

Builder's Block™

PROFESSIONAL GRADE ADHESIVE AND MOISTURE VAPOR CONTROL

TECHNICAL DATA SHEET 03/03/2025

SMART ADVANTAGES

- Unlimited moisture vapor protection
- No flooring length or width restrictions
- Low VOC

DESCRIPTION

Builder's Block™ is a high performance adhesive and moisture control membrane. Its superior properties provide a tough, flexible, tenacious bond to a variety of surfaces. Builder's Block 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.

MOISTURE PROTECTION

Builder's Block 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. Therefore, costly and time-consuming concrete moisture testing is not required.

ANTI-FRACTURE PERFORMANCE

Builder's Block's elastomeric characteristics establish an antifracture membrane that can bridge cracks up to 1/8" (3 mm) 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

Builder's Block may be used to adhere all engineered, solid, bamboo, cork, and parquet hardwood flooring. Builder's Block may be used over all properly prepared substrates common to hardwood flooring installations including concrete, plywood, OSB, well bonded vinyl/VCT and ceramic tile, gypsum underlayments (dry, above-grade), cement patch/underlayments, radiant-heat flooring, and properly prepared terrazzo. This adhesive can also be used to install plywood as described below, as well as ceramic tile, marble, and stone inlays for residential applications.



LEED® CONTRIBUTION

Builder's Block's low-VOC formulation (tested by EPA Method 24) may contribute toward LEED® credits under section EQ 4.1: Low-Emitting Materials – Adhesives & Sealants.

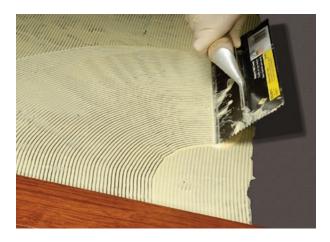
DIRECTIONS FOR USE

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 Builder's Block as directed.

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,

This supersedes and replaces in its entirety all previously published versions of this document. B252501



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™ or UltraFinish™ Pro). Seal any cracks larger than 1/4" or expansion ioints with Bostik 915FS.

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 define by ICRI (International Concrete Repair Institute, Guideline No. 03732). It is advisable to test for adequate substrate absorption and texture in several areas throughout the jobsite by sprinkling droplets of water onto the slab. The drops of water should show signs of penetrating the substrate within one minute. This is evidenced by a water stain on the concrete without a "domed" droplet. If no signs of water penetration are shown within one minute and "domed" droplets remain (similar to drops on a car hood) the substrate will need to be mechanically textured.

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 Ultimate¹M 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 all installations. Flooring that is not flat should be tacked, 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" exterior-grade plywood on the backside every 8" to 10" by using a circular saw and cutting one-half the thickness of the plywood; "scoring or kerfing" takes the tension out of the plywood and helps to prevent possible warping or curling. Apply adhesive to substrate and then set plywood into the wet adhesive. Allow the adhesive to fully cure before nailing or using Builder's Block™ adhesive to install flooring. If nailing to the plywood, nails must not protrude through to the adhesive.

CLEAN UP

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 CLEAN-UP 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.
- · Do not use in areas subject to hydrostatic head.
- Do not install solid wood or bamboo 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.
- 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 (i.e. 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)

WARNING

COMBUSTIBLE. MAY BE HARMFUL IF SWALLOWED OR INHALED. CONTAINS POTENTIAL SENSITIZER. M

AY 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 wellventilated 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 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						
	Residential		Yes			
Use Environments	Offices/Light Comm	ercial	Yes			
	Heavy Commercial	Yes				
	Offices	Yes				
	Hospital	Yes				
	Exterior	No				
	Wet Areas	No				
Substrates	Concrete	Yes				
	Plywood	Yes				
	OSB	Yes				
	Well-Bonded Vinyl	Yes				
	Terrazzo	Yes				
	Ceramic Tile	Yes				
	Gypsum Underlayme	Yes				
	Cement Patch/Unde	Yes				
	Solid Hardwood	Yes				
Flooring Types	Engineered Hardwoo	Yes				
	Bamboo	Yes				
	Cork	Yes				
	Parquet	Yes				
	Plywood	Yes				
	Ceramic Tile, Marble	Yes				
	Cure Time*3					
Cured Physical Properties	Light foot traffic	6 to 8 hours				
	Normal foot traffi	8 to 12 hours				
	Concrete Moisture V	None, dry to				
	subfloor moisture va	the touch				
	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 ³	90 min				
	Color	Grey				
	Density (lbs/gallon)	12.7				
	Percentage of Water	0%				
	Percentage of Adhesive Coverage Required:	For Moisture Protection	For Bond			
	Engineered	100%	>80%			
	Solid	100%	>95%			
	John	10070				
	Application Tempera	50°F to 95°F (10°C to 35°C)				
Chemical Properties	Chemistry Type	1-Part Urethane				
	Adhesive Type	Moisture Cure				
	VOC Compliant (measured per EPA	Yes (20 g/L)				
	Flash Point, closed o	≥142°F (61.1°C)				

^{*} Dry, above grade

^{**} Private grade **

**Residential or light commercial only **

** 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 Please refer to the Open/Working Time Chart.

*5 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%.

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 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. 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

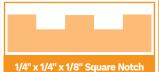
Suggested Notched Trowel (For use as an adhesive and moisture control membrane, refer to chart above.)

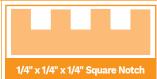
Engineered hardwood flooring ≤1/2" thick. Coverage: 50 sq.ft./gallon ≤1/2" Parquet, or cork underlayment. Coverage: 80 sq.ft./Gallon Engineered hardwood flooring >1/2" thick, Solid wood or bamboo flooring ≤1/2" thick, and parquet ≤3/4" thick. Coverage: 40 sq.ft./gallon

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

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BOSTIK HOTLINE

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