Construction

SikaBond®-54 Wood Floor

Low viscosity, solvent free elastic adhesive for wood flooring

Product Description

SikaBond®-54 Wood Floor is a one component, fast curing, solvent free, elastic adhesive for full surface bonding.

Uses

With SikaBond®-54 Wood Floor:

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

Characteristics / Advantages

- 1-component, ready to use
- Fast curing properties
- Excellent workability
- Floor can be sanded after 12 hrs (+23℃ / 50% r. h. Trowel B3 / B11)
- 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

Environmental Information

Specific Characteristics

- Solvent free
- Odourless
- Recyclable tin pail

Specific Approvals/Standards

EMICODE EC 1^{PLUS} R, very low emission

Specific Ratings

LEED® EQc 4.1	SCAQMD, Rule 1168	BAAQMD, Reg. 8, Rule 51
passes	passes	passes

Product Data

Form

Colour	Parquet brown
Packaging	13 kg metal pails (= 10 litre) / 18 kg (3 x 6 kg) / 700 ml

Storage

Storage 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 +10℃ and +25℃.

Technical Data

Chemical Base	1-part Polyurethane, moisture curing.	
Density	~ 1,29 kg/l	(DIN 53 479)
Skinning- / Laying Time	~ 60 minutes (+23℃ / 50% r. h.)	
Curing Rate	> 4.0 mm / 24h (+23℃ / 50% r. h.) *The floor may be walked on / sanded 12 hours (+23℃ / 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℃ to +70℃	

Mechanical / Physical Properties

Shear Strength	~ 1.5 N/mm^2, 1 mm adhesive thickness, tested with beech wood (+23℃ / 50% r. h.)	(DIN EN 14 293)
Tensile Strength	~ 1.5 N/mm^2 (+23℃ / 50% r. h.)	(DIN 53 504)
Shore A Hardness	~ 34 (after 28 days)	(DIN 53 505)
Elongation at Break	~ 500% (+23℃ / 50% r. h.)	(DIN 53 504)

System Information

Application Details

Consumption / Dosage	Full Surface Bonding: 600 - 700 g/m^2 with notched trowel B3 (acc. to IVK guidelines) (e. g. lam parquet, mosaic parquet and industrial parquet). 600 - 800 g/m^2 with notched trowel B6 (= P4) (acc. to IVK guidelines) or $^3/_{16}$" $^1/_8$" $^1/_8$" (engineered strips / planks, lam parquet, mosaic parquet). 600 - 900 g/m^2 with notched trowel B11 (= P6) (acc. to IVK guidelines), AP 48 or $^3/_{16}$" $^3/_{16}$" $^3/_{16}$" (solid wood, engineered long-strips / 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 SikaBond® Rapid DPM or Sika® Primer MB, the consumption of SikaBond®-54 Wood Floor 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	Concrete / cement screed: Must be ground and thoroughly cleaned with industrial vacuum cleaner. Anhydrite screed / Anhydrite flowable screed: Must be ground and thoroughly cleaned with industrial vacuum cleaner shortly before bonding starts. Broadcast mastic asphalt: Must be primed with SikaBond® Rapid DPM or Sika® Primer MB. Instructions for use, see Product Data Sheet for Sika Primer MB. Glazed ceramic and old ceramic tiles: Degrease, clean with SikaCleaner® or grind the tile surfaces and vacuum thoroughly. 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 Department. Other substrates: Please contact our Technical Department for advice and assistance. SikaBond®-54 Wood Floor can be used without priming on cementitious floors, anhydrite floors, chipboards, concrete and ceramic tiles. For broadcast mastic asphalt, cementitious floors with excessive moisture content and for use over old adhesive residues or on weak substrates use SikaBond® Rapid DPM or Sika® Primer MB. For detailed instructions consult the Product Data Sheet of Sika® Primer MB or contact our Technical Department.

Application Conditions / Limitations

Substrate Temperature	During laying and until SikaBond®-54 Wood Floor has fully cured the substrate and ambient temperatures should be > +15℃ and with flo or heating < +20℃. For substrate temperatures the standard construction rules are relevant.
Ambient Temperature	Ambient temperature between +15℃ and +35℃. For ambient temperatures the standard construction rules are relevant.
Substrate Moisture Content	Permissible substrate moisture content: - 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). Permissible substrate moisture content for use with under floor heating: - 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). For moisture contents and the quality of substrates the guidelines of the wood floor manufacturer as well as standard construction rules must be observed.
Relative Air Humidity	Between 40% and 70%.

Application Instructions

Application Method / Tools	SikaBond®-54 Wood Floor 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 Sika® Wipes. Test wood floor surfaces for compatibility with Sika® Remover-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 / Sika® Wipes immediately after use. Hardened / cured material can only be removed mechanically.
Notes on Application / Limitations	SikaBond®-54 Wood Floor 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 mu st 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 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®-54 Wood Floor is only to be used with written agreement from our Technical Department. Do not use on PE, PP, TEFLON, and certain plasticized synthetic materials (carry out pre-trials or contact our Technical Department). Some primers can negatively influence the adhesion of SikaBond®-54 Wood Floor (pre trials recommended). When laying bonded wood flooring, always make sure that any wood surface sealer coatings do not come into contact with the adhesive. However if direct contact with the adhesive is unavoidable, then the compatibility of the sealing coats must always be checked and confirmed before use. For further information or assistance please contact your local Sika Technical Department.

Construction

Value Base

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

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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

Certificate No. EMS 4308

Certificate No. FM 12504