

Product Data Sheet
Edition 05/08/2014
Identification no:
02 05 01 01 015 0 000005
SikaBond® AT Universal

SikaBond® AT Universal

Multipurpose adhesive for elastic bonding

Product Description / Uses SikaBond® AT Universal is a one part, solvent-free, elastic adhesive with a very good adhesion on non-porous and porous substrates for the following applications:

- Internal and external bonding of cable channels, acoustic tiles, and door sills, lightweight construction materials, bonding of roof and wall coverings and cover plates etc.

Characteristics / Advantages

- 1-part, ready to use
- High adhesive strength without priming
- Excellent workability
- Short cut off string
- Good initial tack and fast curing
- Compensation of substrate unevenness
- Non-corrosive
- Good weathering and water resistance
- Silicone free
- Over paintable
- Solvent free

Approval / Standard ISO 11600 F 20 HM
ISEGA Certificate for foodstuff area usage

Product Data

Colours White, dark-grey

Packaging 300 ml cartridges, 12 cartridges per box
600 ml foil pack, 20 foil packs per box

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	1.4 kg/l approx.	(ISO 1183-1)
Skinning Time	35 minutes approx. ¹	
Curing Rate	3 mm / 24h approx. ¹	
Movement Capability	20%	(ISO 9047)
Sag Flow	0 mm , very good	(ISO 7390)
Service Temperature	-40°C to +80°C	
Lap Shear Strength	1.0 N/mm ² ; approx. ¹ ; 1 mm adhesive thickness	(DIN 52 283)
Tensile Strength	1.5 N/mm ² approx. ¹	(ISO 37)
Tear Propagation Strength	5 N/mm approx. ¹	(ISO 34)
Shore A Hardness	33 approx. ¹ (after 28 days)	(ISO 868)
E-Modulus	0.6 N/mm ² approx. ¹ at 100% elongation after 28 days	(ISO 8340)
Elongation at Break	400% approx. ¹	(ISO 37)
Elastic Recovery	70% approx. ¹ after 28 days	(ISO 7389 B)

Resistance

Chemical Resistance	<p>Resistant to water, seawater, diluted alkalis, cement grout and water dispersed detergents.</p> <p>Not resistant to alcohols, organic acids, concentrated alkalis and concentrated acids, chlorinated and aromatic hydro-carbons.</p> <p>Not or only short-term resistant to concentrated mineral acids, organic solvents (ketones, esters, aromatics) and alcohol, lacquer and paint thinners, organic acids and caustic solutions or solvents.</p> <p>For detailed information contact our Technical Service.</p>
----------------------------	--

System Information

Application Details

Consumption	<i>Beaded / Cordon application in Bonding:</i> 44 ml approx. per running meter (with triangular nozzle)
Substrate Quality	Clean and dry, homogeneous, free from oils and grease, dust and loose or friable particles. Cement laitance, poorly adhering particles and incompatible paints must be removed.
Substrate Preparation / Priming	<p>SikaBond® AT Universal generally has strong adhesion to most clean, sound substrates. For optimum adhesion and critical, high performance applications such as multi story building work, for high stress bonding joints or in case of extreme weather exposure substrate primers and cleaners must be used. If in doubt apply product in test area first.</p> <p><u>Non-porous substrates</u> Non-porous substrates such as metals, powder coatings, etc. have to be treated with an abrasive pad very fine and Sika® Aktivator-205 using a clean towel. Before bonding allow a flash-off time of at least 15 min.</p> <p>For frequent water contact or constant high relative air humidity use Sika® Primer-3 N for porous substrates (concrete, brick, etc.)</p> <p><u>Porous substrates</u> Concrete, aerated concrete and cementitious renders, mortars, brick, natural stone etc. have to be primed with Sika® Primer-3 N by using a clean brush or roller. Before bonding allow a flash-off time of at least 30 min. (max. 8 h).</p> <p>For further information refer to the Sika® Pre-treatment Chart Sealing & Bonding.</p>

¹ 23°C / 50% r.h.

Application Conditions / Limitations

Substrate Temperature	During application and until SikaBond® AT Universal has fully cured the substrate temperature must be +5°C min. and +40°C max.
Ambient Temperature	+5°C min. / +40°C max.
Substrate Moisture Content	Dry
Relative Air Humidity	Between 30% and 90%

Application Instructions

Application Method / Tools	<p>SikaBond® AT Universal is supplied ready to use.</p> <p>After substrate preparation apply SikaBond® AT Universal in strips or spots on the bonding surface at intervals of a few centimeters. Use hand pressure to set the element to be bonded into position. If necessary, use SikaTack-Panel fixing tape for the initial hours of curing. An incorrectly positioned element can be easily unfastened and repositioned in the first few minutes after application.</p> <p>Optimum bonding will be obtained after complete curing of SikaBond® AT Universal.</p>
Cleaning of Tools	Clean all tools and application equipment with Sika® Remover-208 immediately after use. Hardened / cured material can only be removed mechanically.
Further Documents available	<ul style="list-style-type: none">■ Pre-treatment Chart Sealing & Bonding■ Method Statement Joint Maintenance, Cleaning and Renovation■ Material Safety Data Sheet (MSDS)
Notes on Application / Limitations	<p>For best workability the adhesive temperature should be > 15°C.</p> <p>For the correct curing of the adhesive sufficient relative humidity is necessary.</p> <p>SikaBond® AT Universal can be over-painted with most conventional paint systems. The paint must be tested for compatibility by carrying out preliminary trials and the best results are obtained if the adhesive is allowed to cure fully first. Please note that non-flexible paint systems may impair the elasticity of the adhesive and lead to cracking of the paint film. The compatibility must be tested according to DIN 52 452-4.</p> <p>Colour variations in the adhesive may occur due to exposure to chemicals, high temperatures, UV-radiation. However a change in colour will not adversely influence the technical performance or durability of the product.</p> <p>Before using on natural stone contact our technical service department.</p> <p>Do not use SikaBond® AT Universal without priming on copper, titan-zinc, bras. Do not use it as a glass sealer, on bituminous substrates, natural rubber, EPDM rubber or on building materials which might bleed oils, plasticizers or solvents which could attack the adhesive.</p> <p>Do not use on PE, PP, Teflon and certain plasticized synthetic materials (carry out pre-trials or contact our Technical Service Department).</p>

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
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