TECHNICAL DATA SHEET

SabreBond[™] T460

SabreBond T460 is a premium highperformance wood flooring adhesive formulated with advanced MS Polymer technology, eliminating common problems brought by traditional polyurethane adhesives. It develops superior early strength for immediate grab, and quickly crosslinks to form a tenacious elastic bond for wood flooring applications. When cured, it is waterproof and is not adversely affected by exposure to moisture or water. Its superior elastic characteristics allows the wood floor to expand and contract without cracking, and deadens floor sound induced by foot traffic.

Advantages

The adhesive can be troweled easily. Its non-slump formula enables notched trowel ridges hold firm, bridging gaps between wood flooring and subfloor and reduces floor hollowness problems. Since there is no water or solvent present in the content, it will not cause dimensional changes to wood floors. It is also human and environmentally safe because it does not contain hazardous materials like isocyanate and has very low VOC contents.



Features

- Single-component and ready to apply
- Permanently elastic
- 100% solid content
- Free of solvent & isocyanate non-flammable and non-hazardous
- Low odor & low VOC (meets SCAQMD rule #1168)
- Notched trowel ridges hold firm -minimizes hollow spots by bridging gaps between floor and subfloor
- Sound deadening
- Moisture vapor barrier
- Waterproof bonding
- Crack bridging
- Fast initial grab & curing time
- Easy surface clean up

Technical Data

Base	1-component MS (Modified Silane) Polymer	
Curing system	Moisture Curing	
Density	~ 1.57 g/mL	
Tensile strength	1.4 N/mm²	ASTM D 412
Lap Shear strength	1.3 N/mm² (wood to wood)	ASTM D1002
Elongation	300% – 400 %	ASTM D 412
Shore A hardness	35 - 45	ASTM C661
VOC Compliant	Yes. 30g/L	SCAQMD Method 303-91 USEPA Test method 24

Applications

Ideal for bonding wood floors to concrete, concrete screeds, cement / sand screeds, anhydrite screeds, plywood, cured leveling compounds, epoxy membrane, OSB (underlayment grade), gypsum board, ceramic tiles, stone, terrazzo, radiant heated subfloors, metal decking, steel, aluminum, etc.

Types of Flooring

Most types of wood flooring including but not limited to:

- Solid Wood Plank/Strip
- Parquet
- Wood Blocks
- Wood Mosaic
- Engineered Wood
- Laminated Plank
- Bamboo
- Acrylic Impregnated Wood
- Plywood

Preparation

- Subfloor must be solid and structurally sound, flat, smooth, clean, permanently dry, no indentations and anti-adherents, as well as resistant to pressure.
- Subfloor must be free of dust, dirt, grease, wax, loose paint, oil, sealers of any type, curing compounds, bond breakers, asphaltic residue, liquid adhesive remover, strippers, chemicals, or any other foreign substances that can potentially affect bonding. Cleaning the subfloor with an industrial vacuum cleaner is recommended.
- Subfloor must be flat to 3mm over 3 meter, otherwise it will increase the risk of hollow spots under timber overlay.
- Any existing coating or adhesives must be completely removed. Mechanical treatment (e.g. shot blasting, grinding or sanding) may be required to achieve subfloor conditions mentioned above.

- It is required to verify the moisture content of the slab before commencing installation works. It is recommended that the moisture vapour transmission rate is <15g/m2 per 24 hours, and the in-slab relative humidity is less than 85%.
- To prevent moisture migration and subsequent wood swelling or cupping, ground floor slabs or new concrete slabs that do not meet the moisture conditions above are recommended to be coated with V-tech VT-507 FloorSeal Epoxy Moisture Barrier.
- Before installation, check moisture content of wood is as recommended by wood flooring manufacturer (generally 9% ±2%).
- Radiant heated subfloors should be turned off 24 hours prior to and during installation to prevent premature curing of the adhesive.
- Recommended air temperature during installation – between 10°C – 35°C (50°F – 95°F), Ambient humidity between 40% and 75%, subject to the requirements specified by wood flooring manufacturer.
- Do not install if the walls and ceilings of the area are not dry (e.g. after plastering or painting etc.)

Application Direction

Sausage sachet:

- Place the sausage sachet in a suitable application gun and snip off the end. Cut the tip off the nozzle to suit the application.
- **2** Apply the adhesive with appropriate force and speed.
- **3** Make sure the wood is positioned on subfloor within the working time of the adhesive.

Packs in Pail:

Remove the lid and cut open the foil liner. Once open, the entire contents should be used within a short period of time.

- 2 Spread the adhesive with the proper notched trowel, apply uniformly on the subfloor. Avoid adhesive pools and excessive adhesive thickness by passing the trowel evenly through the adhesive at a 45 degree angle.
- 3 Place wood in the adhesive within working time, correctly position it and press down firmly or tamp down with a rubber hammer to ensure good overall contact. Wood may slip and move at first so be sure to secure the initial row to limit movement and hold patterns.
- 4 Minimum 80% of adhesive contact coverage is recommended to achieve proper installation of parquet floor. Place heavy objects to hold the wood firmly in place during the curing time, especially on bowed boards or boards over low spots. It may be necessary to sort out bowed planks before installation.
- 5 When installing near a solid object or wall, leave ample room for expansion. Installing wood too tight against a stationary object will not allow room for normal wood expansion, which may cause a failure.
- 6 When the installation is complete, use wedges or some object to hold wood in place while adhesive dries. Remove wedges after initial setting of adhesive (approximately 2 hours) to allow for normal expansion of wood. Failure to remove wedges can cause the wood flooring to buckle and pop off the substrate.
- 7 Restrict foot traffic for a minimum of 12-16 hours. Wait a minimum of 24 hours before sanding and varnishing.

Note: Follow wood flooring manufacturer's guidelines for layout, design and any special precautions for installation.

Clean Up

- Can be cleaned up with acetone or mineral spirits when wet.
- Cured materials can only be removed mechanically.

Physical Properties

COVERAGE (Adhesive only)			
Floor Type	Trowel	Coverage	
<1/2" (~13mm) solid wood <1/2" (~13mm) engineered wood 3/4" (19mm) parquet	^{3/16'} 5/32' – V Notch 3/16" x 5/32"	Up to 1.2 m ² /L	
>1/2" (~13mm) engineered wood <1/2" (~13mm) solid wood 3/4" (19mm) parquet	$\frac{1/4'}{1/8'} = \frac{1/4'}{1/4'}$ Square Notch 1/4" x 1/4" x 1/8"	Up to 1m²/L	
1/2″ (~13mm) solid wood 4′ x 4′ plywood	$\frac{1/4'}{1/4'} = \frac{1/4'}{1/4'}$ Square Notch 1/4" x 1/4" x 1/4"	Up to 0.9m²/L	
5/16"(~8mm) solid wood 1/4" (~6.5mm) engineered wood finger block parquet	^{1/8'} 1 ^{/8'} 1/8' 1/8' 1/8' Square Notch 1/8'' x 1/8'' x 1/8''	Up to 2.0m ² /L	
COVERAGE (Adhesiv	e + Sound + Moisture Barrier Me	mbrane)	
Floor Type	Trowel	Coverage	
Floor Type	Trowel		
	15/32	Coverage	

- Trowel type and size are selected based on flooring type.
- Coverage rates shown are only guidelines.
 Coverage will vary with trowel size/type, angle the trowel is held to the subfloor, and the absorption level of substrate.
- Generally, use a fine trowel for woods of smaller sizes and/or smooth substrates, and a coarse trowel for woods of larger sizes and/or less smooth and rough surfaces.
- If subfloor is uneven but not leveled, a larger V-notched trowel is required for proper coverage of adhesive.

Caution

- Uncured adhesive causes skin and eye irritation upon contact.
- Avoid contact with eyes, skin and mouth.
- Use in well-ventilated area. In case of contact with eyes, flush with waterimmediately for 15 minutes. If irritation persists, seek medical attention.
- Keep out of reach of children.

Limitations

- Below grade applications are subject to wood manufacturer's recommendations. Conditions for below grade applications must meet a vapour emission rate < 3 lbs./1,000 sq. ft./24 hrs. (1.36 kg/93 m2 /24 hrs.)based on the Calcium Chloride Test
- Do not use on wet, dusty, contaminated or friable substrates.
- Do not apply over any acrylic primer or sealer.
- Do not install solid wood flooring over cutback residue or over VCT/vinyl.
- Resistant to water, dilute acids, and diluted caustic solutions, temporarily resistant to fuel, animal fats and oils, not resistant to organic acids, concentrated caustic solutions.
- Will not prevent damage to wood flooring induced by excessive moisture transmission due to environmental factors like leaky pipe.
- New construction concrete must be cured for at least 28 days prior to installation.

SabreBond_T460_TDS_2404

IMPORTANT NOTICE

Sabre Adhesives Limited makes no warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of application. Due to the fact that specific substrates, such as: plastics, polycarbonates, etc, may differ from manufacturer to manufacturer we recommend preliminary compatibility tests. Please remember that many factors can affect the use and performance in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a product. Given the variety of factors that can affect the use of our products some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

LIMITATION OF REMEDIES AND LIABILITY

If the product is proved to be defective, the sole remedy shall be to refund the purchase price or to repair or replace the defective product. Sabre shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.

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