Product Data Sheet

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SikaBond®-T35

Trowel-applied, Polyurethane Wood Flooring Adhesive

Description	SikaBond-T35 is a one-component, low-VOC, low odor, moisture cured polyurethane adhesive for full surface bonding of wood flooring. SikaBond-T35 will tenaciously bond wood to most surfaces, including concrete, plywood, and leveling and patch underlayments that have been properly prepared.
Where to Use	SikaBond-T35 may be used to bond all engineered, solid plank flat milled, shorts up to max. ¾" thick, including bamboo, cork and parquet hardwood flooring designed by the manufacturer for glue down applications. This adhesive can also be used for many other bonding applications that are common for light commercial and residential applications.
Advantages	 170% Elongation Low odor Easy to trowel Excellent workability Fast curing Crack bridging Suitable for common types of wood floors Suitable for in-floor radiant heat installation Contains no water Tenacious bond

Green Rating

LEED [®] EQc 4.1	SCAQMD, Rule 1168	BAAQMD, Reg. 8, Rule
(100 g/L limit)	(100 g/L limit)	51 (120 g/L limit)
passes	passes	passes

Technical Data

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATION DEPENDING UPON MIXING METHODS AND EQIUPMENT, TEMPERATURE APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Shelf Life 12 months from date of production if stored in undamaged original

sealed containers, in dry conditions and protected from direct sunlight at

temperatures between 50°F and 77°F (10°C and 25°C).

Color Ta

Packaging 5 gal. (18.93 L) unit

Chemical Base 1-component polyurethane, moisture curing

Specific Gravity 9.85 lbs/gal (1.18 kg/L)

Skinning/Laying Time ~ 45-60 minutes at 73°F (23°C) and 50% RH

Curing Rate 4.0 mm/24 hrs. at 73°F (23°C) and 50% RH. Floor may accept light foot

traffic after 6-8 hrs. (depending on climatic conditions and adhesive layer

thickness).

Sag Flow Consistency: Spreads easily, holds ridges after troweling

Service Temperature -40°F to +158°F

Mechanical Properties

Shear Strength 150 psi using 1 mm adhesive thickness at 73°F (23°C) and 50% RH

Tensile Strength 150 psi at 73°F (23°C) and 50% RH

Shore A Hardness ~ 50 (after 28 days)

Elongation at Break ~ 170% cured at 73°F (23°C) and 50% RH

 $VOC (g/L) \leq 60$



Application Details

Consumption

- Engineered wood flooring up to ½ inch: P5 Trowel: approximately 45 50 SF/ gal Engineered wood flooring shorts > ½ inch and for short hardwood solids including bamboo shorts max. ¾ inch thick:
 - 30-40 SF/ gal (½ x ½ x ½ inch (6 mm x 6 mm x 6 mm) square notch trowel)
- Coverage must be monitored to ensure accuracy of application. Trowel angle may prevent proper coverage.

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Recomended Trowel Sizes				
P5	1/4 x 1/4 x 1/4			
3/16"				
Coverage of approximately: 45 - 50 SF/gal	Coverage of approximately: 30 - 40 SF/gal			

Trowel size is recommended to obtain proper coverage. Larger sizes are acceptable. Excessive amounts of adhesive may cause wood flooring to slide while placing. Check coverage during installation. Trowels should be used at the 90° angle to subfloor to get stated coverages. Periodically check trowel for wear. Worn trowels must be replaced immediately.

Substrate Quality

Substrate must be clean and dry, homogeneous, even, free from grease, dust and loose particles. Paint, laitance and other poorly adhering particles must be removed by mechanical means.

Substrate Preparation

SikaBond can be used on properly prepared, structurally sound concrete, cementitious patch/underlayments, chipboards, ceramic tiles, plywood. For on-grade sub-floors Sika recommends the use of Primer MB for best protection against sub-floor moisture - moisture testing is required by the wood flooring manufacturer for best results with the wood flooring products. Below grade applications are generally not recommended unless proper precautions are taken to protect the wood flooring from sub-floor and in-room humidity extremes. Sika recommends the use of Primer MB over any dry, gypsum based sub-flooring to enhance surface strength. Preparation is a critical step in the installation process and will ensure a successful long term tenacious bond. All concrete, cement screed and gypsum based subfloors must be structurally sound, clean, dry, smooth; free of voids, projections, loose materials, oil, grease, sealers and other surface contaminants Thoroughly clean with an industrial vacuum. Remove laitance or weak areas mechanically and thoroughly. For application over ceramic tiles it is necessary to grind tile surfaces and clean thoroughly with an industrial vacuum. For substrates with old well bonded adhesive or adhesive residue use Primer MB – see Primer MB data sheet for installation instructions and proper details. If surface contains asphalt (cutback) adhesive follow the Resilient Floor Covering Institute "Recommended Work Practices" for removal. When the asphalt (cutback) adhesive is sufficiently removed use the Sika Primer MB to help promote adhesion to the subfloor - or use an industry approved levelling compound over the cutback residue. SikaBond-T35 will adhere to most common patching/levelling compounds. Due to differences in asphalt based adhesive types and performance capabilities; applicator must verify that preparation of the surface is sufficient prior to using Primer MB or patch/level compound. Due to differences in asphalt-based adhesive types and performance capabilities, applicators must verify that preparation of the surface is sufficient prior to using Sika Primer MB or patch/ level compound. For unknown substrates, please contact Sika Technical Services for best practices at 1-800-933-SIKA.

Application Conditions/Limits

Substrate Temperature During laying and until SikaBond-T35 has fully cured, substrate temperature should be greater than 60°F (15°C) and in case of radiant heating, less than 70°F (20°C). For substrate temperatures, the standard construction rules are relevant.

Air Temperature

Room temperature between 60°F (15°C) and 90°F (35°C). For ambient temperatures the standard construction rules are relevant. Follow all wood floor manufacturer's acclimation and room temperature requirements.

Substrate Humidity Moisture requirements are set forth to protect the wood flooring products that can expand and contract with different moisture levels. SikaBond-T35 is not affected by moisture or vapor transmission. For protection of the wood, follow the wood floor manufacturer's requirements for subfloor moisture. If substrate is not acceptable, use Sika Primer MB. See Sika Primer MB technical data sheet for proper instruction on Sika Primer MB.



Relative Air Humidity

Between 40% and 70% during installation is best for adhesive. See wood floor manufacturer for wood requirements.

Application

Read this product data sheet completely prior to starting installation. SikaBond-T35 is applied to the properly prepared substrate directly from the pail and uniformly distributed by notched trowel. Press the wood floor elements firmly into the adhesive so that the wood floor underside is sufficiently wetted. The elements can then be joined together using a rubber hammer and an impact block and/or rubber mallet. Many types of wood floors have to be tapped from the top. Leave gaps at room perimeters and at any floor wall partition to allow wood flooring to move naturally - follow recommended guidelines from wood floor manufacturer. Spaces should be used to ensure perimeter space is maintained. Fresh, uncured adhesive, or fingerprints remaining on the wood floor surface must be removed immediately using a clean cloth and mineral spirits (be careful not to harm finish) or Sika Hand Cleaner Towels. The laying instructions of the wood floor manufacturer as well as standard construction rules must be observed.

Note: wood floor manufacturer's requirements for room humidity levels and environmental control along with wood flooring acclimation requirements must be strictly followed.

Area Clean Up

All tools must be cleaned immediately after use with Sika Equipment Cleaner, mineral spirits, or standard industry cleaning solvent. Any adhesive that is permitted to cure on the tool will need to be removed by mechanical means. Use a dry towel and mineral spirits to remove adhesive from wood surface before it cures. Fingerprints or small amounts of adhesive residue can be removed from pre-finished wood using a clean cloth with mineral spirits.

Limitations

- P5 trowel or larger must be used. Follow the wood floor manufacturer's installation instructions.
- Room temperatures should be between 50°F and 90°F during installation unless otherwise specified limitations by wood flooring manufacturer.
- Do not use on wet, contaminated or friable substrates.
- When needed Sika recommends the use of Portland Cement based patching and levelling compounds for best results
- Gypsum based sub-floors are very susceptible to excess moisture and will be degraded if exposed to excess moisture from below or above.
- Below grade installations are typically more difficult to control moisture and room humidity levels if this cannot be done sufficiently then below grade applications should use structurally sound Engineered hardwood only.
- Do not use in areas subject to hydrostatic head or in areas subject to secondary source of moisture.
- Do not use over concrete with curing compounds, sealers or other surface treatments that could impact the adhesion
- This adhesive will not prevent moisture related damage to wood flooring installations.
- Sub-floor should be level do not use adhesive as a levelling agent.
- Cutback or other asphaltic based residue must be removed.
- Adhesive should be kept above 60°F for best workability.
- Sufficient ambient moisture is necessary for proper curing.
- Installations over radiant heat require that slab temperature be kept below 70°F during installation and for 48 hours after installation then raised slowly up to final desired temperature. Follow wood floor manufacturer's temperature guidelines.

Wood floors in non-insulated areas or areas without a damp proof membrane, must only be installed after the application of Sika Primer MB to control the moisture, if within product limitations. For detailed instructions consult the Product Data Sheets or contact our Technical Service. In case of chemically pre-treated types of wood floors (e.g. ammonia, wood stain, timber preservative or woods that have been pre-sealed on the back side) and woods with high oil content SikaBond should only be used if adhesion tests are run by applicator prior to starting application. Do not use on PE, PP, TEFLON, and certain plasticized synthetic materials. (Carry out pre-trials). Some primers can negatively influence the adhesion of SikaBond (pre-trials suggested). Do not expose SikaBond to alcohol; this will impact the curing of the SikaBond.

Health & Safety Information Caution

WARNING: IRRITANT, SENSITIZER. Contains 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich (CAS:68515-49-1), Naphtha (petroleum), hydrotreated heavy (CAS:64742-48-9) and quartz (CAS:14808-60-7). Harmful if inhaled in high concentrations. May cause skin/eye irritation. May cause allergic respiratory reaction. May cause gastrointestinal disturbance if swallowed. Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

WARNING! This product contains a chemical known in the State of California to cause cancer and birth defects or other reproductive harm.



First Aid	Eyes – Hold eyelids apart and flush thoroughly with water for 15 minutes. Skin – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. Inhalation – Remove to fresh air. Ingestion – Do not induce vomiting. Dilute with water. Contact physician. In all cases contact a physician immediately if symptoms persist.
Handling & Storage	Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse.
Clean Up	Use personal protective equipment (chemical resistant gloves/ goggles/clothing). Without direct contact, sweep up spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable local, state, and federal regulations.

KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY
All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the
application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled
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Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available online at www.sikausa.com or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

LIMITED WARRANTY: Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Technical Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NOOTHERWARRANTIES EXPRESSORIMPLIED SHALL APPLYINCLUDING ANYWARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKASHALL NOTBELIABLE UNDERANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKASHALL NOTBERESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

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