

Product Data Sheet
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SikaBond®-542 W+

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Low viscosity (easy flowing) water dispersed adhesive for wood flooring

Product

Description

SikaBond®-542 W+ is a one part, solvent free, water dispersed adhesive.

Uses

SikaBond®-542 W+ is an adhesive suitable for bonding engineered planks, wood blocks and 2-ply engineered strips onto cementitious substrates and suitable wood boards.

Characteristics / Advantages

- 1-part adhesive, ready to use
- Very easy to apply
- Very good workability
- Solvent free
- Suitable for use with under-floor heating
- Low water content (high solids)

Tests

Approval / Standards

Wood floor adhesive according to DIN 281.

Product Data

Form

Colour

Beige

Packaging

15 kg plastic pail (= 11.1 litre)

Storage

Storage Conditions / Shelf Life

12 months from date of production if stored in undamaged and unopened original sealed containers, in dry conditions and protected from frost and direct sunlight at temperatures between +10 °C and +25 °C.

Technical Data

Chemical Base

1-part adhesive, polyvinyl acetate, water dispersed (pH-value 6 - 7).

Density

~ 1.35 kg/l

(According to DIN 53 479)

Skinning / Laying Time

< 20 minutes (+23 °C / 50% r.h.)

Construction



Curing Rate	~ 3.0 mm / 24h (+23°C / 50% r.h.) The floor may be walked on or sanded 24 to 48 hours after installation. Full load bearing capacity after 48 hours. (Curing rate will be dependant on the temperature and humidity and the adhesive layer thickness).	
Sag Flow	Consistency: Spreads very easily , trowel marks stable.	
Service Temperature	+15°C to +30°C suitable for use with under floor heating.	
Mechanical / Physical Properties		
Tensile Shear Strength	> 10 N/mm ² (+23°C / 50% r.h.)	(According to EN 204-D1)
Shore A Hardness	~ 38 (after 28 days +23°C / 50% r.h.)	(According to DIN 53 505)
Elongation at Break	~ 100%	(According to DIN 53 504)
System Information		
Application Details		
Consumption / Yield	700 - 900 g/m ² when applied with a notched / toothed trowel B3 (acc. to IVK guidelines). Consumption will vary dependent on the type of substrate and the type of timber floor.	
Substrate Quality	Clean and dry, homogeneous, even, free from oils and grease, dust and loose or friable particles. Paint, laitance and any other poorly adhering materials must be removed. Only for cementitious substrates. Standard construction rules must be observed.	
Substrate Preparation / Priming	Concrete / cementitious screed: Must be mechanically prepared as necessary to achieve the substrate quality and thoroughly vacuumed. To improve adhesion properties and on strongly absorbent cementitious substrates use Sika® Grund-P plus. For detailed instructions consult the Product Data Sheet of Sika® Grund-P plus or contact our Technical Department.	
Application Conditions / Limitations		
Substrate Temperature	During application and until SikaBond®-542 W+ has fully cured, the substrate temperature must be > +15°C, and when used with under-floor heating ~ + 20°C. For substrate temperature and heating construction rules are relevant.	
Ambient Temperature	Ambient room temperature must be between +15°C and +35°C. For ambient temperature the standard construction rules are relevant.	
Substrate Humidity	<p><i>Permissible substrate moisture content:</i></p> <ul style="list-style-type: none"> - 2.5% CM for cementitious substrates (approx. 4% Tramex / Gravimetric percent by weight). <p><i>Permissible substrate moisture content for use with under-floor heating:</i></p> <ul style="list-style-type: none"> - 1.8% CM for cement screed (approx. 3% Tramex / Gravimetric percent by weight). 	
Relative Air Humidity	Between 40% and 65%	

Application Instructions

Application Method / Tools

SikaBond®-542 W+ is applied to the prepared substrate directly from the pail and uniformly distributed by notched trowel.

Press the wood firmly into the adhesive so that the underside is fully wetted with adhesive. The wood can then be joined together and tapped down.

Fresh, uncured adhesive remaining on the wood floor surface must be removed immediately with a clean, damp cloth and if necessary cleaned with Sika® TopClean-T.

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 water or Sika® TopClean-T immediately after use. Cured material can only be mechanically removed.

Notes on Application / Limitations

SikaBond®-542 W+ is only suitable for use by experienced applicators.

Always follow the wood flooring manufacturers recommendations and instructions / substrate requirements.

For optimum workability the adhesive temperature must be at least +15°C.

Not suitable for wood floors in non insulated areas such as basements, or other areas without a damp proof membrane.

Do not use on non-porous substrates (i.e. Sika Primer MB).

Uneven substrates must be properly prepared and levelled out in order to avoid an accumulation of dispersion adhesive.

Water dispersed adhesives are not suitable for use on anhydrite or non-porous substrates. Do not use wood floors with sealed undersides (chipboards, MDF).

For use with chemically pre-treated timber (i.e. ammonium, wood stains, timber preservatives etc.) and timber with a high oil content, SikaBond®-542 W+ is only to be used with written confirmation from our technical service department.

Some primers can negatively influence the adhesion of SikaBond®-542 W+. Use only Sika® Grund-P plus for substrate improvement.

Use only for engineered planks, wood blocks (max. size ca. 10 x 50 x 200 mm) and 2-ply engineered stripes (max. size 12 x 80 x 600 mm).

Water based dispersion adhesives are not suitable for every type of wood. SikaBond®-542 W+ is not to be used for strong swelling woods, such as large sizes of engineered or solid wood panels, or problematic wood types such as beech, maple or bamboo. For these use other Sika® Bond adhesives (such as Sika® Bond-T52 / T53 / T54 / T55 etc. as appropriate).

The adhesive is not to be diluted.

Protect from freezing. After being frozen the adhesive can no longer be used.

Avoid strong vibrations during curing of the adhesive (i. e. too early walking on, or tapping the wood before the adhesive is fully cured).

Sanding or sealing of the wood must be done only after full curing of the adhesive and after a period of acclimatisation.

Avoid extreme variations of environmental conditions (temperature, air humidity ...).

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 any allergic reactions, wear protective gloves. Change soiled work clothes and wash hands before eating 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	Uncured 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.



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