



# WOOD-GRIP<sup>™</sup> Advanced<sup>™</sup>

ADVANCED TRI-LINKING<sup>™</sup> ADHESIVE , MOISTURE CONTROL & SOUND REDUCTION MEMBRANE

## **KEY FEATURES**

- Easy clean before and after cure
- Lifetime unlimited moisture vapor warranty
- Superior sound dampening performance

## DESCRIPTION

Wood-Grip™ Advanced™ is a high performance adhesive, moisture control, and sound reduction membrane all in one. Bostik's breakthrough AXIOS® Tri-Linking™ Polymer Technology used in this formulation maintains the superior long term durability, moisture control and sound abatement properties of high end urethane adhesives. However, it is easier to spread and clean off of prefinished flooring before and after cure. This adhesive contains 1% recycled rubber material, has zero VOC's (as calculated per SCAQMD Rule 1168) and does **NOT** contain any water.

## THICKNESS CONTROL<sup>™</sup> SPACER TECHNOLOGY

Wood-Grip<sup>™</sup> Advanced<sup>™</sup> contains Bostik's patent-pending Thickness Control<sup>™</sup> Spacer Technology. This proprietary feature helps ensure proper membrane thickness is maintained between the hardwood flooring and substrate. Installers can use mallets to engage the tongue and groove or even walk on their work during the installation process without significant reduction in the film thickness that could compromise moisture protection and sound control.

## SUPERIOR MOISTURE PROTECTION

Wood-Grip™ Advanced™ has extremely low moisture vapor permeability and is not adversely affected by moisture. As a result, costly and time-consuming concrete moisture testing is not required when the slab is properly prepared, fully cured and dry to the touch.

## SUPERIOR SOUND CONTROL

Wood-Grip<sup>™</sup> Advanced<sup>™</sup> provides a premium sound reduction barrier over the substrate that typically outperforms 1/4" thick cork underlayment. This eliminates the costly labor and materials required to transport and install these secondary acoustical sheet membranes. Independent testing laboratory results are summarized on the table to the right.



ACOUSTIC PERFORMANCE CHART							
Subfloor Type	Flooring Type	Ceiling Type	Results	Test			
6" Concrete	3/8" Engineered	5/8" Suspended Gypsum	70	IIC			
6" Concrete	3/8" Engineered	No suspended ceiling	50	IIC			
6" Concrete	3/8" Engineered	No suspended ceiling	21	∆IIC			
6" Concrete	3/8" Engineered	No suspended ceiling	51	STC			
6" Concrete	3/8" Engineered	5/8" Suspended Gypsum	67	STC			

## **ANTI-FRACTURE PERFORMANCE**

Wood-Grip<sup>TM</sup> Advanced<sup>TM</sup>'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 high performance formulation may be used to adhere all engineered, solid, bamboo, cork, and parquet. Wood-Grip™ Advanced™ has no restrictions on board width or length. It 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, and properly prepared terrazzo. This

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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 0 VOC formulation (as calculated per SCAQMD Rule 1168) may contribute toward LEED<sup>®</sup> credits under section NC-v2.2 EQ 4.1: Low-Emitting Materials—Adhesives & Sealants. It also contains 1% recycled rubber material contributing to LEED<sup>®</sup> credits under section NC-v2.2 MR 4.2: Recycled Content.

#### **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<sup>™</sup> Advanced<sup>™</sup> as directed.

## 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-150™, 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" or "Walkon-Work" method of installation. For either 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™ Advanced™ 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'x4' or 2'x8' sheets of 3/4" exteriorgrade 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™ Advanced™ adhesive/ membrane to install flooring. Make sure that nails do not penetrate through the Wood-Grip™ Advanced™ membrane.

#### **CLEAN UP**

While Wood-Grip™ Advanced™ 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

- 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 parguet.
- 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.

## PACKAGING

Available in 4 gallon pails, 36 pails/pallet.

## CAUTION

IRRITANT. MAY IRRITATE EYES, SKIN AND RESPIRATORY TRACT. Methanol may form during curing. Do not breathe fumes. Do not get in eyes, on skin or on clothing. Use with adequate ventilation or wear mask. 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**

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

	Chemistry Type	1-part Axios <sup>™</sup> Tri-Linking Polymer Technology		
		,		
Chemical Properties	Adhesive Type		re Cure	
	Plasticizer Migration Resistant	Mode Ye		
	Solvent Free Flash Point			
	Residential	>200°F (93°C)		
	Offices/Light Commercial	Yes		
	Heavy Commercial/Retail	Yes		
Use Environments	Hospital/Healthcare	Yes		
	Industrial	Yes		
	Exterior	No		
	WetAreas	No		
	Concrete	Yes		
	Concrete Board	Yes		
	Concrete Patch/SLU			
	Gypcrete	Yes		
Substrates	Plywood	Yes		
Substitutes	OSB	Yes Yes		
	Ceramic Tile			
	Terrazzo		Yes Yes	
	Well-Bonded Vinyl	Ye		
	Solid Hardwood	Ye		
	Engineered Hardwood	Ye		
	Bamboo	Ye		
Flooring Types	Cork	Yes		
r toornig rypes	Parquet	Yes		
	Plywood	Yes		
	Ceramic Tile, Marble, Stone Inlays*1	Yes		
	Application Method	Trowel		
	Ease of Application		Easy	
	Odor	Slight		
	Required Flash Time	0 min		
	Open/Working Time* <sup>2</sup>	60 min		
	Color	Beige w/black spec		
	Density Min/Max (lbs/gallon)	14.25		
Application	Wet Lay	Yes		
Properties	Walk-On-Work prior to cure	Yes		
	Percent of Adhesive Coverage &	For Moisture	For Bon	
	Transfer Required	Protection	FUI BUII	
	Engineered	100%	>80%	
	Solid	100%	>95%	
	Application Temp Range	50°F-90°F	(10°C-32°	
	Shelf Life	1 ye		
	Ease of Clean, Wet	Very	Easy	
	Ease of Clean, Cured		sy	
	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		
	Elongation	>100%		
	Water Vapor Permeability*3	-	).4	
	Concrete Moisture Vapor Limits for Subfloor Moisture Vapor Protection	Unlimited		
Cured Physical	Concrete Moisture Vapor Protection	Dry-to-the-Touch		
Properties	for Bond	Unlimited Dry-to-the-Touch		
	ASTM E2179 Increased Impact Insulation	Delta IIC 21 dB		
	ASTM E492-04 IIC	Detta no 21 dD		
	(6" concrete slab, no ceiling)	50 dB		
	(6" concrete slab with 5/8" gypsum ceiling)"	70 dB		
	ASTM E90-09 STC			
	(6" concrete slab, no ceiling)	51 dB		
	(6" concrete slab with 5/8" gypsum ceiling)	67 dB		
	EQ 4.1: Low-Emitting Materials: VOC			
		0 g/L		
LEED Contribution	(as calculated per SCAQMD Rule 1168)		·	

<sup>\*1</sup> Light commercial and/or residential applications.
<sup>\*2</sup> Please refer to Open/Working Time chart.
<sup>\*3</sup> Per ASTM-71249 standard test method for water vapor transmission rate through plastic film and sheeting using a modulated infrared sensor. Ratings are g/m<sup>2</sup>-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.

## ADHESIVE & MOISTURE MEMBRANE INSTALLATION METHOD

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

Solid, engineered or bamboo wood flooring up to 5/8" thick. Coverage: 30-35 sq.ft. per gallon Solid, engineered or bamboo 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 and moisture control membrane, refer to chart above.) Engineered hardwood ≤1/2" Parquet, or cork Engineered hardwood flooring Solid wood or bamboo flooring flooring  $\leq 1/2$ " thick. underlayment. >1/2" thick, Solid wood or >1/2" thick, or plywood. Coverage: 50 sq.ft./gallon Coverage: 80 sq.ft./Gallon Coverage: 35 sq.ft./gallon bamboo flooring  $\leq 1/2$ " thick, and parquet ≤3/4" thick. Coverage: 40 sq.ft./gallon 3/16" x 5/32" V-Notch 1/8" x 1/8" x 1/8" Square Notch 1/4" x 1/4" x 1/8" Square Notch 1/4" x 1/4" x 1/4" Square Notch

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.

### **FIRST AID TREATMENT**

Contains 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 clothing. 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

#### LIMITED WARRANTY

Limited Warranty found at www.bostik.com/us or call 800.726.7845. 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.

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