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# PRODUCT DATA SHEET SikaBond® AT Universal

Multipurpose adhesive for elastic bonding

### DESCRIPTION

SikaBond® AT Universal is a 1-component, solvent-free multipurpose adhesive with very good workability.

### USES

SikaBond<sup>®</sup> AT Universal is designed for internal and external bonding of cable channels, acoustic tiles, and door sills, lightweight construction materials, bonding of roof and wall coverings and cover plates.

### **CHARACTERISTICS / ADVANTAGES**

- Silicone-free
- Non-corrosive
- Very good workability
- Short cut off string
- Good initial tack and fast curing
- Over-paintable
- High adhesive strength without priming
- Good weathering and water resistance
- Very good adhesion on non-porous and porous substrates

### **ENVIRONMENTAL INFORMATION**

LEED v2009 IEQc 4.1: Low-Emitting Materials - Adhesives and Sealants

### **APPROVALS / STANDARDS**

- ISO 11600 F 20 HM
- ISEGA Certificate for foodstuff area usage

#### **Chemical Base** Silane terminated polymer Packaging 300 ml cartridge, 12 cartridges per box 600 ml foil pack, 20 foil packs per box Colour White, dark-grey Shelf Life SikaBond® AT Universal has a shelf life of 12 months from the date of production, if it is stored properly in undamaged, original, sealed packaging, and if the storage conditions are met. **Storage Conditions** SikaBond® AT Universal shall be stored in dry conditions, protected from direct sunlight and at temperatures between +5 °C and +25 °C. Density ~1.40 kg/l (ISO 1183-1)

# **TECHNICAL INFORMATION**

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# PRODUCT INFORMATION

Shore A Hardness	~33 (after 28 days)	(ISO 868)
Tensile Strength	~1.5 N/mm²	(ISO 37)
Secant Tensile Modulus	~0.60 N/mm <sup>2</sup> at 100 % elongation (after 28 days) (23 °C)	(ISO 8339)
Elongation at Break	~400 %	(ISO 37)
Elastic Recovery	~70 % (after 28 days)	(ISO 7389)
Lap Shear Strength	~1.0 N/mm <sup>2</sup> (1 mm adhesive thickness)	(EN 1465)
Tear Propagation Resistance	~5.0 N/mm	(ISO 34)
Movement Capability	± 20 %	(ISO 9047)
Chemical Resistance	<ul> <li>SikaBond<sup>®</sup> AT Universal is resistant to water, seawater, diluted alkalis, cement slurry and water dispersed detergent.</li> <li>SikaBond<sup>®</sup> AT Universal is not resistant to alcohols, organic acids, concentrated alkalis and concentrated acids, chlorinated and aromatic hydro-carbons.</li> <li>SikaBond<sup>®</sup> AT Universal is not or is only temporarily resistant to concentrated mineral acids, organic solvents (kelones, esters, aromatics) and alcohol, lacquer and paint thinners, organic acids and caustic solutions or solvents.</li> <li>For detailed information please contact Sika Technical Service.</li> </ul>	
Service Temperature	–40 °C min. / +80 °C max.	

# **APPLICATION INFORMATION**

Consumption	Beaded / Cordon application: ~44 ml per linear meter (with triangular nozzle)	
Sag Flow	0 mm (20 mm profile, 23 °C)	(ISO 7390)
Ambient Air Temperature	+5 °C min. / +40 °C max.	
Relative Air Humidity	30 % min. / 90 % max.	
Substrate Temperature	+5 °C min. / +40 °C max. min. 3 °C above dew point temperature	
Curing Rate	~3 mm/24 hours (23 °C / 50 % r.h.)	(CQP 049-2)
Skin Time	~35 minutes (23 °C / 50 % r.h.)	(CQP 019-1)

# **BASIS OF PRODUCT DATA**

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.

# FURTHER DOCUMENTS

- Safety Data Sheet
- Pre-treatment Chart Sealing and Bonding
- Method Statement Joint Maintenance: Cleaning Renovation

# LIMITATIONS

- SikaBond<sup>®</sup> AT Universal shall not be used for facade panel bonding. For facade panels, use the SikaTack<sup>®</sup> Panel System.
- For optimal workability, the adhesive temperature

shall be > 15 °C.

- For correct curing of the adhesive, sufficient relative humidity is necessary.
- SikaBond® AT Universal can be overpainted with most conventional facade coating paint systems. However, paints must first be tested to ensure compatibility by carrying out preliminary trials (e.g. according to ISO technical paper: Paintability and Paint Compatibility of Sealants). The best overpainting results are obtained when the sealant is allowed to fully cure first. Note: non-flexible paint systems may impair the elasticity of the sealant and lead to cracking of the paint film.
- Colour variations may occur due to exposure to chemicals, high temperatures and/or UV-radiation (especially with white colour shades). However, a change in colour is purely of aesthetic nature and does not adversely influence the technical performance or durability of the product.
- Before using SikaBond<sup>®</sup> AT Universal on natural

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stone, please refer to Sika Technical Service for advice.

- Do not use SikaBond<sup>®</sup> AT Universal on copper, titanzinc, or brass without priming.
- Do not use SikaBond<sup>®</sup> AT Universal as a glass sealer, on bituminous substrates, natural rubber, EPDM rubber or on any building materials which might bleed oils, plasticizers or solvents that could attack the sealant.
- Do not use SikaBond<sup>®</sup> AT Universal to seal joints in and around swimming pools.
- Do not use SikaBond<sup>®</sup> AT Universal for joints under water pressure or for permanent water immersion.
- Do not use on polyethylene (PE), polypropylene (PP), polytetrafluoroethylene (PTFE / Teflon), and other similar plasticized synthetic materials, SikaBond<sup>®</sup> AT Universal is only to be used with the written agreement of our Technical Service Department.
- Do not expose uncured SikaBond<sup>®</sup> AT Universal to alcohol containing products as this may interfere with the curing reaction.

# ECOLOGY HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

# **APPLICATION INSTRUCTIONS**

For the application of SikaBond® AT Universal all standard construction guidelines apply.

### SUBSTRATE PREPARATION

The substrate must be clean, dry, sound and homogeneous, free from oils, grease, dust and loose or friable particles. Paint, cement laitance and other poorly adhering contaminants must be removed. SikaBond<sup>®</sup> AT Universal adheres without primers and/or activators.

However, for optimum adhesion and critical, high performance applications, such as on multi-story buildings, highly stressed joints, extreme weather exposure or water immersion, the following priming and/or pretreatment procedures shall be followed:

#### Non-porous substrates

Glazed tiles, powder coated metals, aluminium, anodised aluminium, stainless steel and galvanised steel have to be treated with a very fine abrasive pad and Sika® Aktivator-205 shall be applied using a clean towel. Before sealing allow a flash-off time of > 15 minutes (< 6 hours).

#### **Porous substrates**

Concrete, aerated concrete and cement-based renders, mortars, brick, and natural stone have to be primed with Sika<sup>®</sup> Primer-3 N applied with a clean brush. Before sealing allow a flash-off time of > 30 minutes (< 8 hours).

For detailed advice, please contact Sika Technical Service.

Note: Primers are adhesion promoters. They are neither a substitute for the correct cleaning of a surface, nor do they improve the strength of the surface significantly.

### **APPLICATION METHOD / TOOLS**

After the necessary substrate preparation, insert a foil pack or cartridge into the sealant gun and extrude SikaBond® AT Universal in beads, strips or spots to the bonding surface in intervals of a few centimetres each. Use hand pressure only to set the element to be bonded into position. If necessary, use adhesive tapes, wedges, or props to hold the assembled elements together during the initial curing hours. An incorrectly positioned element can easily be unfastened and repositioned during the first few minutes after application.

Optimum bonding will be obtained after the complete curing of SikaBond<sup>®</sup> AT Universal.

#### **CLEANING OF TOOLS**

Clean all tools and application equipment immediately after use with Sika<sup>®</sup> Remover-208 and/or Sika<sup>®</sup> Top-Clean T. Once cured, residual material can only be removed mechanically.

# 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.

# **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, sub-

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strates 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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