Product Data Sheet Edition 19/08/2014 Identification no: 02 05 02 02 150 0 000001 SikaBond[®] AT-80



SikaBond[®] AT-80

Easily spreadable, solvent free, elastic adhesive for full surface bonding of wood flooring

Product Description	SikaBond® AT-80 is a 1-component, solvent free, elastic adhesive based on Silane Terminated Polymers for full surface bonding of wood floors.
Uses	Solid and engineered wood floors (strips, longstrips, planks, panels and boards), mosaic parquet, industrial parquet, lam parquet, wood paving (residential) and chipboard can all be installed by full surface bonding.
Characteristics / Advantages	1-component, ready to use
	Solvent free
	Excellent workability, very easy to spread
	Elastic, footfall sound dampening
	Suitable for most common types of wood floors
	Reduces stress to the substrate: the elastic adhesive reduces stress transfer between the wood floor and the substrate
	Suitable for use with under floor heating
	Can be sanded
Approval / Standards	EMICODE EC1 R "very low emission"
Product Data Colour	Parquet brown
Packaging	17 kg plastic pail
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 Silane Terminated Polymers (PU-Hybrid technology, moisture curing)
Density	~ 1.65 kg/l (DIN 53 479
Skinning- / Laying Time	~ 75 minutes (+23°C / 50% r. h.)
0,0	
Curing Rate	~ 3.0 mm/24h (+23°C / 50% r. h.)
	~ 3.0 mm/24h (+23°C / 50% r. h.) The floor shall be walked on / sanded 24 - 48 hours (+23°C / 50% r. h. Trowel B3 / B11) after installation, dependent on climatic conditions and the adhesive layer thickness.
	The floor shall be walked on / sanded 24 - 48 hours (+23°C / 50% r. h. Trowel B3 / B11) after installation, dependent on climatic conditions and the adhesive layer



Mechanical / Physical Properties		
Shear Strength	~ 1.25 N/mm ² , 1 mm adhesive thickness	
Tensile Strength	~ 1.40 N/mm ² (+23°C / 50% r. h.)	(DIN 53 504)
Shore A Hardness	~ 40 (after 28 days)	(DIN 53 505)
Elongation at Break	~ 160% (+23°C / 50% r. h.)	(DIN 53 504)

System Information

Application Details	
Consumption / Dosage	Full Surface Bonding: 800 - 1000 g/m ² with notched trowel B3 (acc. to IVK guidelines) (e. g. lam parquet, mosaic parquet and industrial parquet).
	900 - 1200 g/m ² with notched trowel B6 (=P4) (acc. to IVK guidelines) or $^{3}/_{16}$ " $^{1}/_{8}$ " (engineered strips / planks, lam parquet, mosaic parquet)
	1000 - 1300 g/m ² with notched trowel B11 (=P6) (acc. to IVK guidelines), AP 48 or ${}^{3}/_{16}{}^{"}{}^{3}/_{16}{}^{"}{}^{3}/_{16}{}^{"}$ (solid wood, engineered longstrips / panels, industrial parquet, wood paving (residential), chipboard)
	For bonding of long or wide boards or on uneven substrates it may be necessary to use a notched trowel with bigger notches (to prevent hollow areas).
	For substrates primed with Sika $^{\ensuremath{\mathbb{R}}}$ Primer MB the consumption of SikaBond $\ensuremath{\mathbb{R}}$ AT-80 is reduced.
Substrate Quality	Clean and dry, homogeneous, even, free from grease, dust and loose or friable particles. Paint, laitance and any other contaminants must be removed.
Substrate Preparation	Concrete / cement screed:
-	- Must be ground and thoroughly cleaned and vacuumed.
	Anhydrite screed / Anhydrite flowable screed:
	 Must be ground and thoroughly cleaned and vacuumed shortly before bonding starts.
	Broadcast mastic asphalt:
	 Must be primed with Sika[®] Primer MB. Please refer to the respective Product Data Sheet.
	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 firmly and securely 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® AT-80 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 Sika[®] Primer MB. 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 [®] AT-80 has fully cured the substrate and ambient temperatures should be $> +15^{\circ}$ C and with floor heating $\sim +20^{\circ}$ C.
	For substrate temperatures the standard construction rules are relevant.
Ambient Temperature	Ambient temperature shall be 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 3 - 12% CM for magnesite flooring (dependent on the 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)
	Note: For moisture contents and the quality of substrates the guidelines of the wood floor manufacturer must be observed.
Relative Air Humidity	Between 40% and 70%
Application Instructions	
Application Method / Tools	SikaBond® AT-80 is applied to the prepared substrate directly from the pail and uniformly distributed with a 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 maintained.
	Fresh, uncured adhesive remaining on the wood floor surface must be removed immediately with a clean cloth and if necessary cleaned with Sika [®] thinner C. Test wood floor surfaces for compatibility before use.
	The laying instructions of the wood floor manufacturer must be observed.
Cleaning of Tools	Clean all tools and application equipment with Sika [®] Thinner C immediately after use. Hardened/cured material must be removed mechanically.
Notes on Application /	SikaBond® AT-80 shall only be used by experienced contractors.
Limitations	For optimum workability the adhesive temperature shall be at least +15°C. For the correct curing of the adhesive sufficient ambient moisture is necessary.
	A preliminary adhesion test is necessary before any application on glazed tiles.
	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.
	Wood floors in non insulated areas such as basements, or other areas without a damp proof membrane, may only be installed after the application of Sikafloor [®] EpoCem [®] sealed with Sika [®] Primer MB to control the moisture. For detailed instructions refer to the respective 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, etc.) and woods with a high oil content SikaBond® AT-80 is only to be used with the prior written agreement of our Technical Service Department.

	Do not use SikaBond® AT-80 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® AT-80. Pre trials are therefore recommended.
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.





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SIKA LIMITED Head Office · Watchmead · Welwyn Garden City · Hertfordshire · AL7 1BQ · United Kingdom Phone: +44 1 707 394444 · Fax: +44 1 707 329129 · www.sika.co.uk