Technical Data Sheet Edition 1, 2007 Identification no. 02 05 01 01 015 0 000006 Version no. 0010 SikaBond® AT-Metal

SikaBond® AT-Metal

Special adhesive for the elastic bonding of metals

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| Product Description | SikaBond® AT-Metal is a one part, solvent-free, elastic adhesive and sealant for porous and non-porous substrates, particularly for metals. SikaBond® AT-Metal is based on Silane Terminated Polymers. |
| Uses | ■ SikaBond® AT-Metal is an adhesive for both internal and external sealing and bonding of metal façade- and roof elements, roof coverings, cover plates, metal sheets, seam sealing, sky lights, sealing of metal cladding etc. |
| | SikaBond® AT-Metal has strong adhesion on non-porous substrates, especially on metals (aluminium, copper, galvanized steel, stainless steel, etc), and many plastics (PVC, powder coatings, etc.) |
| Characteristics / Advantages | 1-part, ready to use. Very good adhesion without priming on many metals and non porous substrates. Good adhesion on porous substrates (i.e. concrete, roof tiles, mortar etc.) Excellent workability. Short cut off string. Good initial tack and fast curing. Non-corrosive. Good weathering and water resistance. Silicone free. Solvent free. |
| Tests | |
| Approval / Standard | ISO 11600 F 20% HM SKZ Würzburg |
| Product Data | |
| Form | |
| Colours | Copper, Light-grey |
| Packaging | 300 ml cartridges (12 cartridges per box) |
| Storage | |
| Storage Conditions / Shelf-Life | 9 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 | | |
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| Chemical Base | 1-part Silane Terminated Polymers (PU-Hybrid technology, mo | oisture curing) |
| Density | ~ 1.35 kg/l | (DIN 53 479) |
| Skinning Time | ~ 30 minutes (+23°C / 50% r. h.) | , |
| Curing Rate | ~ 3 mm / 24h (+23°C / 50% r. h.) | |
| Joint Dimensions | 10 mm min. width | |
| | 35 mm max. width | |
| Sag Flow | 0 mm , very good | DIN EN ISO 7390) |
| Service Temperature | -40℃ to +90℃ | |
| Mechanical / Physical Properties | | |
| Shear Strength | ~ 1.15 N/mm2; 1 mm adhesive thickness (+23°C / 50% r.h.) | (DIN 52 283) |
| Tensile Strength | ~ 1.6 N/mm2 (+23℃ / 50% r. h.) | (DIN 53 504) |
| Tear Strength | ~ 5.5 N/mm2 (+23℃ / 50% r. h.) | (DIN 53 515) |
| Shore A Hardness | ~ 38 (after 28 days) | (DIN 53 505) |
| E-Modulus | 0.7 N/mm2 at 100% elongation (+23℃ / 50% r. h.) | (DIN EN ISO 8340) |
| Elongation at Break | ~ 420% (+23°C / 50% r. h.) | (DIN 53 504) |
| Elastic Recovery | > 70% (+23°C / 50% r. h.) | (DIN EN ISO 7389 B) |
| Resistance | | |
| Chemical Resistance | Resistant to water, seawater, diluted alkalis, cement grout and detergents. | I water dispersed |
| | Not resistant to alcohols, organic acids, concentrated alkalis a acids, chlorinated and aromatic hydro-carbons | nd concentrated |
| | Not or only short-term resistant to concentrated mineral acids, (kelones, esters, aromatics) and alcohol, lacquer and paint this and caustic solutions or solvents. | |
| | For detailed information contact our Technical Service Departs | ment. |
| System Information | | |
| Application Details | | |
| Consumption | Beaded / Cordon application for Bonding: | |
| Substrate Quality | ~ 44 ml per running meter (with triangular nozzle) Clean and dry, homogeneous, free from oils and grease, dust particles. Cement laitance, poorly adhering particles and incorbe removed. | |
| | Standard construction rules must be observed. | |
| Substrate Preparation / Priming | SikaBond® AT-Metal generally has strong adhesion to most cl substrates. For optimum adhesion and critical, high performan as multi story building work, for high stress bonding joints or in weather exposure substrate primers and cleaners must be use product in test area first. | ce applications such a case of extreme |
| | Non porous substrates: | |
| | E.g. metals, plastics, aluminium, polymers, etc. have to be cle abrasive pad and SikaCleaner®-205 by using a clean towel / 6 Before sealing allow a flash off time of at least 15 min max 6 For frequent water contact or constant high relative air humidit Sika® Primer-3 N for porous substrates (concrete, brick, etc.). | cloth. 3 hrs. |
| | For detailed instructions consult the Product Data Sheet for Si contact our Technical Service Department. | kaBond primers or |
| | Standard construction rules must be observed. | |



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| Application | |
| Conditions / | |
| Limitations | |
| Substrate Temperature | During application and until SikaBond® AT-Metal has fully cured the substrate |
| | temperature must be +5℃ min. and +40℃ max. |
| Ambient Temperature | +5℃ min. / +40℃ max. |
| Substrate Moisture | Dry |
| Content | |
| Relative Air Humidity | Between 30% and 90% |
| Application | |
| Instructions | |
| Application Method / | SikaBond® AT-Metal is supplied ready to use. |
| Tools | After substrate preparation apply SikaBond® AT-Metal in beads, strips or spots on the bonding surface at intervals of a few centimetres. Use hand pressure only 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 easily be unfastened and repositioned during the first few minutes after application. |
| | Optimum bond will be obtained after complete curing of SikaBond® AT-Metal. |
| Cleaning of Tools | Clean all tools and application equipment with Sika® Remover-208 immediately |
| | after use. Hardened / cured material can only be removed mechanically. |
| Notes on Application / Limitations | SikaBond® AT-Metal is not to be used for Façade panel bonding. For façade panels use the SikaTack-Panel System. |
| | For best workability the adhesive temperature should be > 15°C. Do not use SikaBond® AT-Metal as a glass sealer, on titan zinc, bituminous substrates, natural rubber, EPDM rubber or on building materials which might bleed oils, plasticizers or solvents which could attack the sealant. |
| | Before using on natural stone contact our technical service Department. For the correct curing of the adhesive sufficient relative humidity is necessary. Elastic adhesives should not generally be over painted. If there is over painting of the adhesive, surface cracking and higher tackiness plus |
| | slight colour variations can occur. The compatibility must be tested according to DIN 52 452-4. Colour variations 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. Do not use on PE, PP, Teflon and some plasticized synthetic materials (carry out pre-trials or contact our Technical Service Department). |
| 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 should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data. |



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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 product when properly stored, handled and applied under normal conditions in accordances 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.

Construction



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