Jiffy®-type mixer
- Mixing container

Instructions

All Use Powerhold 900P Primer, a low VOC, high-solids acrylic primer, for priming the concrete or wood subfloor prior to application of Powerhold LP-4K and PC-5K Self-Leveling Underlayments. For application over gypsum subfloors, contact Powerhold Technical Services. Proper use of Powerhold 900P Primer effectively seals the subfloor, enhances bond and prevents formation of pinholes, domes and craters in Powerhold underlayments due to the upward migration of air bubbles from the subfloor.

To seal Powerhold LP-4K Self-Leveling Underlayment, see the *Application* section, As a Sealer for Powerhold LP-4K Self-Leveling Underlayment on page 3.

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, adhesives, paint, chemicals, loose topping, joint compounds from drywall installation or any other contaminant that might interfere with development of good bond.

Apply Powerhold 900P Primer in a two-step application over porous subfloors. For the first application, dilute 1 part Powerhold 900P Primer to 4 parts of water (full dilution). Mix the diluted solution with a paddle mixer at slow speed for approximately 1 minute. Next, apply primer solution to the subfloor at a coverage rate of approximately 200 sq. ft./gal. Apply evenly and do not puddle. The actual coverage of the primer will depend upon the nature and porosity of the subfloor. High absorption concrete may require additional coats of primer. Allow the first coat to dry for a minimum of 1 hour prior to the application of the second coat.

For the second application, dilute 1 part Powerhold 900P Primer to 1 part of water (partial dilution). Mix gently with a paddle mixer at slow speed for approximately 1 minute. Next, apply the primer solution to the subfloor. Apply the primer evenly at a rate of $300-350\,\mathrm{sq}$, ft./gal. and do not puddle. Allow the second coat to dry to a clear thin film for a minimum of 3 hours and a maximum of 18 hours before recoating will be necessary. High air relative humidity and/or low subfloor temperature may necessitate a longer drying time. Primer must be completely dry before application of Powerhold underlayments. Extremely porous concrete subfloors may require an additional application.

For primer application, the temperature of Powerhold 900P Primer, the subfloor and the room must be maintained between 50 °F and 95 °F for a period of 48 hours before and after application.

Application

As a Primer for Concrete Subfloors

- 1. New concrete must be cured a minimum of 28 days.
- 2. When the MVER exceeds 5 lbs./1000 sq. ft./24 hours, then treat the concrete subfloor with an industry recognized moisture mitigation system such as USG Durock™ Brand RH-100™ Moisture Vapor Reducer, in all areas of use where potential for moisture problems may exist.
- 3. Job site and Powerhold 900P Primer must be maintained at minimum 50 °F (10 °C) for 48 hours before, during and after job completion.
- 4. Subfloor must be free of dirt, wax, polish, joint compound, paint, excess dust or any other contaminants before application of primer. The use of oil-based sweeping compounds is not recommended.
- 5. Apply fully diluted primer (see the *Mixing* section, Instructions on pages 1-2) at a rate of 200 sq. ft./gal. for porous subfloors. Allow to dry 1 hour before applying second coat. Powerhold 900P Primer can initially be sprayed or rolled onto subfloor, but using a push broom to further work primer into the subfloor is strongly recommended, especially for the first coat.
- 6. Apply second coat using partially diluted mixture (see the *Mixing* section, Instructions on pages 1-2) evenly at a rate of 300-350 sq. ft./gal. Primer should show signs of puddling; if not, a third coat of partially diluted Powerhold 900P Primer is recommended.
- 7. Allow primer to dry at least 3 hours, but not more than 18 hours, before pouring Powerhold LP-4K or PC-5K Self-Leveling Underlayment. If 18 hours has passed and the underlayment has not been poured, recoat the subfloor with a partial dilution at a rate of 300-350 sq. ft./gal.

As a Primer for Wood Subfloors

- 1. Use on plywood or OSB; must meet APA Type 1 or 2 standards.
- 2. Plywood or OSB should not contain more than 12% moisture.
- 3. Weak, rotted or damaged wood should be replaced prior to priming.
- 4. Job site and Powerhold 900P Primer must be maintained at a minimum of 50 °F (10 °C) for 48 hours before, during and after the job.
- 5. Subfloor must be free of dirt, wax, polish, joint compound, paint, excess dust or any other contaminants before application of primer. The use of oil-based sweeping compounds is not recommended.
- Apply using a partially diluted mixture (see the Mixing section, Instructions on pages 1-2) at rate of 300-350 sq. ft./gal.
- 7. Allow primer to dry at least 3 hours but not more than 18 hours before pouring Powerhold LP-4K or PC-5K Self-Leveling Underlayment. If 18 hours has passed and the underlayment has not been poured, recoat the subfloor with a partial dilution at a rate of 300-350 sq. ft./gal.

As a Primer Over Non-Pourous Substrates

- 1. Job site and Powerhold 900P Primer must be maintained at a minimum of 50 °F (10 °C) for 48 hours before, during and after the job.
- 2. Subfloor must be free of dirt, wax, polish, joint compound, paint, excess dust or any other contaminants before application of primer. The use of oil-based sweeping compounds is not recommended.
- 3. Apply a single coat of concentrated primer-sealer (i.e., no dilution) with a paint roller or push broom at a coverage rate of 450 sf. ft./gal.
- 4. Allow primer to dry at least 3 hours but not more than 18 hours before pouring Powerhold LP-4K or PC-5K Self-Leveling Underlayment. If 18 hours has passed and the underlayment has not been poured, recoat the subfloor with undiluted primer at a rate of 450 sq. ft./gal. with roller or push broom and allow 3 hours for drying prior to underlayment application.

As a Sealer for Powerhold™ Self-Leveling Underlayments

- Powerhold LP-4K Self-Leveling Underlayment must be sealed prior to application of water-based adhesives.
 Powerhold PC-5K Self-Leveling Underlayment should not be treated with any primer or sealer prior to floor-covering installation.
- 2. At the job site, Powerhold 900P Primer and underlayment must be maintained at a minimum 50 °F (10 °C) for 48 hours before, during and after job completion. Radiant heat systems should be shut down during application and drying of primer.
- 3. Underlayment must be free of dirt, wax, polish, paint, excess dust or other contaminants before application of Powerhold 900P Primer. The use of oil-based sweeping compounds is not recommended.
- 4. Underlayment must be dry prior to application of Powerhold 900P Primer. Good air movement is critical to drying of underlayment. Check for dryness by taping down a sheet of plastic approximately 18 in. x 18 in. Tape must seal all sides of plastic. After 16 hours, a lack of condensation or no noticeable darkening of Powerhold underlayment indicates that the floor is dry. Be sure to check for dryness in corners where airflow may be restricted. See ASTM D4263 for complete instructions.
- 5. Apply fully diluted primer (see the *Mixing* section, Instructions on pages 1–2) at a rate of 400 sq. ft./gal. for porous subfloors. The Powerhold 900P Primer solution can be sprayed or applied with a paint roller to the underlayment surface. Do not allow primer to puddle. Do not overseal Powerhold LP-4K Self-Leveling Underlayment.
- 6. Allow Powerhold 900P Primer to dry for 3 hours before installation of floor-covering products. Dry time will vary with drying conditions.
- 7. Consult Powerhold Technical Services at 844 USG.FCDA (844 874.3232) when applying impermeable materials.
- 8. No underlayment preparation is required when using high solids urethane adhesives for wood floor attachment. However, insuring that the underlayment is completely dry prior to wood floor attachment is especially critical.
- 9. Recommendations of the floor-covering and floor-covering adhesive manufacturers supercede these instructions.

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 on excessively dusty floors.
- 5. Do not use as a surface sealer on Powerhold $^{\text{TM}}$ PC-5K Self-Leveling Underlayment.
- 6. Do not use on water-soluble adhesive residues.
- 7. Do not use as a primer under dispersion wood floor adhesives.
- 8. If high solids adhesives are used, do not seal Powerhold LP-4K Self-Leveling Underlayment with Powerhold 900P Primer.
- Contact Powerhold Technical Services at 844 USG.FCDA (844 874.3232) for multiple-lift selfleveling underlayment applications.

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Product Data

MVER (ASTM F1869): 5 lbs per 1000 sq. ft./24hrs

RH (ASTM F2170): NA

0.9 **: Ha**

Solids Content: 58%

Calculated VOC Content (SCAQMD 1168): 1.52 g/L

Approximate Coverage: Non-Porous

No dillution: Apply at 400-450 sf. ft./gal. Allow to dry 3 hrs.

Approximate Coverage: Concrete

Full dillution (1:4): Apply at 200-250 sq. ft./gal. Allow to dry minimum 1 hour Partial dillution (1:1): Apply at 300-350 sf. ft./gal. Allow to dry minimum 3 hours

Approximate Coverage: Wood/Highly Porous Substrate

Partial dillution (1:1): Apply at 300-350 sq. ft./gal. Allow to dry minimum 3hrs **Approximate Coverage:** USG Durock™ Brand Multi-Use Surface Sealing:

Full dillution (1:4): Apply at a rate of 400-450 sf. ft./gal. Allow to dry 3 hours before installing floor covering.

Approximate Dry Time: 3-4 hours Packaging: 1 gallon jug, 5 gallon pail

Storage

Do not store Powerhold 900P Primer in freezing conditions. If material becomes frozen, allow to thaw to room temperature. If material is smooth and homogeneous, it can be used. If material is lumpy or has a "cottage cheese" appearance, dispose of material properly, following all local, state and federal regulations. During summer months, do not store primer above 120 °F. Powehold 900P Primer has a shelf life of 12 months from the manufactured date.

Cleanup

Clean tools with water before Powerhold 900P Primer dries. Use mineral spirits to clean dried sealer. Carefully read manufacturer's warnings and instructions before using mineral spirits.

Submittal **Approvals**

Job Name Contractor Date

Product Information

See powerhold.com for the most up-to-date product information

WARNING

May cause an allergic skin reaction. Avoid breathing mist or vapor. Use only in a well-ventilated area, wear a NIOSH/MSHA-approved respirator. Wear protective gloves/protective clothing/eye protection. If on skin: Wash with plenty of water. If skin irritation or rash occurs, or if swallowed: Get medical attention. If eye contact occurs, flush thoroughly with water for 15 minutes. 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. Keep containers closed when

not in use. For more information Trademarks call Product Safety: 800-507-8899 or see the SDS at usg.com

KEEP OUT OF REACH OF CHILDEREN.

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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 SDS and literature before specification and installation.