

BILDER'S ULTIMATE® ALL-IN-ONE Polyurethane Adhesive & Moisture Retarder

Features:

- Retards Moisture Vapor Transmission from Concrete Slabs
- Crack Bridging
- Low Odor
- Excellent Green Grab
- Does Not Contain Water
- Suitable for Installation of Solid Plank, Bamboo and Engineered Flooring
- Elastic, allows wood to expand and contract without stressing adhesive
- 0 VOC content

Technical Data:

- WPG 12.8 lb./gal
- Water Vapor Permeability: 0.58 g/m²/24 hour – mm Hg
- Color: Beige
- Sound Reduction: STC = 66; IIC = 70; IIC = 70
- Flash Point >200°F
- Tensile > 210 psi
- Elongation > 300%
- Zero VOC
- Upper Moisture Limit 15 lbs. and/or 85% RH

BILDER'S ULTIMATE is a single component, water free, polyurethane adhesive formulated to bond engineered, solid and bamboo flooring to concrete, plywood and other approved substrates.

BILDER'S ULTIMATE is also designed to have a low permeability to reduce moisture vapor transmission between concrete sub-floors and hardwood or Bamboo flooring. BILDER'S ULTIMATE develops a permanent bond and remains flexible to withstand expansion and contraction of the flooring.

BILDER'S ULTIMATE is designed to flow slightly so that gaps between trowel ridges will close and create a continuous polyurethane membrane. When applied as directed

BILDER'S ULTIMATE for subfloor moisture protection, BILDER'S ULTIMATE will prevent damages caused to flooring from moisture in the substrate. BILDER'S ULTIMATE is flexible and will bridge in-plane cracks up to 1/8" wide in concrete.

Do not use BILDER'S ULTIMATE on subfloors with historical or obvious severe moisture problems; or those with a moisture vapor emission rate >15lbs per 1000 square feet using the calcium chloride test (ASTM F-1869) or with a relative humidity >85% when tested using in-situ RH probes (ASTM F-2170).

BILDER'S ULTIMATE is also ideal for permanent glue-down installations of plywood subfloors over concrete and for ceramic or stone tile inlays.

BILDER'S ULTIMATE may be used over cement patches, cement self-leveling underlayments or screeds; properly prepared existing ceramic tile, well bonded sheet vinyl or VCT tiles existing cement terrazzo, underlayment grade chip board and gypsum concrete that has a minimum 2000 psi mix design for engineered flooring and 2500 psi mix design for solid and bamboo flooring. BILDER'S ULTIMATE is suitable for the installation of flooring over electrical warming and radiant heat systems.

BILDER'S ULTIMATE exceeds the VOC requirements for Southern Coast Air Quality Management District (SCAQMD) for wood flooring adhesives and therefore may contribute to the qualification of a project for LEED NC V3 certification for "Indoor Environmental Air Quality" credits for low emitting materials ED 4.1 Adhesives and Sealants.

Directions For use:

Review the technical data sheet prior to starting the installation. Follow applicable industry guidelines and manufacturer's instructions for design, layout, acclimation and expansion space around the perimeter and within the field of flooring.

Surface preparation:

Improper surface preparation is the most common reason for failure of glue down wood flooring. Surface preparation is especially critical when installing less stable products such as solid hardwood or bamboo flooring.

Surfaces must be clean, dry and flat to within 3/16" in 10'; free of voids, loose materials, paint, varnish, adhesive residues, sealers, oil, grease, plaster and gypsum finishing compounds.

Asphaltic “cut-back” adhesive residues should be completely removed prior to the installation of solid or bamboo flooring or if there is concern/history with elevated moisture content in concrete.

CAUTION: Black mastic or cut-back adhesive residues may contain asbestos. Follow applicable state and federal regulations for handling asbestos containing materials.

Dimensionally stable, engineered flooring may be installed over on and above grade concrete that has an asphaltic or “cut-back” adhesive residue after preparation. Such a residue must be completely removed from the surface and only exist as a black stain on the concrete. Do not install solid or bamboo flooring over cut-back adhesive residue; and do not install over cut-back adhesive residue below grade or if there is or ever has been a moisture concern with the slab.

Concrete substrates should not be smooth or reflective. Suitable concrete will have a minimum CSP 3 surface profile, which is similar in roughness to a light broom finish.

Remove contamination and create a surface profile by diamond grinding, shot blasting or scarifying. The use of floor sanding equipment may polish contaminants into the concrete. Be sure the resulting concrete is porous and clean.

Areas that require patching or leveling should be treated with Portland cement based materials. Do not use gypsum patching or leveling products for substrate preparation.

If installing over existing sheet vinyl or VCT, all waxes and sealers must be completely removed and the existing flooring must be well bonded. Installations over existing sheet vinyl or VCT are limited to dimensionally stable engineered wood flooring only.

If installing over existing ceramic tile or natural stone, all waxes and sealers must be completely removed. Highly reflective tile or stone should be lightly abraded with a sanding disk to improve adhesion.

Installation:

Job-site conditions affect the handling and curing of this adhesive. Cold conditions make adhesives more difficult to spread. High relative humidity accelerates cure/hardening. Dry conditions slow cure/hardening.

Installation begins with a starter row secured to the subfloor. The starter row provides a stationary point to push against so the flooring doesn't move during the installation process. Once the starter row is complete, apply the adhesive to the substrate using the appropriate notched trowel. Refer to the trowel coverage chart on the back page.

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Install the flooring immediately into the adhesive. Avoid getting adhesive on pre-finished wood flooring. Immediately remove any adhesive from the surface of the flooring using an adhesive remover recommended by the flooring manufacturer. Take care to remove all adhesive from the surface prior to curing/hardening. Cured adhesive is difficult to remove from pre-finished flooring.

After a few rows have been installed, tape the boards together using 3M #2080 Blue tape. The tape will prevent the flooring from sliding. Flooring that is not flat should be weighted to ensure proper adhesive transfer between the flooring and the sub-floor.

Glue-down installation of plywood Sub-floor

Use 19/32" (5/8") or better plywood subfloor panels cut into 2'X8" or 4'X4' sections. Score the backside of the panels every 12" in both directions. Apply BILDER'S ULTIMATE to the subfloor using a 1/4" X 1/4" square or V notch trowel and lay the sections of subfloor into the adhesive in a staggered joint pattern with 1/8" space between the panels and 3/4" space around the perimeter and vertical obstructions.

Periodically check coverage of the adhesive during the installation. 100% coverage of the substrate is required for protection from subfloor moisture. Solid and bamboo wood flooring require a 95- 100% adhesive transfer between the substrate and flooring. Engineered flooring requires a minimum 80% adhesive transfer between the substrate and the flooring.

Limitations:

Installation of unstable flooring such as bamboo or solid flooring is not recommended for below grade applications.

On or below grade construction must have a functioning vapor barrier (6mil poly or better) beneath the slab.

Do not install dimensionally unstable wood such as solid or bamboo over existing sheet vinyl or VCT.

Do not install flooring over perimeter bonded sheet vinyl.

Slab temperature should be between 50°F-95°F during installation.

Turn radiant heating or floor warming off during and for 72 hours after installation.

Do not use on wet, dusty, contaminated, reflective or friable substrates. Do not use on sub-floors treated with sealers or curing compounds. Do not use on concrete slabs subject to hydrostatic pressure.

Completely remove adhesive residue, sealers and contaminants by diamond grinding, shot blasting or scarifying.

Use over gypsum concrete should be limited to substrates that are in solid condition. Do not glue down flooring over gypsum concrete that is powdery and cracked.

Gypsum concrete should have a minimum mix design of 2000 psi for engineered flooring and 2500 psi for solid or bamboo wood flooring.

Do not use to install foam backed parquet.

Refer to the flooring manufacturer's recommendations and NWFA guidelines for acclimation and required expansion space as these requirements vary substantially.

Important! BILDER'S ULTIMATE is designed and intended to reduce moisture vapor emissions that originate from concrete subfloors. There are numerous potential sources of moisture that may damage wood flooring. BILDER'S ULTIMATE does not affect moisture from sides, ends or top of the flooring or humid conditions within a structure.

Storage and shelf life:

Pails of BILDER'S ULTIMATE are purged at the factory to remove moisture and minimize skinning or curing in the container. If there is a layer of cured adhesive simply remove it with a utility knife and discard.

Shelf life of unopened containers is 1 year from the date of manufacture.

Larger notched trowels are used for thicker flooring products. Additional adhesive will fill voids and minimize hollow spots.

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For adhesive & moisture protection trowels with a saw tooth configuration are required to ensure 100% slab coverage.

For installations that require sub-floor moisture protection:

Flooring Up To 3/8" Thick

3/16" X 5/32" VNotch

Coverage: average 50ft²/gal

Flooring Up to 3/4" Thick & Plywood Subfloor

1/4" X 1/4" VNotchTrowel

Coverage: average 30ft²/gal

For installations that are for adhesive only and do not require sub-Floor moisture protection

Flooring from 1/4" to 3/8" Thick

3/16" X 5/32" VNotch

Coverage: average 50 ft² per gallon

Flooring from greater than 3/8"

1/4" X 1/4" square notch

Coverage: average 30-40ft²/gal

Trowel sizes are suggested to maximize adhesive transfer. Uneven subflooring may require the use of a patching or leveling compound or the use of a larger notched trowel.