Product Data Sheet Edition 02/09/2010 Identification no: 02 05 02 01 004 0 000003 SikaBond®-T54 FC



## SikaBond®-T54 FC

## Easy spreadable, solvent free elastic adhesive for wood flooring

Product Description	SikaBond®-T54 FC is a one component, fast curing and solvent free, elastic adhesive for full surface bonding.		
Uses	With SikaBond <sup>®</sup> -T54 FC:		
	<ul> <li>Solid and engineered we mosaic parquet, industri- well as chipboards can be</li> </ul>	al parquet, lam parquet, wo	os, planks, panels, boards), ood paving (residential) as
Characteristics /	■ 1-component, ready to use		
Advantages	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 da	mpening adhesive	
	Suitable for most common suitable for most common suitable.	on types of wood floors	
	Especially suitable for pr	oblematic 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 PLUS "very low emission".		
Green Rating	LEED® EQc 4.1	SCAQMD, Rule 1168	BAAQMD, Reg. 8, Rule 51
	passes	passes	passes
Product Data			
Form			



Colour

**Packaging** 

Parquet brown

13 kg metal pails (≈ 10.5 litre)

18 kg cardboard box (3 x 6 kg bags)

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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°C and +25°C.		
Technical Data			
Chemical Base	1-part Polyurethane, moisture curing		
Density	~ 1.25 kg/l	(DIN 53 479)	
Skinning- / Laying Time	~ 90 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. Trowe after installation, dependent on climatic conditions and the adhesive lathickness.		
Sag Flow	Consistency: Spreads very easily, trowel marks stable.		
Service Temperature	-40°C to +70°C		
Mechanical / Physical Properties			
Shear Strength	$\sim 0.8 \ \text{N/mm}^2, 1 \ \text{mm}$ adhesive thickness, tested with beech wood (+23°C / 50% r. h.)	(DIN 281)	
Tensile Strength	~ 1.0 N/mm <sup>2</sup> (+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: 600 - 800 g/m² with notched trowel B3 (acc. to IVK guidelines) (e. g. la mosaic parquet and industrial parquet).	am parquet,	
	700 - 900 g/m² with notched trowel B6 (= P4) (acc. to IVK guidelines) (engineered strips / planks, lam parquet, mosaic parquet).	or <sup>3</sup> / <sub>16</sub> " <sup>1</sup> / <sub>8</sub> " <sup>1</sup> / <sub>8</sub> "	
	800 - 1000 g/m² with notched trowel B11 (= P6) (acc. to IVK guideline $^3/_{16}$ " $^3/_{16}$ " $^3/_{16}$ " (solid wood, engineered long-strips / panels, industrial paving (residential), chipboards).	s), AP 48 or arquet, wood	
	For bonding of long or wide boards or with uneven substrates it may be to use a notched trowel with bigger notches (to prevent hollow section		
	For substrates primed with Sika® Primer MB / Sika® Primer MR Fast, consumption of SikaBond®-T54 FC is reduced.	the	
Substrate Quality	Clean and dry, homogeneous, even, free from grease, dust and loose Paint, laitance and other poorly adhering particles must be removed.	particles.	
	Standard construction rules must be observed.		

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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 Sika® Primer MB / Sika® Primer MR Fast. Instructions for use, see Product Data Sheet for Sika Primer MB / Sika® Primer MR Fast.		
	Glazed ceramic and old ceramic tiles: Degrease, clean with Sika® Aktivator-205 (Sika® Cleaner-205) 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 Service Department.		
	Other substrates:		
	Please contact our Technical Service Department for advice and assistance.  SikaBond®-T54 FC can be used without priming on cementitious floors, anhydrite		
	floors, chipboards, concrete and ceramic tiles.		
	For broadcast mastic asphalt, cementitious floors with an excessive moisture content and for use over old adhesive residues or on weak substrates use Sika <sup>®</sup> Primer MB / Sika <sup>®</sup> Primer MR Fast. For detailed instructions refer to the respective Product Data Sheet or contact our Technical Service Department.		
Application Conditions / Limitations			
Substrate Temperature	During laying and until SikaBond <sup>®</sup> -T54 FC has fully cured the substrate and ambient temperatures should be > +15°C and with floor heating ~ +20°C.		
	For substrate temperatures the standard construction rules are relevant.		
Ambient Temperature	Ambient temperature between +15°C and +35°C.		
	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.		
	<ul> <li>3 - 12% CM for magnesite flooring (dependent on proportion of organic components).</li> </ul>		
	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.		
	<ul> <li>3 - 12% CM for magnesite flooring (dependent on the proportion of organic components).</li> </ul>		
	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%.

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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 Sika®TopClean-T. Test wood floor surfaces for compatibility 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® TopClean-T immediately after use. Hardened / cured material can only be removed mechanically.		
Notes on Application /	SikaBond®-T54 FC is only suitable for use by experienced applicators.		
Limitations	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 / Sika® Primer MR Fast 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 <sup>®</sup> -T54 FC (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 Service Department.		
	Do not mix with or expose uncured SikaBond®-T54 FC to substances that may react with isocyanates, especially alcohols which are often components within e.g. thinners, solvents, cleaning agents and formwork releasing compounds. Such contact could interfere or prevent the cross linking curing reaction of the material.		
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.		

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## Construction

## **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.

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