

Product Data Sheet
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SikaBond® AT-80

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Easy Clean, solvent & isocyanate free, elastic adhesive
for full surface bonding of wood flooring

Product Description	SikaBond® AT-80 is a 1-component, solvent and isocyanate free, elastic adhesive based on Silane Terminated Polymers for the 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), Plywood and chipboard can all be installed by full surface bonding.
Characteristics / Advantages	<ul style="list-style-type: none">■ 1-component, ready to use■ Environmentally friendly - Solvent & Isocyanate Free■ Easy to remove from hands, tools and surface of prefinished flooring even when fully cured■ Excellent workability, very easy to spread & good retention of trowel profile■ Advanced Hybrid Technology, superior to standard PU & MS based adhesives■ Elastic, footfall sound dampening■ Suitable for most common types of wood floors■ Suitable for use with under floor heating■ Can be sanded
Product Data	
Form	
Colour	Beige
Packaging	16.8 kg plastic pail
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.

Construction



Technical Data

Chemical Base	1-part Silane Terminated Polymers (PU-Hybrid technology, moisture curing)	
Density	~ 1.68 kg/l	(DIN 53 479)
Skinning- / Laying Time	~ 60 minutes (+23°C / 50% r. h.)	
Curing Rate	~ 3.0 mm/24h (+23°C / 50% r. h.)	
	The floor shall be walked on / sanded 24 - 48 hours (+23°C / 50% r. h.) after installation, dependent on climatic conditions and the adhesive layer thickness.	
Sag Flow	<i>Consistency:</i> Spreads easily, trowel marks stable.	
Service Temperature	-40°C to +70°C	

Mechanical / Physical Properties

Shear Strength	~ 1.25 N/mm ² , 1 mm adhesive thickness	
Tensile Strength	~ 1.60 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	<p>Full Surface Bonding: 800 - 1000 g/m² with notched trowel B3 (e. g. lam parquet, mosaic parquet and industrial parquet).</p> <p>900 - 1200 g/m² with notched trowel B6 or $\frac{3}{16}$" $\frac{1}{8}$" $\frac{1}{8}$" (engineered strips / planks, lam parquet, mosaic parquet)</p> <p>1000 - 1300 g/m² with notched trowel B11, AP 48 or $\frac{3}{16}$" $\frac{3}{16}$" $\frac{3}{16}$" (solid wood, engineered longstrips / panels, industrial parquet, wood paving (residential), chipboard)</p> <p>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).</p> <p>For substrates primed with Sika® Primer MB, the consumption of SikaBond® AT-80 is reduced.</p>
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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.
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Substrate Preparation	<p><i>Concrete / cement screed:</i></p> <ul style="list-style-type: none"> - Must be ground and thoroughly cleaned and vacuumed. If substrate moisture content exceeds 2.5% CM for cement screed (ca. 4% Tramex / Gravimetric weight percent) Sika Primer MB or SikaBond® Rapid DPM must be applied. Please refer to the respective Product Data Sheet. <p><i>Anhydrite screed / Anhydrite flowable screed:</i></p> <ul style="list-style-type: none"> - Must be ground and thoroughly cleaned and vacuumed shortly before bonding starts. <p><i>Broadcast mastic asphalt:</i></p> <ul style="list-style-type: none"> - Must be primed with Sika® Primer MB or SikaBond® Rapid DPM. Please refer to the respective Product Data Sheet. <p><i>Glazed ceramic and old ceramic tiles:</i></p> <ul style="list-style-type: none"> - Degrease, clean with Sika® Cleaner or grind the tile surfaces and vacuum thoroughly. <p><i>Wood- / gypsum boards (e.g. chipboards, plywood):</i></p> <ul style="list-style-type: none"> - 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 Department. <p><i>Other substrates:</i></p> <ul style="list-style-type: none"> - Please contact our Technical 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 or SikaBond® Rapid DPM. For detailed instructions refer to the respective Product Data Sheet or contact our Technical Department.
Application Conditions / Limitations	
Substrate Temperature	<p>During laying and until SikaBond® AT-80 has fully cured the substrate and ambient temperatures should be > +10°C and with floor heating ~ +20°C.</p> <p>For substrate temperatures the standard construction rules are relevant.</p>
Ambient Temperature	<p>Ambient temperature shall be between >+10°C and <+35 °C.</p> <p>For ambient temperatures the standard construction rules are relevant.</p>
Substrate Moisture Content	<p><i>Permissible substrate moisture content for wood.</i></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 the proportion of organic components) <p><i>Permissible substrate moisture content for use with engineered wood over under floor heating:</i></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>Note: For moisture contents and the quality of substrates the guidelines of the wood floor manufacturer must be observed.</p>
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 perimeter gap of 10 - 15 mm from the wall to the wood floor must be maintained.

Fresh, uncured adhesive remaining on the wood floor surface can be removed with a clean cloth or Sika Wipes. Cured adhesive on the top surface of the wood can be removed by rubbing with Scotchbrite or similar. Ensure the lacquer will not be damaged by testing on a spare piece of timber flooring.

The laying instructions of the wood floor manufacturer must be observed.

Cleaning of Tools

Clean all tools and application equipment with Sika® Remover-208 / Sika® TopClean-T or Sika Thinner 'C' immediately after use. Hardened/cured material must be removed mechanically.

Notes on Application / Limitations

SikaBond® AT-80 should only be used by experienced contractors.

For optimum workability the adhesive temperature should 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 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 or SikaBond® Rapid DPM to control the moisture. For detailed instructions refer to the respective 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, 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.



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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