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

- · Permanently elastic
- 100% solid content
- Free of solvent & isocyanate non-flammable and non-hazardous
- Low odour & Low VOC (meets SCAQMD rule #1168)
- Notched trowel ridges hold firm minimising 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, level, 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.
- Chemically treated woods (ammonia, wood stain, timber preservatives, etc.) and woods with high oil content must be tested for adhesion prior to application.
- 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.
- · Applying primer is typically not required.
- Moisture level of concrete subfloors must be below 1.36 kg/24 hours/93 m2(3 lbs./24 hours/1,000 sq. ft.) confirmed with Calcium



Chloride Test, or below 75% RH using an insitu probe. For concrete with greater moisture levels, treat the concrete with a Sabre WE2 Moisture Vapour Barrier. Concrete floors with high moisture readings are usually indicative of a chronic underlying moisture source problem that must be rectified.

- Concrete slabs below or partially below grade are especially subject to hydrostatic pressure, hence moisture vapor inhibitor membrane or primer is highly recommended to be in place.
- All wood floors should have minimum 6-9% moisture content during installation. Variance in moisture content between the wood flooring and any wood subfloor should not be more than 4-5%.
- Cracks, holes, or irregularities on concrete subfloor must be filled with concrete crack filler or polymer modified cementitious compound and allowed to fully cure before applying adhesives.
- When necessary level subfloor to 4.5 mm in 3 m (3 /16" within 10').
- Adhesives, subfloor, and wood floorings should be acclimated in an enclosed building with the HVAC operational and running for at least 72hours before, during and after the installation.
- 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 15°C – 30°C (60°F – 85°F), Relative Humidity – between 30% and 70%, subject to the requirements specified by floor manufacturer.
- Recommended substrate temperature during installation 5°C - 30°C (60°F -85°F),.
- To prevent timber swelling/cupping due to the presence of excessive moisture vapour, applying primer or moisture barrier on the floor slab is recommended (especially ground floor slab).
- Do not install if the walls and ceilings of the area are not dry (e.g. after plastering or painting etc.)
- In case of unlevel substrates, a notched trowel with bigger notches is recommended to avert hollow sections.

Application Direction

Sausage sachet:

- Place the sausage sachet in a suitable caulking gun and snip off the end. Cut the tip off the nozzle to suit the application.
- 2 Apply the adhesive at 100mm centres when bonding 20mm solid woodflooring and at maximum 200mm centres when bonding 15mm solid or engineered wood flooring.
- **3** Wait at least 48 hours before sanding and finishing the parquet.

Packs in Pail:

- 1 Cut the tip of the sausage carefully and slip it into the caulking gun.
- 2 Cut the nozzle into an appropriate diameter at an angle of approximately 45° to 60°.
- 3 Place the nozzle into the caulking gun and screw tight.
- 4 Extrude the sealant with a single bead. Tool the sealant bead with a clean and dry tool before the sealant skins for a smooth finishing.

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 | 5/32' | Up to 1.2 m ² /L |
| >1/2" (~13mm) engineered wood <1/2" (~13mm) solid wood 3/4" (19mm) parquet | 1/8' 1/4' 1/4' 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" | Up to 1m²/L |
| 1/2" (~13mm) solid wood4' x 4' plywood | 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" Square Notch 1/8" x 1/8" x 1/8" | Up to 2.0m ² /L |
| COVERAGE (Adhesive | e + Sound + Moisture Barrier Me | mbrane) |
| Floor Type | Trowel | Coverage |
| • > 5/8" (~16mm) wood flooring | V Notch 1/2" x 15/32" | Up to 0.5m²/L |
| | 1/4' | |



• ≤ 5/8" (~16mm) wood flooring

16'

Up to 0.9m²/L

Up to 0.75m²/L

• ≤ 3/8" thick wood flooring

Square Notch 1/4" x 1/4" x 1/4"

V Notch 1/4" x 1/4"

Flat V Notch with spacers 1/8" x 5/32" x 3/16"

- 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 water immediately 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 vapor 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.

Reviewed July 2023 SabreBond_T460_TDS_2307

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.

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