

# WOOD-GRIP™

# HARDWOOD & BAMBOO ADHESIVE & MOISTURE CONTROL MEMBRANE

TECHNICAL DATA SHEET 10/10/2022

#### SMART ADVANTAGES

- Easy clean before and after cure
- Concrete moisture vapor control
- Low odor and VOC

#### **DESCRIPTION**

Wood-Grip™ is a hardwood and bamboo adhesive and moisture control membrane all in one. Bostik's polymer adhesive formulation maintains long term durability and moisture control properties, and it is easy to spread and clean off of prefinished flooring before and after cure. This adhesive has low VOC's (as calculated per SCAQMD Rule 1168) and does **NOT** contain any water.

### MOISTURE PROTECTION

Wood-Grip™ has low moisture vapor permeability and is not adversely affected by moisture. As a result, it will reduce moderate amounts of 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. WoodGrip™ may be used for concrete slabs with elevated moisture levels up to 12 lbs. per 1,000 square feet per 24 hours (using an anhydrous calcium chloride test kit according to ASTM F-1869 test method), and up to 85% RH (tested in accordance with ASTM F-2170). For substrates that have an MVER of greater than 12 lbs or 85% RH, use Bostik Wood-Grip™ Plus, Roll-Cote™ or MVP4™prior to the application of Wood-Grip™ for unlimited moisture vapor protection.

# ANTI-FRACTURE PERFORMANCE

Wood-Grip™'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**

This polymer adhesive formulation may be used to adhere engineered, solid, bamboo, cork, and parquet. It may be used over properly prepared substrates common to hardwood flooring installations including; concrete, plywood, well bonded vinyl/VCT and ceramic tile, cement backer board, 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, as well as ceramic tile, marble, and stone inlays for light commercial and/or residential applications.

# LEED® CONTRIBUTION

This polymer adhesive formulation may be used to adhere engineered, solid, bamboo, cork, and parquet. It may be used over properly prepared substrates common to hardwood flooring installations including; concrete, plywood, well bonded vinyl/VCT and ceramic tile, cement backer board, 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, as well as ceramic tile, marble, and stone inlays for light commercial and/or residential applications.

### **DIRECTIONS FOR USE**

Read and understand data sheet completely before beginning installation. Follow industry standards, as well as 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 Wood-Grip™ as directed.

This supersedes and replaces in its entirety all previously published versions of this document, B35451

#### **SURFACE PREPARATION**

Surfaces must be absorptive, clean, 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 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-175™, SL-200™ or UltraFinish™ Pro).

**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 a "Wet-Lay" type of installation, 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. If a thin skin forms on the adhesive on the slab prior to installation of the flooring, it may be possible to re-trowel the adhesive and obtain proper coverage and transfer. Re-trowel 90° to the ridges, and if no sign of the original trowel marks remains, install additional flooring and check coverage and transfer. Adhesive that has cured too much prior to installation of the flooring must be mechanically removed and fresh adhesive applied.

Although it is relatively easy to remove Wood-Grip™ adhesive from the face of prefinished hardwood even after cure, it is recommended to clean with a non-abrasive towel as you work prior to cure. 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. 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. Using a recommended trowel, apply adhesive/membrane to substrate and then set plywood into the wet adhesive/membrane. For moisture protection, ensure 100% coverage and transfer. Allow the adhesive/membrane to fully cure before nailing or using Wood-Grip™ adhesive/membrane to install flooring. Make sure that nails do not penetrate through the Wood-Grip™ membrane.

#### CLEANUP

While Wood-Grip™ bonds tenaciously to concrete and flooring, it is designed not to bond with most finishes on pre-finished flooring making it relatively easy to remove from the finish even after cure. Although it is relatively easy to remove after cure, it is recommended to clean with a non-abrasive towel as you work prior

to cure. After cure, adhesive may be removed with a plastic scraper and dry, non-abrasive towel, taking care not to damage the finish. Immediately clean all tools and equipment before material cures.

**TROWEL CLEAN-UP TIP:** Before use, cover areas of the trowel that are not used to spread the adhesive with duct tape or blue tape. After use, simply tear off tape before material cures, and clean the remainder of the trowel with a towel.

#### STORAGE/SHELF LIFE

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

Re-Seal Partially Used Container: Clean all adhesive residue off of the lip of the pail and the groove around the perimeter of the lid. Plastic (e.g., a trash bag) may be placed into the pail to cover the wet adhesive, especially in high humidity environments, but do not allow the plastic to extend outside of the pail and interfere with the seal of the pail with the lid. Use a rubber mallet to fully seat the lid on the pail. Do not turn the pail over.

**Re-Open Partially Used Container:** Remove the lid. Peel any cured material away from pail and discard cured material and plastic from the top of the pail. Any uncured material may be used.

#### LIMITATIONS

- Surfaces must be absorptive, clean, free from loose materials, Periodically check coverage of adhesive during installation; 100% substrate coverage and adhesive transfer 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.
- On or below-grade substrates must have appropriate vapor barrier (6 mil poly or better) properly installed below slab.
- 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.
- Do not use in areas subject to hydrostatic head.
- · Do not use over perimeter bonded flooring material.
- Completely remove all adhesive residue and other surface contaminants from the slab by diamond grinding, shot blasting, or scarifying.
- 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 vinyl-backed cork flooring or foamed backed parquet.
- This membrane does NOT reduce/affect issues originating from the sides, ends, or top of flooring (i.e. puddles, water leaks, wet mopping, hydrostatic-head, etc.).
- This membrane does NOT eliminate all possible moisturerelated 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.

Available in 4 gallon (15.1 L) pails, 36 pails/pallet.

#### CAUTION

IRRITANT. MAY IRRITATE EYES, SKIN OR RESPIRATORY TRACT. CONTENTS MAY BE HARMFUL IF SWALLOWED OR INHALED. Methanol may form during curing. Do not breathe fumes. Do not get in eyes, on skin or on clothing. Do not swallow. Handle with care. Use only in a well ventilated area or wear a mask. Wear protective clothing including gloves. Wash thoroughly after handling. Keep container closed. Store in a cool, dry area. Do not reuse container.

#### KEEP OUT OF REACH OF CHILDREN

#### FIRST AID TREATMENT

Contains Calcium Carbonate, Quartz Silica and Diisodecyl Phthalate (DIDP) inextricably bound in a polymer matrix. If in eyes or on skin, rinse well with water. If on clothes, remove clothes. If inhaled, move person into 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

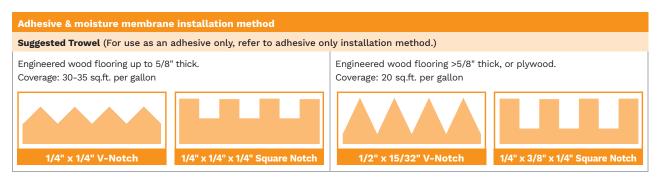
OPEN TIME CHART				
Temperature	Humidity			
	40%	60%	80%	
60°F (16°C)	2.3 Hours	2.0 Hours	1.0 Hours	
70°F (21°C)	2.0 Hours	1.0 Hours	45 Minutes	
80°F (27°C)	1.0 Hours	45 Minutes	30 Minutes	
<b>Note:</b> This chart is for reference only; actual jobsite times may vary.				

	Chemistry Type		Polymer
Chemical Properties			esive
	Adhesive Type	Moisture Cure	
	Solvent Free	Yes	
	Flash Point	>200°F (93°C)	
Use Environments	Residential	Yes	
	Offices/Light Commercial	Yes	
	Heavy Commercial/Retail	Yes	
	Hospital/Healthcare	No	
	Industrial	No	
	Exterior		No No
	Wet Areas	Yes	
Substrates	Concrete		
	Concrete Board	Yes Yes	
	Concrete Patch/SLU		
	Gypcrete Plywood	Yes	
	OSB	Yes	
	Ceramic Tile	Yes Yes	
	Terrazzo	Yes	
	Well-Bonded Vinyl	Yes	
	Solid Hardwood	Yes	
Flooring	Engineered Hardwood	Yes	
	Bamboo	Yes	
	Cork	Yes	
Types	Parquet	Yes	
	Plywood	Yes	
	Ceramic Tile, Marble, Stone		
	Inlays*1	Yes	
	Application Method	Trowel	
	Ease of Application	Very Easy	
	Odor	Slight	
	Required Flash Time	0 min	
	Open/Working Time*2	60 min	
	Color	Terra Cotta	
	Density Min/Max (lbs/gallon)	14.25	
Application Properties	Wet Lay		es
	Walk-On-Work prior to cure		No.
	Percent of Adhesive Coverage & Transfer Required	For Moisture Protection	For Bon
	Engineered	100%	>80%
	Solid	100%	>95%
	Application Temp Range	50°F-90°F	(10°C-32°C
	Shelf Life	1 year	
	Ease of Clean, Wet	Very Easy	
	Ease of Clean, Cured	Easy	
	Dry Time: Light Traffic	6-8 hrs	
	Dry Time: Normal Traffic	12-24 hrs	
	Service Temp Range	-40°F to 150°F (-40°C to 66°C	
	Elongation	>100%	
Cured Physical	Water Vapor Permeability*3	<0.8	
Physical Properties	Concrete Moisture Vapor Limits for subfloor moisture vapor protection:		
	ASTM 1869 Calcium Chloride Method	≤ 12 lbs/ 1000 sq ft /24 hrs	
	ASTM 2170 Relative Humidity Test	85% RH	
LEED	EQ 4.1: Low-Emitting Materials: VOC		

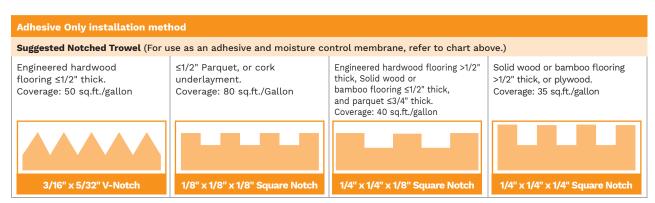
 <sup>\*1</sup> Light commercial and/or residential applications.
\*2 Please refer to Open/Working Time chart.
\*3 Per ASTMF-1249 Standard test method for water vapor transmission rate through plastic film and sheeting using a modulated infrared sensor. Ratings are g/m²-24 hr-mmHG.

#### 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.



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.



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.

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**BOSTIK HOTLINE** 

Smart help 1-800-726-7845

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