

## PRODUCT DATA SHEET

# SikaBond® T-53

SikaBond-T53 is a one-part polyurethane adhesive for timber flooring systems. The adhesive is of high viscosity and cures on exposure to atmospheric moisture.

### PRODUCT DESCRIPTION

SikaBond® T-53 is a 1-component, wood flooring adhesive with high viscosity.

### USES

SikaBond® T-53 is designed for use with the Sika® AcouBond®-System and beaded application of solid wood boards (tongued and grooved), 3-ply engineered wood and chipboard floor systems and subfloors.

### CHARACTERISTICS / ADVANTAGES

- Adhesive can be sanded
- Floor can be walked on / sanded 12 / 24 hours
- Elastic, footfall-sound dampening properties
- Reduces stress transfer between the wood floor and the substrate
- Suitable for common types of wood floors

### PRODUCT INFORMATION

|                           |   |              |
|---------------------------|---|--------------|
| <b>Chemical Base</b>      | Polyurethane  |              |
| <b>Packaging</b>          | 600 ml foil pack, 20 foil packs per box   |              |
| <b>Color</b>              | Beige   |              |
| <b>Shelf Life</b>         | SikaBond® T-53 has a shelf life of 12 months from the date of production, if it is stored properly in undamaged, original, sealed packaging, and if the storage conditions are met. |              |
| <b>Storage Conditions</b> | SikaBond® T-53 shall be stored in dry conditions, protected from direct sunlight and at temperatures between +5 °C and +25 °C.  |              |
| <b>Density</b>            | 1.20 kg/l approx.   | (ISO 1183-1) |

### TECHNICAL INFORMATION

|                            |                               |           |
|----------------------------|-------------------------------|-----------|
| <b>Shore A Hardness</b>    | 40 approx. (after 28 days)    | (ISO 868) |
| <b>Tensile Strength</b>    | 1.8 N/mm <sup>2</sup> approx. | (ISO 37)  |
| <b>Elongation at Break</b> | 400% approx.                  | (ISO 37)  |

|                            |   |             |
|----------------------------|---|-------------|
| <b>Shear Strength</b>      | 1.20 N/mm <sup>2</sup> approx., 1 mm adhesive thickness | (ISO 17178) |
| <b>Service Temperature</b> | +5 °C to +40 °C   |             |



## APPLICATION INFORMATION

|                                   |  |
|-----------------------------------|--|
| <b>Coverage</b>                   | <p>Sika® AcouBond®-System:</p> <ul style="list-style-type: none"><li>500–600 ml/m<sup>2</sup> approx. for SikaLayer®-03 and 500–600 ml/m<sup>2</sup> approx. for SikaLayer®-05. All cut-outs must be filled out. Use a triangular nozzle with a 8 x 10 mm opening.</li></ul> <p>Full Surface Bonding:</p> <ul style="list-style-type: none"><li>700–900 g/m<sup>2</sup> with notched trowel B3 (TKB Germany) e.g. for lam parquet, mosaic parquet and industrial parquet.</li><li>800–1000 g/m<sup>2</sup> with notched trowel B11 (TKB Germany) or P5 (US Standard) e.g. solid wood, engineered long-strips and panels, industrial parquet, other residential wood floors and paving, and chipboard.</li></ul> <p>Beaded Application:</p> <ul style="list-style-type: none"><li>44 ml approx. per running meter consumes 200–400 g/m<sup>2</sup>, depending on bead spacing (solid wood boards, 3-ply engineered wood, chipboards).</li></ul> <p>For bonding long or wide boards, or when working on uneven substrates, it may be necessary to use a notched trowel with bigger notches to ensure that a sufficient amount of SikaBond® T-53 is applied to provide a uniform adhesive surface and prevent hollow sections i.e. without full surface bond. For substrates primed with Sika® Primer MR Fast or Sika® Primer MB, the consumption of SikaBond® T-53 may be reduced.</p> |
| <b>Sag Flow</b>                   | <p>SikaBond® T-53 maintains stable trowel marks.<br/>SikaBond® T-53 is easily applied using guns or SikaBond® Dispensers.</p>  |
| <b>Ambient Air Temperature</b>    | +15 °C to +35 °C   |
| <b>Relative Air Humidity</b>      | 40% to 70%   |
| <b>Substrate Temperature</b>      | <p>During laying and until SikaBond® T-53 has fully cured, the substrate and ambient temperatures shall be between +15 °C and +35 °C without and between +20 °C and +35 °C with underfloor heating</p>   |
| <b>Substrate Moisture Content</b> | <p>Permissible substrate moisture content without underfloor heating:</p> <ul style="list-style-type: none"><li>2.5% CM for cement screeds.</li><li>0.5% CM for anhydrite screeds.</li><li>3–12% CM for magnetite flooring (depending on the organic content).</li></ul> <p>Permissible substrate moisture content for use with underfloor heating:</p> <ul style="list-style-type: none"><li>1.8% CM for cement screeds.</li><li>0.3% CM for anhydrite screeds.</li><li>3–12% CM for magnetite flooring (depending on the organic content).</li></ul> <p>Note: For all moisture contents, the quality of the substrates and surfaces, always follow the guidelines of the wood flooring manufacturer.</p>   |
| <b>Curing Rate</b>                | 3.0 mm/24 hours approx. (23 °C / 50% r.h.)   |
| <b>Skin Time / Laying Time</b>    | 60 minutes approx. (23 °C / 50% r.h.)  |

## APPLICATION INSTRUCTIONS

For the application of SikaBond® T-53 all standard construction guidelines apply. For further information, please refer to the Method Statement "Full Surface Bonding".

### SUBSTRATE PREPARATION

- The substrate must be clean, dry, sound and homogeneous, free from oils, grease, dust and loose or friable particles. Paint, cement laitance and other poorly adhering contaminants must be removed.
- Concrete and/or cement screeds must be ground and thoroughly cleaned with an industrial vacuum.
- Anhydrite screeds, including flowable anhydrite screeds must be ground and thoroughly cleaned with an industrial vacuum shortly before bonding with the adhesive starts.
- Broadcast mastic asphalt must be primed with Sika® Primer MR Fast or Sika® Primer MB. For the instructions for use, please refer to the corresponding Product Data Sheet.
- Glazed ceramic and old existing ceramic tiles must be

degreased and cleaned with Sika® Aktivator-205, or the tile surfaces must be ground and then thoroughly cleaned with an industrial vacuum.

- Wood and/or gypsum boards (e.g. chipboard, plywood) must be glued and/or screwed to the substructure in order to be fixed to the substrate. For floating dry-floors, contact our Technical Service Department.
- For other substrates contact our Technical Service Department for advice and assistance.
- SikaBond® T-53 can be used without priming on cement based floors, anhydrite floors, chipboards, concrete and ceramic tiles.
- For broadcasted mastic asphalt, cement based floors with excessive moisture content and use over old adhesive residues or on weak substrates use Sika® Primer MB. For detailed instructions contact our Technical Service Department.

#### APPLICATION METHOD / TOOLS

##### Sika® AcouBond®-System:

- For detailed application instructions refer to the Product Data Sheet for the Sika® AcouBond®-System, or contact our Technical Service Department.

##### Full Surface Bonding with SikaBond® Dispensers:

- SikaBond® T-53 is applied to the prepared substrate directly from SikaBond® Dispensers. Press the wood floor pieces firmly into the adhesive so that the wood floor underside is completely covered with the adhesive. The pieces can then be joined together using a hammer and an impact block. Many types of wood floors also have to be tapped into position from above. A distance of 10–15 mm from the wall to the wood floor must be maintained. For detailed application instructions refer to the Product Data Sheet for the SikaBond® Dispensers, or contact our Technical Service Department.

##### Beaded Application:

- After inserting a sausage into the gun, extrude a triangular shaped bead of adhesive approximately 10 mm high and 8 mm wide (depending on the wood floor type) on the prepared subfloor. The distance between beads may not exceed 150 mm. Press the wood pieces firmly into the adhesive (at a right angle to the adhesive beads). The pieces can then be joined together using a hammer and an impact block. The required distance from the wall to the wood floor which is provided by the laying instructions from the wood floor manufacturer must be maintained.

The floor shall be walked on and/or sanded 18 to 42 hours after installation (23 °C / 50% r.h. up to 1 mm adhesive thickness depending on the environmental conditions and adhesive layer thickness).

Fresh, uncured adhesive on the wood floor surface must be removed immediately with a clean cloth and if necessary also cleaned with Sika® Remover-208 or Sika® TopClean-T. Always test wood floor surfaces for compatibility with Sika® Cleaner-208 before use.

The guidelines of the wood floor manufacturer apply.

#### CLEANING OF TOOLS

Clean all tools and application equipment immediately after use with Sika® Remover-208 and/or Sika® TopClean T. Once cured, residual material can only be removed mechanically.

##### Product Data Sheet

SikaBond® T-53

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## AVAILABILITY/WARRANTY

- Safety Data Sheet
- Pre-treatment Chart Sealing and Bonding
- Method Statement "Full Surface Bonding"
- Method Statement "SikaBond® Dispenser"

## LIMITATIONS

- SikaBond® T-53 is only suitable for use by professional wood floor applicators.
- For good workability, the adhesive temperature shall be  $\geq +15$  °C.
- For proper curing of the adhesive, sufficient ambient humidity / moisture is necessary.
- A preliminary adhesion test is necessary before any application on glazed tiles.
- For the Sika® AcouBond-System, Beaded Application, Accurate tongued and grooved floors, the following limitations apply:
  - Minimum wood size: length 300 mm (over 3 adhesive beads), width 50 mm, thickness 12 mm
  - Maximum wood size: thickness 28 mm
- Before wood floors may be installed in non-insulated areas, such as basements or other areas without a damp proof membrane, Sikafloor® EpoCem must be applied and sealed with Sika® Primer MB to control the moisture. For detailed instructions, contact our Technical Service Department.
- For use with chemically pre-treated types of wood floors (e.g. those produced or treated with ammonia, wood stain, timber preservative) and woods with a relatively high oil content, SikaBond® T-53 is only to be used with the written agreement of our Technical Service Department.
- Do not use on polyethylene (PE), polypropylene (PP), polytetrafluoroethylene (PTFE / Teflon), and other similar plasticized synthetic materials.
- Some other floor priming materials can negatively influence the adhesion of SikaBond® T-53 (pre-trials recommended).
- SikaBond® T-53 is designed as a wood floor bonding adhesive. When laying parquet type wood floors without tongued and grooved joints, e.g. mosaic parquet floors, avoid the wood floor adhesive extruding into the joints between the wood pieces.
- Avoid contact between any wood surface sealer coatings and adhesive. However, if direct contact with the adhesive is unavoidable, then the compatibility must be checked and confirmed before use of any coatings. For further information and advice, please

- contact our Technical Service Department.
- Do not expose uncured SikaBond® T-53 to alcohol containing products as they may interfere with the curing reaction.
- For further information and advice, please contact our Technical Service Department.

## BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

## OTHER RESTRICTIONS

See Legal Disclaimer.

## ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

## LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at [usa.sika.com](http://usa.sika.com) or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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 Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or

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### Product Data Sheet

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