



POWERHOLD

POWERBOND THINSET

Mortero de capa delgada Powerbond

PH-1

DESCRIPTION:

Powerhold PH-1 Powerbond Thinset Mortar is for use with porcelain and ceramic tiles. Mixed with water, it exceeds ANSI A118.4 and ANSI A118.11 specifications. Use interior and exterior.

RECOMMENDED SUBSTRATES:

Mixed with water, Powerhold PH-1 exceeds ANSI A118.4 and ANSI A118.11 specifications. Use interior and exterior. When properly prepared, suitable substrates include:

- Gypsum wallboard
- Water resistant gypsum wallboard (greenboard)
- Cementitious backer units (CBU)
- Glass mat backerboard
- Cured concrete, cured mortar beds, brick and masonry
- APA Grade Trademarked Exposure 1 Plywood [underlayment grade or better, two layers 1 1/8" (28 mm) total minimum thickness, interior floors only]
- Existing ceramic tile and natural stone (provided existing flooring is well-bonded to an approved substrate)*
- Vinyl composition tile, asphalt tile, linoleum or non-cushioned vinyl sheet goods (provided such surfaces are single layered, well-bonded to an approved substrate and properly prepared)
- Adhesive residue (except tacky or pressure-sensitive adhesive)

**Prime first with Powerhold 900P Primer*

Notes: Vinyl asbestos tile or any substrate containing asbestos shall not be sanded, scored or scarified because of the potential health hazard of breathing dust. Any substrate containing asbestos must be handled in accordance with existing EPA regulations. Contact your local EPA office.

Expansion joints must be provided in the tile work over all construction, control and expansion joints in the backing and where backing materials change. Follow ANSI A108.01 Section 3.7, Requirements for Expansion Joints.

DIRECTIONS/PREPARATION:

All substrates must be dry, structurally sound with maximum deflection per industry standards of L/360 for ceramic tile installations and L/720 for natural stone installations under all live and dead loads; and be free from oil, grease, dust, paint, sealers or concrete curing compounds. All contaminants should be removed prior to installation of tile. Surface protrusions and tile glazes shall be removed by sanding, scraping or scarifying. After preparation, remove all dust by vacuuming.

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Expansion joints must be provided in the tile work over all construction, control and expansion joints in the backing and where backing materials change. Follow ANSI A108.01 Section 3.7 Requirements for Expansion Joints.

Maximum variations in all substrates must not exceed 1/4" in 10 ft. or 1/16" in 1 ft. from the required plane.

MIXING:

For best results, maintain all tiling materials, substrates, room and adhesives at 50°-70°F (10-21°C) for 24 hours before and 48 hours after installation. Avoid breathing dust and contact with eyes and skin. Avoid using high speed mixing, not to exceed 300 rpm, to prevent entraining air. Add powder to liquid for ease of mixing.

In a clean mixing container, slowly add product to 5-6 quarts (4.7-5.7 L) of clean, cool, water. Mix material for 2-5 minutes to a thick creamy consistency, then allow the mortar to stand for 10 minutes. Remix for 1-2 minutes and apply.

APPLICATION:

Apply mortar using flat side of trowel to promote better substrate contact, then comb in one direction with the notched side of the trowel. Spread only an area that can be tiled while surface is still tacky (typically 20-30 minutes). Press tiles into setting bed, then push in a direction perpendicular to the notched trowel ridges to achieve optimum coverage. Apply mortar in a heavy enough layer so that complete contact (no voids) between mortar and tile is accomplished when tile is positioned. It may be necessary to "back-butter" large tiles to achieve complete coverage and firm support. Periodically remove and check a tile to assure proper coverage. Keep a minimum of 2/3 of the joint depth between tiles for grouting.

Open time and tile hand adjustability may vary with job site conditions. Stir occasionally during use to maintain the smooth, creamy consistency of the product. Do not add additional water.

DRYING TIME:

Grouting may be accomplished when tiles are held firmly in place, typically 16 to 24 hours after installation is completed. No traffic is permitted over the tiles prior to



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grouting. Cold temperatures or high humidity may extend curing time. Unglazed tiles may require sealing prior to grouting so discoloration will not occur.

CLEAN-UP:

Clean tools, hands, and excess materials from face of tile, while mortar is still fresh, with warm soapy water.

LIMITATIONS:

1. For non-green marble tile applications, use white thin set mortars.
2. For all resin-backed stone, prime back of stone first with the Powerhold 900P Primer.

3. Not for use over rubber, strip wood floors, oriented strand board, particle board, lauan plywood or CDX plywood.
4. Do not apply over single layer wood floors.
5. Certain natural stone tiles may be affected by mortar shadowing or staining. Test a small area prior to use to determine suitability.

WARRANTY:

Powerhold offers a limited warranty for this product when used in accordance with printed specifications. A copy of the limited warranty can be obtained by calling technical service at 800-832-9023 or visiting powerhold.com.

TECHNICAL DATA:

Physical State:.....	Dry powder
Color:.....	Available in white and gray
Pot Life:.....	2 to 3 hours
Initial Cure [at 72°F (22°C)]:.....	16 to 24 hours
Final Cure:.....	21 days
Foot Traffic Rating (ASTM C627):.....	Residential to Extra Heavy Commercial (depending on substrate)
Storage:.....	Store in a cool, dry area away from direct sunlight. Do not store open containers.

PACKAGING

50 Pound (22.68 Kg) Bags

SHELF LIFE

Maximum of 1 year from date of manufacture in unopened package.

COVERAGE:

Coverage will vary with condition of substrate. Required trowel size will vary with the tile size, type and substrate uniformity. Select the trowel size that will ensure 100% coverage. Figures below are presented only as guidelines.

- 1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) square notch trowel; 85-95 sq. ft. (7.9-8.8 m²)
- 1/4" x 3/8" x 1/4" (6 x 9 x 6 mm) square notch trowel; 58-68 sq. ft. (5.4-6.3 m²)