

Sikaflex® AT-Connection

The Universal Construction Sealant for Perimeter and Connection Joints

Description Sikaflex® AT-Connection is a one-component, moisture-curing elastic sealant based on hybrid polyurethane. Ideal for connection and perimeter joints between porous and non-porous substrates, specifically PVC windows and doors. Sikaflex® AT-Connection is odourless and solvent-free, suitable for both interior and exterior use.

Where to Use Sikaflex® AT-Connection meets the requirements for all kinds of connection joints, window and door perimeter joints, joints, facade and metal cladding joints and many other construction and expansion joints. Ideal sealant for vinyl windows.

- Advantages**
- Capable of ± 25% joint movement.
 - Good primerless adhesion to most PVC profiles and vinyl.
 - Silicone-free and over-paintable.
 - Good adhesion on porous and non-porous substrates.
 - Primerless adhesion on many substrates.
 - Good UV resistance and colour stability, non-yellowing.
 - Odourless and solvent-free.
 - Very good workability, (low extrusion force, excellent tooling).
 - High mechanical properties.

Technical Data

Packaging	300 mL (10.1 fl. oz) cartridge, 12/case; 600 mL (20 fl. oz) sausage, 20/case			
Colour	White, Black (<i>sausages only</i>) Concrete Grey (<i>cartridges and sausages</i>)			
Yield	Linear Metre of Sealant per Litre		Linear Feet of Sealant per Cartridge	
Width	Depth	Depth	Depth	Depth
mm (in)	6 (¼)	13 (½)	6 (¼)	13 (½)
6 (¼)	24.8		24.4	
13 (½)	12.4	6.2	12.2	6.1
19 (¾)	8.3	4.1	8.2	4.0
Shelf Life	9 months in original, unopened packaging. Store dry between 10 and 25°C (50 and 77°F). Protect from direct sunlight.			
Properties at 23°C (73°F) and 50% R.H.				
Chemical Base	Hybrid polyurethane technology, moisture-curing.			
Substrate Temperature	5°C (40°F) min. / 40°C (100°F) max.			
Ambient Temperature	5°C (40°F) min. / 40°C (100°F) max.			
Substrate Humidity	Dry			
Tack-free Time	~ 60 min			
Curing Rate	> 2 mm / 24 hrs			
Final Cure	5 to 7 days			
Movement Capability	± 25 %			
Joint Dimensions	Minimum width = 6 mm (1/4 in) Maximum width = 30 mm (1 1/4 in)			
Sag Flow	0 mm (0 in) very good			
Service Temperature	-40 to 70°C (-40 to 158°F)			
Shore A Hardness	25 ± 5 after 28 days			
Elongation at Break (DIN 53 504)	~ 450%			
Elastic Recovery	> 70%			
Tensile Strength	1.3 MPa (189 psi)			

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.



How to Use

Surface Preparation

Sikaflex® AT-Connection generally has strong adhesion to most clean, sound substrates. All joint surfaces must be clean, sound, dry and frost-free. Joint walls must be free of oils, tar, asphalt, bitumen, grease, paints, coatings, sealers, curing compound residues, and any other foreign matter that might prevent adhesion. Install bond breaker tape or backer rod to prevent bond at base of joint. PVC and metal substrates should be cleaned with Sika® Cleaner 205 to remove all oils and other residues.

Application

Recommended application temperatures: 5 to 40°C (40 to 100°F). For cold weather application, condition units at approximately 21°C (70°F); remove prior to using. For best performance, Sikaflex® AT-Connection should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction. Place nozzle of gun into bottom of the joint and fill entire joint. Keep the nozzle in the sealant, continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air. Tool as required. Joint dimension should allow for 6 mm (1/4 in) minimum and 13 mm (1/2 in) maximum thickness for sealant. Proper design for moving joints is 2:1 width to depth ratio. For use in horizontal joints in traffic areas, the absolute minimum depth of the sealant is 13 mm (1/2 in) and closed cell backer rod is recommended. Tool as necessary.

Clean Up

Uncured material can be removed from equipment and tools using Sika® Equipment Cleaner. Cured material can only be removed manually or mechanically. For removal of uncured material from hands and sensitive surfaces, use Sika® Hand Cleaner towels.

Limitations

- Colour deviations may occur due to exposure to chemicals, high temperatures, or UV radiation. However, a change in colour will not adversely influence the technical performance or the durability of the product.
- If there is painting of the sealant, surface crazing and higher tackiness as well as slight colour variation can occur.
- For correct curing of the sealant, sufficient relative humidity is necessary.
- Before using on natural stone, contact our Technical Service Department.
- Do not use Sikaflex® AT-Connection as a glass sealer, on materials or surfaces impregnated with, or containing, oil, asphalt, tar or bituminous substances, on natural rubber, EPDM rubber or on building materials which might bleed oils, plasticizers or solvents which could attack the sealant.
- Do not apply or cure in the presence of uncured silicone sealants, alcohol and other solvent cleaners.
- Do not use Sikaflex® AT-Connection to seal swimming pools.
- Not suitable for joints under water pressure or permanent water immersion.
- Although applying sealants over paints, sealers or coatings is not recommended within the industry, where it cannot be avoided, it is always necessary to test for adhesion. It should also be recognized that the existing paint, sealer or coating will dictate bond values and possibly the integrity of a subsequently applied sealant and thus the performance of the joint.

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.

**KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY**

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, within their shelf life. 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 recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under www.sika.ca.

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