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Technical Data Sheet

Hav:Bond Urethane Based Wood Flooring Adhesive

Special features

- Moisture cured
- Non-etching
- Requires no moisture testing (some restrictions apply)
- Great shear strength
- Easy clean even after cured

Product Description

Hav:Bond provides a tremendous improvement for urethane adhesives. It is a urethane based, high-strength adhesive for professional wood flooring installation. Unlike other Urethane adhesives, it contains no isocyanates, the primary chemical in other urethane adhesives that will etch fine floor finishes and is a suspected carcinogen. Nor does it contain any solvents or other hazardous materials. It is therefore safe for the ozone and environment. And it is certified to meet some of the toughest "green" product requirements in Europe and the world. It qualifies for LEED credits.

Long open time allows for easy, stress free installations. Hav:Bond is a water-free product, therefore there will be no dimensional changes to the wood seen during installation. High shear strength ensures the floor is strongly held in place and good initial grab is produced. This adhesive is waterproof and will not dissolve if it gets wet. This adhesive has earned the highest GEV-EMICODE EC 1 ranking by the European Association for Control of Emissions for Flooring. See www.emicode.com for information.

This adhesive is designed for easy spread with a non-slump formula to help ensure good overall adhesive contact and transfer and also promotes fast installation due to its strong initial green grab. There is no flash time required, so installation can commence immediately. Rolling of the adhesive or completed floor surface is not recommended or needed. It offers superior flexibility and is designed to hold the flooring in place from the start of the installation process, yet allows for normal movement during seasonal changes to the flooring.

Pre-installation Checklist

Always be sure to read and understand all applicable guidelines and technical data sheets before installation. Follow industry standards and flooring manufacturer's recommendations in relation to sub floor moisture content, design, layout and application of flooring materials. Backing of all flooring material must be solid and sound and free of any contaminants and substances that are likely to affect adhesion. All slab constructions must meet the specific requirements of the floor covering to be installed. The use of correct subfloor preparation practices is always promoted for a successful installation.

Subfloor Examination

Prior to installation, the sub floor must be checked according to NWFA installation guidelines. It must be solid and sound, flat, permanently dry, clean, free of chaps, indentations and anti-adherents, as well as resistant to pressure and tension. Moisture content of all floors must be measured before installation. All wood floors should have 6-9% moisture content at installation. There should be no more than a 4-5% variance in moisture content between the wood flooring and any wood sub floor. See NWFA guidelines and the wood flooring manufacturer's recommendations for details.

Sub Floor Preparation

Dust, paint, adhesive residues or other surface contaminants that may hinder adhesion must be removed by suitable means. Cleaning the surface with an industrial vacuum cleaner is always recommended. Cracks and gaps must be filled with a suitable filling compound unless they are expansion joints. Level when necessary to 3/16 inches within 10 feet. Heated sub floors, gypcrete, wooden sub floors, levellers, patches and light weight concrete must be primed. Fast curing



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cementitious leveling or patching compounds might reduce the flash and work time of water-based products due to absorption. Depending on the condition and type of the subfloor a mechanical removal of the surface may be necessary. This is to be determined by an on inspection by the installer (grinding, sanding or brushing).

Installation Procedure

Spread the adhesive with Notched Trowel #5 (3/16" x 1/4" x 9/32")(5mm x 6mm x 10mm). Avoid excessive adhesive thickness by passing the trowel evenly through the adhesive at a 45 degree angle. There is no flash time, the installation can begin straight away. Lay the flooring into the adhesive and once in place, apply pressure to the surface of the board to ensure the board is in full contact with the adhesive. Weight, in the form of Adhesive pails or unused flooring packs, can be placed on the installed areas of the floor to ensure the boards are in full contact until the adhesive cures. Bowed boards or low spots should be weighted immediately after placing. Check for good adhesive transfer at regular intervals. Rolling of the adhesive or completed floor surface is not recommended or needed.

Limitations

When using products other than Havwoods' recommended products in conjunction with this adhesive, Havwoods denies any and all responsibility for any ensuing problems and/or damages without prior written authorization from Havwoods.

This adhesive is mould and mildew resistant and water resistant when fully cured. However, it will not prevent moisture-related damages to wood flooring unless it is used as a moisture barrier (if applicable) within the limitations set forth in the technical data sheet.

In case of accident, injury, spill or exposure, see SDS for information.

Do not install solid wood below grade. Do not use on concrete with curing agents or sealers. Do not install wood flooring with a moisture reading above 9%. Do not use adhesive as a leveling material. This adhesive will not prevent moisture-related damages to wood flooring caused by flooding, busted pipes etc., or where moisture conditions are in excess of limitations outlined in the Sub Floor Examination.

The foregoing representations are based on the results of our most current product and material testing within a controlled environment and are of a non-obligatory advisory nature only. As such, they do not constitute an express or implied warranty of any kind including the Warranty of Merchantability and/or Fitness for a Particular Purpose. Because we have no control over the actual quality of workmanship, materials used and worksite conditions, Havwoods will in no event be liable for any incidental and/or consequential damages. Therefore, we strongly recommend that prior on-site testing be conducted to refer to and study the suitability of the product for the intended purpose. With the release of this technical information sheet all its prior versions become invalid. For warranty and warranty disclaimer information please see www.havwoods.com/us/havbond



<p>General Features</p> <ul style="list-style-type: none"> • LEED qualified • contains no isocyanates • contains no water • high shear strength • contains no solvents • contains no VOC (calc. per CA Rule 1168) • certified "green" • certified "very low emission" • nonflammable • high solids content • ozone friendly • Freeze/thaw stable 	<p>Installation Features</p> <ul style="list-style-type: none"> • wet lay - no flash time required • strong green grab • non-slump formula • bridges normal sub floor variations • very low odor • cleans with acetone • no rolling required • excellent spread rate • long open time • spreads easily • higher temp & RH will shorten drying time • No risk of sensitization
<p>Long Term Features</p> <ul style="list-style-type: none"> • resistant against aging • remains elastic • suitable for radiant heat systems with primer • allows normal dimensional changes in wood flooring • adhesive is waterproof when cured • No health hazards • Stronger shear strength reduces cupping • moisture barrier up to 10# or 88% RH using XBL12 	<p>Approved Flooring</p> <ul style="list-style-type: none"> • Engineered Wood Flooring of any width • Strip Flooring • Shorts • Solid planks, up to 7" wide • Parquet • Solid Wood Flooring must be straight and flat • Bamboo or Eucalyptus Flooring (except Strand Woven Products)
<p>Approved Sub Floors</p> <ul style="list-style-type: none"> • Concrete Slabs • OSB (underlayment grade) • Plywood (underlayment grade) • Felt backed Sheet Vinyl (well bonded, sanded, asbestos-free) • Ceramic Tiles • Stone, Terrazzo • Cured Leveling Compounds • Radiant Heated Sub Floors • Wet Concrete Slab up to 10#/24hrs/1,000SF and 88% RH 	
<p>Approved Trowels and Spread Rate</p> <ul style="list-style-type: none"> • Engineered Floors-#14 (3/16"x1/4"x9/16") up to 85 SF/gal (sub floor/flooring gap 1/8" max) • Engineered Floors-#5 (3/16"x1/4"x3/8") up to 60 SF/gal. • Solid Floors-#4 (1/4"x7/32"x9/32") up to 50 SF/gal. • Moisture Barrier-#12: up to 35 SF/gal. (Must use one per pail) • Underlayments-#15 (3/32"x3/32"x3/32") up to 130 SF/gal. 	



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Cure Time until Normal Traffic	Between 24 and 48 hours			
Clean-Up	Use acetone while wet Use plastic scraper and terry cloth when dry			
Temperature Range during Installation	50°-90°F			
Relative Humidity Range during Installation	30% - 80%			
Packaging Size	3 gal. Plastic Pail 48 per pallet			
Color	Brown			
Shelf Life	12 Months in original, unopened container			
Shear Strength	391 psi (2.7 N/mm ²)			
Water Vapor Permeability [ASTM E-96]	0.16 g / 24h * m ² * mmHg 0.16 perms * inches			
Open Time		30% R/H	50% R/H	80% R/H
	50 F / 10 C	2 1/2 hours	2 hours	1 1/2 hours
	70F / 21 C	1 3/4 hours	1 1/4 hours	1 hour
	90 F / 32 C	1 hour	50 mins	45 mins