



SikaBond®-T54 FC

Low viscosity, solvent free elastic adhesive for wood flooring

Product Description

SikaBond®-T54 FC is a one component, solvent free, elastic adhesive.

Uses

With SikaBond®-T54 FC:

- Solid and engineered wood floors (strips, longstrips, planks, panels, boards), mosaic parquet, industrial parquet, lam parquet, wood paving (residential) as well as chipboards can be bonded

Characteristics / Advantages

- 1-component, ready to use
- Solvent free
- Fast curing properties
- Excellent workability
- Floor can be sanded after 12 hrs (+23°C / 50% r. h. Trowel B3 / B11)
- Odourless
- Elastic, footfall sound dampening adhesive
- Suitable for most common types of wood floors
- Especially suitable for problematic woods such as beech, maple and bamboo
- Suitable for bonding wood floors directly onto old ceramic tiles
- Reduces stress to the substrate: the elastic adhesive reduces stress transfer between the wood floor and the substrate
- Suitable for use with sub floor heating
- Adhesive can be sanded

Tests

Approval / Standards

EMICODE EC 1 "very low emission".
GISCODE PU 10 "solvent free".

Product Data

Form

Colour Light beech

Packaging 13 kg metal pails (= 10.5 litre).



Storage

Storage Conditions / Shelf Life 9 months from date of production if stored in undamaged, original sealed containers, in dry conditions and protected from direct sunlight at temperatures between +10°C and +25°C.

Technical Data

Chemical Base 1-part Polyurethane, moisture curing.

Density ~ 1.25 kg/l (DIN 53 479)

Skinning- / Laying Time ~ 80 minutes (+23°C / 50% r. h.)

Curing Rate ~ 4.5 mm / 24h (+23°C / 50% r. h.)

The floor may be walked on / sanded 12 hours (+23°C / 50% r. h. Trowel B3 / B11) after installation, dependent on climatic conditions and the adhesive layer thickness.

Sag Flow Consistency:
Spreads very easily, trowel marks stable.

Service Temperature -40°C to +70°C

Mechanical / Physical Properties

Shear Strength ~ 0.8 N/mm², 1 mm adhesive thickness, tested with beech wood (DIN 281)
(+23°C / 50% r. h.)

Tensile Strength ~ 1.0 N/mm² (+23°C / 50% r. h.) (DIN 53 504)

Shore A Hardness ~ 30 (after 28 days) (DIN 53 505)

Elongation at Break ~ 500% (+23°C / 50% r. h.) (DIN 53 504)

System Information

Application Details

Consumption / Dosage Full Surface Bonding:
700 - 900 g/m² with notched trowel B3 (acc. to IVK guidelines) or ³/₁₆" ¹/₈" ¹/₈" (engineered strips / planks, lam parquet, mosaic parquet).
800 - 1000 g/m² with notched trowel B11 (acc. to IVK guidelines), AP 48 or ³/₁₆" ³/₁₆" ³/₁₆" (solid wood, engineered longstrips / panels, industrial parquet, wood paving (residential), chipboards).
For bonding of long or wide boards or with uneven substrates it may be necessary to use a notched trowel with bigger notches (to prevent hollow sections).
For substrates primed with Sika® Primer MB, the consumption of SikaBond®-T54 FC is reduced.

Substrate Quality Clean and dry, homogeneous, even, free from grease, dust and loose particles. Paint, laitance and other poorly adhering particles must be removed.

Standard construction rules must be observed.

Substrate Preparation	<p>Concrete / cement screed: Must be ground and thoroughly cleaned with industrial vacuum cleaner.</p> <p>Anhydrite screed / Anhydrite flowable screed: Must be ground and thoroughly cleaned with industrial vacuum cleaner shortly before bonding starts.</p> <p>Broadcast mastic asphalt: Must be primed with Sika® Primer MB. Instructions for use, see Product Data Sheet for Sika Primer MB.</p> <p>Glazed ceramic and old ceramic tiles: Degrease, clean with SikaCleaner® or grind the tile surfaces and vacuum thoroughly.</p> <p>Wood- / gypsum boards (e.g. chipboards, plywood): Glue / screw the boards to the substructure. They must be fixed to the substrate. For floating sub floors, please contact our Technical Service Department.</p> <p>Other substrates: Please contact our Technical Department for advice and assistance.</p> <p>SikaBond®-T54 FC can be used without priming on cementitious floors, anhydrite floors, chipboards, concrete and ceramic tiles.</p> <p>For broadcast mastic asphalt, cementitious floors with an excessive moisture content and for use over old adhesive residues or on weak substrates use Sika® Primer MB. For detailed instructions consult the Product Data Sheet of Sika® Primer MB or contact our Technical Department.</p>
Application Conditions / Limitations	
Substrate Temperature	<p>During laying and until SikaBond®-T54 FC has fully cured the substrate and ambient temperatures should be > +15°C and with floor heating ~ +20°C.</p> <p>For substrate temperatures the standard construction rules are relevant.</p>
Ambient Temperature	<p>Ambient temperature between +15°C and +35°C.</p> <p>For ambient temperatures the standard construction rules are relevant.</p>
Substrate Humidity	<p>Permissible substrate moisture content:</p> <ul style="list-style-type: none"> - 2.5% CM for cement screed (ca. 4% Tramex / Gravimetric weight percent). - 0.5% CM for anhydrite screed. - 3 - 12% CM for magnesite flooring (dependent on proportion of organic components). <p>Permissible substrate moisture content for use with under floor heating:</p> <ul style="list-style-type: none"> - 1.8% CM for cement screed (ca. 3% Tramex / Gravimetric weight percent). - 0.3% CM for anhydrite screed. - 3 - 12% CM for magnesite flooring (dependent on the proportion of organic components). <p>For moisture contents and the quality of substrates the guidelines of the wood floor manufacturer as well as standard construction rules must be observed.</p>
Relative Air Humidity	<p>Between 40% and 70%.</p>

Application Instructions

Application Method / Tools

SikaBond®-T54 FC is applied to the properly prepared substrate directly from the pail and uniformly distributed by notched trowel.

Press the wood floor pieces firmly into the adhesive so that the wood floor underside is fully wetted. The pieces can then be joined together using a hammer and an impact block. Many types of wood floors have to be tapped from the top. A distance of 10 - 15 mm from the wall to the wood floor must be observed.

Fresh, uncured adhesive remaining on the wood floor surface must be removed immediately with a clean cloth and if necessary cleaned with Sika® Remover-208 or Thinner C. Test wood floor surfaces for compatibility with Sika® Cleaner-208 before use.

The laying instructions of the wood floor manufacturer as well as standard construction rules must be observed.

Cleaning of Tools

Clean all tools and application equipment with Sika® Remover-208 immediately after use. Hardened / cured material can only be removed mechanically.

Notes on Application / Limitations

SikaBond®-T54 FC is only suitable for use by experienced applicators.

If, according to wood floor suppliers or producers deviation from the standards is permissible, temperatures between +5°C and +35°C must still be observed for the adhesive.

For better workability the adhesive temperature should be at least +15°C. For the proper curing of the adhesive sufficient ambient moisture is necessary.

Wood floors in non insulated areas such as basements, or other areas without a damp proof membrane, must only be installed after the application of Sikafloor® EpoCem sealed with Sika® Primer MB to control the moisture. For detailed instructions consult the Product Data Sheets or contact our Technical Service Department.

For use with chemically pre-treated types of wood floors (e.g. with ammonia, wood stain, timber preservative) and woods with high oil content SikaBond®-T54 FC is only to be used with written agreement from our Technical Service Department.

Do not use on PE, PP, TEFLON, and certain plasticized synthetic materials (carry out pre-trials or contact our Technical Service Department).

Some primers can negatively influence the adhesion of SikaBond®-T54 FC (pre trials recommended).

Notes

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Local Restrictions

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

Health and Safety Information

Protective Measures

To avoid rare allergic reactions, we recommend the use of protective gloves. Change soiled work clothes and wash hands before breaks and after finishing work.

Local regulations as well as health and safety advice on packaging labels must be observed.

Ecology

Refer to Material Safety Data Sheet.

Transportation Class

Refer to Material Safety Data Sheet.

Important Notes

Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.

Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the material safety data sheet.

Toxicity

Refer to Material Safety Data Sheet.

Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.



Sika Limited
Watchmead
Welwyn Garden City
Hertfordshire
AL7 1BQ
United Kingdom

Phone +44 1707 394444
Telefax +44 1707 329129
www.sika.co.uk, email: sales@uk.sika.com



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