PRODUCT DATA SHEET

SikaBond®-T35

Trowel-applied, Polyurethane Wood Flooring Adhesive

PRODUCT DESCRIPTION

SikaBond®-T35 is a one-component, low-VOC, low odour, moisture-cured polyurethane adhesive for full surface bonding of wood flooring. SikaBond®-T35 will tenaciously bond wood to most surfaces, including concrete, plywood, and levelling 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. 19 mm (3⁄4”) 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 including acoustic rubber underlayment systems.

CHARACTERISTICS / ADVANTAGES

- 170% Elongation
- Easy to trowel
- Fast curing
- Excellent workability, holds ridges after troweling
- Suitable for common types of wood floors
- Tenacious bond
- Suitable for in-floor radiant heat installation
- Low odour
- Contains no water

PRODUCT INFORMATION

Composition / Manufacturing	One-component polyurethane, moisture curing
Packaging	18.93 L (5 US gal.) unit
Shelf Life	12 months from date of production
Storage Conditions	Stored in undamaged original sealed containers, in dry conditions and protected from direct sunlight at temperatures between +10°C – 25°C (50°F and 77°F).
Colour	Tan
Density	1.18 kg/L (9.85 lbs/US gal)
Volatile organic compound (VOC) content	53 g/L

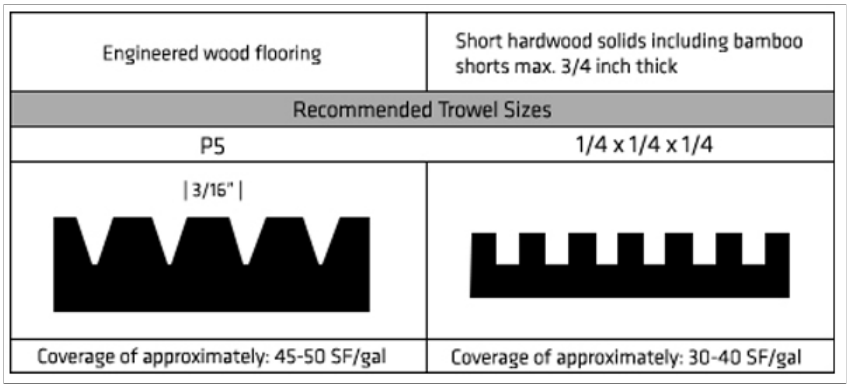
TECHNICAL INFORMATION

Shore A Hardness	~ 50 (after 28 days)
Tensile Strength	1.05 MPa (150 psi) at 23°C (73 °F) and 50% r.h.
Elongation at Break	~ 170% cured at 23 °C (73 °F) and 50% r.h.
Shear Strength	1.05 MPa (150 psi) using 1 mm adhesive thickness at 23 °C (73 °F) and 50% r.h.
Service Temperature	-40 °C – +70 °C (-40 °F – +158 °F)

APPLICATION INFORMATION

Consumption

- **Engineered wood flooring: P5 Trowel:** approximately 4.18 m^2 – 4.65 m^2(45 – 50 SF/ US gal)
- **Short hardwood solids including bamboo shorts max. 19 mm (3⁄4 ") thick: 6 mm x 6 mm (1⁄4 x 1⁄4 x 1⁄4 inch) square notch trowel)** approximately 2.79 m^2 – 3,72 m^2(30-40 SF/ US gal)
- Coverage must be monitored to ensure accuracy of application. Trowel angle may prevent proper coverage.



Engineered wood flooring	Short hardwood solids including bamboo shorts max. 3/4 inch thick
Recommended 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.

Sag Flow

Consistency: Spreads easily, holds ridges after troweling

Ambient Air Temperature

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

Relative Air Humidity

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

Substrate Temperature

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

Substrate Moisture Content

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® MB. See Sika® MB technical data sheet for proper instruction on Sika® MB.

Curing Rate	4.0 mm/24 hrs. at 23 °C (73 °F) and 50% r.h. Floor may accept light foot traffic after 6-8 hrs. (depending on climatic conditions and adhesive layer thickness).
Skin Time / Laying Time	~ 45 – 60 minutes at 23 °C (73 °F) and 50% r.h.

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

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® 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®.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

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®-T35 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 Sika® 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 Sika® 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 Sika® MB – see Sika® 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 Sika® 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 Sika® 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® MB or patch/ level compound. For unknown substrates, please contact Sika® Technical Services for best practices at 1-800-933-SIKA.

Substrate Temperature: During laying and until SikaBond®-T35 as fully cured, substrate temperature should be greater than +15 °C (59 °F) and in case of in?floor heating systems, less than +20 °C (68 °F). For substrate temperatures, the standard construction rules are relevant.

Air Temperature: Room temperature must be between +15 °C (59 °F) and +32 °C (90 °F). For ambient temperatures, the standard construction rules are relevant. Follow all wood floor manufacturer’s acclimation and room temperature requirements.

Substrate Humidity:

For use as an adhesive only: 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 SikaBond®-T35 at recommended coverage rate as All-in-One or Sika® MB. See Technical Data Sheet for proper instruction.

For use as an adhesive and membrane: Concrete moisture vapor emission rate (MVER) may not exceed 5,44 kg per 92,9 m2 (15 lb/1 000 ft2) per 24 hours, anhydrous calcium chloride test (ASTM F1869). Do not install when the relative humidity (RH) of the concrete slab exceeds 90 % (ASTM F2170).

Relative Air Humidity: Between 40 % and 70 %

APPLICATION METHOD / TOOLS

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 with a notched trowel. Take care to place only enough adhesive to allow sufficient time to place wood into the adhesive while the adhesive is still very wet. Press the wood floor elements firmly into the adhesive ensuring there is sufficient transfer of the SikaBond®-T35 to the underside. A general rule is to apply the wood flooring within 20 to 25 minutes of applying the adhesive under normal temperature and humidity conditions. The SikaBond®-T35 is a moisture curing adhesive and will cure faster in more humid environments - **Do not let a skin form on the adhesive prior to applying the wood flooring**. The elements can then be joined together using a 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. The wood floor manufacturer’s laying instructions, 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 acclimatization requirements must be strictly followed.

CLEAN UP

All tools should be cleaned immediately after use with Sika® Urethane Cleaner and Thinner. Any adhesive that is permitted to cure on the tools will need to be removed by mechanical means. Use a dry cloth or Sika® Hand Cleaner towels to remove adhesive from pre-finished wood surfaces before it cures. Finger prints or small amounts of adhesive residue can be removed from pre-finished wood using the Sika® Hand Cleaner towels. Sika® Hand Cleaner towels use a citrus based cleanser that will not harm the floor finish.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

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