



Bostik's BEST®

WOOD FLOORING URETHANE ADHESIVE AND MOISTURE VAPOR CONTROL

TECHNICAL DATA SHEET 10/03/2023

SMART ADVANTAGES

- Over 25 years of industry-leading performance
- Moisture vapor protection
- Bostik's Blockade™ antimicrobial protection

DESCRIPTION

Bostik's BEST® is a high performance adhesive and moisture control membrane. Its superior properties provide a tough, flexible, tenacious bond to a variety of surfaces. Bostik's BEST® high tacking formula exhibits exceptional green grab immediately after troweling, making installation easier and more secure. This adhesive has low VOC's (measured per EPA Method 24) and does NOT contain any water. Bostik's BEST® contains Bostik's BLOCKADE™ antimicrobial protection, which inhibits the growth of bacteria, mold, or mildew on the surface of the dried adhesive.

MOISTURE PROTECTION

Bostik's BEST® has very low moisture vapor permeability and is not adversely affected by moisture vapor. As a result, it will reduce moisture vapor transmission through the concrete. When applied as directed as a moisture vapor membrane, it will prevent damages caused by subfloor moisture beneath dimensionally stable, engineered wood flooring only. As a result, costly and time-consuming concrete moisture testing is not required for engineered hardwood flooring when the slab is properly prepared, dry to the touch, and fully cured. For solid hardwood or bamboo on substrates >3 lbs. or 75% RH, use Bostik's MVP4™ prior to the application of Bostik's BEST® for unlimited moisture vapor protection, or use Bostik Ultra-Set® SingleStep2™ or GreenForce®.

ANTI-FRACTURE PERFORMANCE

Bostik's BEST®'s elastomeric characteristics establish an anti-fracture membrane that can bridge cracks up to 1/8" (3mm) which can occur in the substrate prior to or after installation. This superior elasticity allows the adhesive to move with the wood as it expands and contracts with changes in humidity and temperature over the life of the floor.

ULTIMATE VERSATILITY

Bostik's BEST® may be used to adhere all engineered, solid (adhesive only), bamboo (adhesive only), cork, and parquet hardwood flooring (adhesive only). Bostik's BEST® may be used over all properly prepared



substrates common to hardwood flooring installations including concrete, plywood, OSB, well bonded vinyl/VCT and ceramic tile, cement backer board, gypsum underlayments (dry, above-grade), cement patch/underlayments, radiant-heat flooring, properly prepared terrazzo, and recycled rubber underlayments. This adhesive can also be used to install plywood as described below, as well as ceramic tile, marble, and stone inlays for light commercial and/or residential applications.

LEED® CONTRIBUTION

This low VOC formulation (as measured per EPA Method 24), may contribute toward LEED® v4 EQ Credit — Low-Emitting Materials, Interior Adhesives & Sealants.

DIRECTIONS FOR USE

Read and understand data sheet completely before beginning installation. Follow industry standards and flooring manufacturer's recommendations for acclimation, design, layout, and application of wood flooring material. If jobsite conditions are outside of flooring manufacturer's recommendations, take necessary corrective actions. Whether the moisture content of substrate exceeds or is within the flooring manufacturer's recommendations, to address current or possible future subfloor moisture, sound, and cracks (up to 1/8"), apply Bostik's BEST® as directed.

This supersedes and replaces in its entirety all previously published versions of this document. B14550

SURFACE PREPARATION

Surfaces must be absorptive, clean, and free from loose materials, oil, grease, sealers, curing compounds, waxes, silicates, laitance, and all other surface contaminants that may inhibit proper bond. Completely remove cutback adhesive residue or other surface contaminants by diamond grinding, shot blasting, or scarifying to open the pores of the concrete. All surfaces to be treated must have a concrete surface profile (CSP) of 1-3 (similar to a broomed finish), as defined by ICRI (International Concrete Repair Institute, Guideline No. 03732). Maximum acceptable floor variation is 3/16" in 10 feet. Areas requiring patching or leveling must be done using a Portland cement-based material (e.g., Bostik Webcrete® 95, Webcrete® 98, SL-100™, SL-150™, SL-175™, SL-200™, SL-Rapid™ or UltraFinish™ Pro). Seal any cracks larger than 1/8" or expansion joints with Bostik 915FS™ or 955-SL™.

PLEASE NOTE: Concrete substrate should NOT be smooth and reflective; it must have a concrete surface profile of CSP 1-3 (similar to a broomed finish), as defined by ICRI (International Concrete Repair Institute, Guideline No. 03732). It also must be tested in accordance with ASTM F3191 and be found porous, where a 1/4" drop of water must absorb into the concrete within 1 minute.

INSTALLATION

The installation begins with a starter row secured to the subfloor; the starter row provides a stationary point to push against so flooring doesn't move during installation. Once the starter row is secured, apply adhesive/membrane to substrate using the appropriate trowel. See the chart on last page for proper trowel selection. Flooring may be installed using a "Wet-Lay" method of installation. For "Wet-Lay" installations, spread the adhesive and begin to install the flooring immediately. Periodically lift boards immediately after installation to ensure proper slab coverage and transfer to the back of the flooring. As you work, immediately clean any adhesive from prefinished flooring with Bostik Ultimate™ Adhesive Remover or mineral spirits (be careful not to harm finish), then dry buff with a non-abrasive towel.

After a few rows have been installed, and as you move across the room, tape the boards together using removable 3M #2080 Blue tape to prevent boards from sliding and to secure close-fitting joints. Rolling is recommended for most installations. For some sensitive factory-applied finishes such as oil-based finishes, tape and rolling may not be recommended. Test to ensure that tape removal after rolling does not harm finish. Flooring that is not flat should be weighted or rolled to ensure proper contact between the flooring and substrate.

Plywood over concrete: Score 4' x 4' or 2' x 8' sheets of 3/4" "scoring or kerfing" takes the tension out of the plywood and helps flooring. If nailing to the plywood, nails must not protrude through to the adhesive.

Glue Assist: Bostik's BEST® in cartridges may be used for glue assist of mechanical fasteners on wood subfloors when suggested or required by wide-plank flooring manufacturers. Cut the tip of the nozzle at a 45-degree angle to produce a bead of adhesive between 1/4" and 3/8" in diameter. Puncture the foil seal inside nozzle. Gun adhesive onto the back of the plank in an "S" pattern within 1" (2.5cm) of long edges and repeating every 6"-8" (15-20cm). Press plank firmly into place, then set mechanical fasteners per the flooring manufacturer or NWFA guidelines. Average coverage at 1/4" diameter bead produces 30 linear feet per 10.1oz cartridge, or 85 linear feet per 28oz cartridge.

PLEASE NOTE: Glue assist is for bond only and offers no moisture vapor protection. As a result, glue assist should only be performed on subfloors that have moisture mitigation or environmental controls beneath, matching the temperature and humidity levels of the space above. Do not apply adhesives over asphalt felt papers or other loose-lay underlayments.

CLEANUP

As you work, immediately clean any adhesive from prefinished flooring with Bostik Ultimate™ Adhesive Remover or mineral spirits (be careful not to harm finish), then dry buff with a non-abrasive

towel. Immediately clean all tools and equipment with Bostik's Ultimate™ Adhesive Remover or mineral spirits before material cures.

TROWEL CLEANUP TIP: Before use, cover areas of the trowel that are not used to spread the adhesive with blue tape. After use, simply tear off tape before material cures, and clean the remainder of the trowel with adhesive remover.

STORAGE/SHELF LIFE

Store at temperatures between 50°F and 100°F (10°C and 38°C). Shelf life is one year from date of manufacture in closed, original packaging.

Re-Seal Partially Used Container: With pail upright place a sheet of plastic (e.g., trash bag) over the top of the pail. Secure lid tightly over the plastic on top of pail. Carefully turn pail upside down. Plastic will help prevent the material from bonding the lid closed.

Re-Open Partially Used Container: Carefully turn pail right side up. Remove lid. Carefully cut and discard cured material and plastic from top of pail. Any uncured material may be used.

LIMITATIONS

- Periodically check coverage of adhesive during installation; 100% substrate coverage and adhesive transfer to the back of the flooring is required to protect against damages from subfloor moisture.
- Due to limitations with solid and bamboo wood flooring (e.g., lack of dimensional stability), "below-grade" installations are limited to engineered hardwood flooring.
- For substrates with any history of moisture problems, or for solid hardwood or bamboo on concrete slabs exceeding 3 lb MVER or 75% RH, use a high performance moisture vapor reduction product such as Bostik MVP4™ prior to the application of Bostik's BEST®, or use Bostik Ultra-Set® SingleStep2™ or GreenForce®.
- Do not use in areas subject to hydrostatic head.
- Do not install solid wood flooring over VCT/vinyl.
- Bamboo installations should follow solid hardwood flooring installation recommendations.
- Slab temperature should be between 50°F and 95°F (10°C and 35°C) during installation.
- Do not use on wet, dusty, contaminated, glassy smooth or friable substrates; do not use over substrates/slabs treated with sealers or curing compounds.
- Completely remove all adhesive residue and other surface contaminants by diamond grinding, shot blasting, or scarifying.
- Do not use over perimeter bonded flooring material.
- Use over gypsum-based/underlayments is limited to dry, "above-grade" installations where the gypsum has dried hard (not dusty/powdery), with a minimum compressive strength > 2,000 psi for engineered hardwood installations, or minimum compressive strength > 2,500 psi for solid hardwood installations.
- Please refer to flooring manufacturer's recommendations and NWFA's specifications for proper acclimation, verification of moisture content of flooring with a moisture meter, and expansion relief around perimeter throughout installation.
- Do not use with vinyl-backed cork flooring or foamed-backed parquet.
- Do not use Bostik's BEST® as a moisture vapor membrane beneath solid or bamboo flooring.
- This membrane is designed to reduce moisture vapor emissions that originate/emanate from below the membrane only.
- This membrane does NOT reduce/affect issues originating from the sides, ends, or top of flooring (ie. puddles, water, leaks, hydrostatic-head, etc.).
- This membrane does NOT eliminate all possible moisture related or install related issues (ie. improper acclimation of flooring, jobsite temperature/relative humidity, etc.).
- This membrane is designed to prevent excessive variance of moisture between the top, middle, and bottom of flooring that originates from the substrate..

PACKAGING

Available in 4 gallon pails (36 pails/pallet),
 10.1 oz cartridges (12 cartridges/case, 96 cases/pallet),
 10.1 oz cartridges (24 cartridges/case, 105 cases/pallet), and
 28 oz cartridges (12 cartridges/case, 60 cases/pallet).

CAUTION

COMBUSTIBLE. MAY BE HARMFUL IF SWALLOWED OR INHALED. CONTAINS POTENTIAL SENSITIZER. MAY CAUSE ALLERGIC SKIN OR LUNG REACTION. MAY IRRITATE EYES, SKIN AND RESPIRATORY TRACT. Do not breathe fumes. Do not get in eyes, on skin or on clothing. Do not swallow. Use only in a well-ventilated area or wear mask. Keep away from flames or sparks. Wash thoroughly after handling. Store container in a cool, dry area with lid tightly sealed. Do not reuse container.

KEEP OUT OF REACH OF CHILDREN

FIRST AID TREATMENT

Contains Petroleum Resins, Diisodecyl Phthalate (DIDP), Methylene Diphenyl Isocyanate (MDI) and Quartz Silica inextricably bound in a polymer matrix. If in eyes or on skin, rinse with water for at least 15 minutes. If on clothes, remove clothes. If breathed in, move person to fresh air. If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

SEE SAFETY DATA SHEET

Chemical Emergency: 800-424-9300 (USA),
 703-527-3887 (International)

Medical Emergency: 866-767-5089

OPEN/WORKING TIME CHART

Temperature		Humidity		
		40%	60%	80%
60°F (16°C)	Tack	2 Hours	1.6 Hours	1.3 Hours
	Open	3.5 Hours	3.5 Hours	3 Hours
70°F (21°C)	Tack	1.6 Hours	1.3 Hours	1 Hour
	Open	3 Hours	3 Hours	2.5 Hours
80°F (27°C)	Tack	1.3 Hours	1 Hour	0.6 Hour
	Open	3 Hours	2.5 Hours	2 Hours

NOTE: This chart is for reference only; actual jobsite times may vary.

CHEMICAL & PHYSICAL PROPERTIES

Use Environments	Residential	Yes		
	Offices/Light Commercial	Yes		
	Heavy Commercial	Yes		
	Offices	Yes		
	Hospital	Yes		
	Exterior	No		
	Wet Areas	No		
Substrates	Concrete	Yes		
	Plywood	Yes		
	OSB	Yes		
	Recycled Rubber Underlayment	Yes		
	Well-Bonded Vinyl	Yes		
	Terrazzo	Yes		
	Ceramic Tile	Yes		
	Cement Backer Board	Yes		
	Gypsum Underlayments*	Yes		
	Cement Patch/Underlayment	Yes		
	Solid Hardwood	Yes		
Flooring Types	Engineered Hardwood	Yes		
	Bamboo	Yes		
	Cork	Yes		
	Parquet	Yes		
	Plywood	Yes		
	Ceramic Tile, Marble, Stone Inlays ²	Yes		
	Cured Physical Properties	Cure Time ³		
		Light foot traffic	6 to 8 hours	
		Normal foot traffic	8 to 12 hours	
		Water Vapor Permeability ⁴	<0.75	
Concrete Moisture Vapor Limits for subfloor moisture vapor protection:				
For engineered hardwood		None, dry to the touch		
For solid hardwood or bamboo				
ASTM 1869 Calcium Chloride Method		≤ 3 lbs/1000 sq.ft./24 hrs		
ASTM 2170 Relative Humidity Test		≤ 75% RH		
Elongation		>150%		
Service Temperature	-40°F to 150°F (-40°C to 66°C)			
Application Properties	Ease of Troweling	Easy		
	Odor	Mild		
	Open/Working Time ⁵	180 min		
	Color	Tan		
	Density (lbs/gallon)	12.66		
	Percentage of Water ⁶	0%		
	Percentage of Adhesive Coverage Required:	For Moisture Protection	For Bond	
	Engineered	95%	>80%	
	Solid	95%	>95%	
	Application Temperature	50°F to 100°F (10°C to 38°C)		
Chemical Properties	Chemistry Type	1-Part Urethane		
	Adhesive Type	Moisture Cure		
	VOC Compliant (measured per EPA Method 24)	Yes (20 g/L)		
	Flash Point, closed cup	≥142°F (61°C)		
LEED® v4 Contribution	IEQ - Low-Emitting Materials for Interior Adhesives & Sealants	Up to 3 Points ⁷		

* Dry, above grade

² Residential or light commercial only

³ Humidity affects cure to a greater degree than temperature; the higher the humidity, the faster the cure. Under normal conditions, light foot traffic is acceptable after 6 to 8 hours; normal traffic after 12-16 hours.

⁴ Per ASTM E-96 Standard Test Methods for Water Vapor Transmission of materials. Ratings are g/m²-24 hour-mmHG.

⁵ Please refer to the Open/Working Time Chart.

⁶ Per ASTM E203-01 Standard Test Method for water using Volumetric Karl Fischer Titration Method. Results rounded to the nearest tenth. Test Method has error range of +/- 0.2%.

⁷ Per LEED® v4 BD+C rating system, taking into account all other interior adhesives & sealants applied on site.

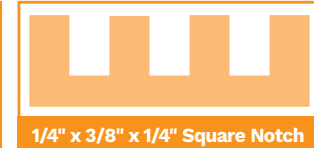
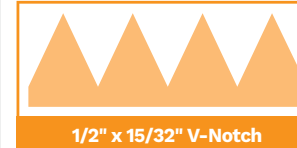
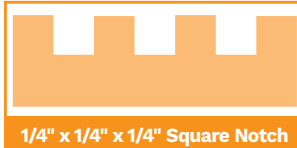
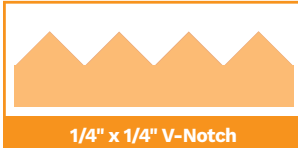
TROWEL SELECTION

In order to form a membrane that functions properly for moisture-vapor protection, the right trowel needs to be selected to achieve both 100% coverage of the substrate and 100% transfer to the back of the flooring. Jobsite conditions, profile of the substrate, depth of back channeling in the flooring, and other factors affect the amount of adhesive that must be applied to achieve proper coverage and transfer. Always pull a board at the beginning of and during the installation process to confirm adequate coverage and transfer. Trowel size may need to be changed to achieve the required coverage and transfer. See trowel suggestions below.

ADHESIVE & MOISTURE MEMBRANE INSTALLATION METHOD

Suggested Notched Trowel (For use as an adhesive only, refer to adhesive-only installation method.)

Engineered wood flooring up to 5/8" thick.
Coverage: 30-35 sq ft per gallon



Engineered wood flooring >5/8" thick, or plywood.
Coverage: 20 sq ft per gallon

Trowel size is suggested to maximize coverage of adhesive. Periodically lift a board to ensure the following conditions are being met: 100% coverage of concrete substrate and 100% transfer to the back of the flooring product. Uneven subflooring may require the use of either a leveling/patching material, or a larger V-notched trowel for proper coverage of adhesive.

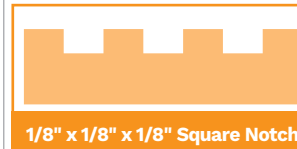
ADHESIVE-ONLY INSTALLATION METHOD

Suggested Notched Trowel (For use as an adhesive, sound, and moisture vapor control membrane, refer to chart above.)

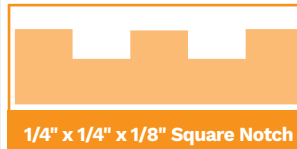
Engineered hardwood flooring ≤1/2" thick.
Coverage: 50 sq ft/gallon



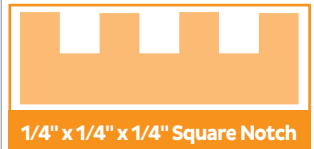
≤1/2" Parquet, or cork underlayment.
Coverage: 80 sq ft/gallon



Engineered hardwood flooring >1/2" thick, solid wood or bamboo flooring ≤1/2" thick, and parquet ≤3/4" thick.
Coverage: 40 sq ft/gallon



Solid wood or bamboo flooring >1/2" thick, or plywood.
Coverage: 35 sq ft/gallon



Trowel size is suggested to maximize coverage of adhesive. Periodically check coverage of adhesive during installation: >80% coverage and transfer to the back of the flooring is required for all engineered wood flooring; >95% coverage and transfer is required for all solid wood flooring or bamboo flooring products.

LIMITED WARRANTY found at www.bostik.com/us. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNLESS OTHERWISE STATED IN THE LIMITED WARRANTY, THE SOLE REMEDY FOR BREACH OF WARRANTY IS REPLACEMENT OF THE PRODUCT OR REFUND OF THE BUYER'S PURCHASE PRICE. BOSTIK DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW. DISCLAIMERS OF IMPLIED WARRANTIES MAY NOT BE APPLICABLE TO CERTAIN CLASSES OF BUYERS AND SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. The Limited Warranty extends only to the original purchaser and is not transferable or assignable. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

Bostik, Inc.
11320 W. Watertown Plank Road
Wauwatosa, WI 53226
www.bostik.com/us

BOSTIK HOTLINE

Smart help 1-800-726-7845



Legal Disclaimer: All information contained herein is believed to be accurate as of the date of publication, is provided "as-is" and is subject to change without notice. This is not a warranty, an agreement, or substitute for expert or professional advice. Bostik Inc. expressly disclaims and assumes no liability for the use of the products or reliance on this information. It is the sole responsibility of the user to determine the suitability of any products for user's application(s). NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED (INCLUDING SUITABILITY FOR USE IN ANY MEDICAL DEVICE OR MEDICAL APPLICATION), IS MADE CONCERNING THE PRODUCTS OR THE INFORMATION PROVIDED HEREIN. The information provided relates only to the specific products designated herein and may not be valid where such products are used in combination with other materials or in any process. The performance of the product, its shelf life, and application characteristics depends on many variables, and changes in these variables can impact product performance. You are responsible to test the suitability of any product in advance for any intended use or application and before commercialization. Nothing herein shall be construed as a license for the use of any product in a manner that might infringe any patent and it should not be construed as an inducement to infringe any patent. Please carefully review the Safety Data Sheet for the product.