Construction

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

- Good primerless adhesion to most PVC profiles and vinyl.
- Movement capability ± 25 %.
- 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 oz) cartridges (12 cartridges/case), 600 mL (20 oz) sausages (20 sausages/case).			
Colour	White, Concrete Grey and Black. Other colours available on special request.			
Yield	Linear Meter of Sealant per Liter		Linear Feet of Sealant per Cartridge	
Width	**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 at 10° - 25°C (50° - 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	5ºC (40ºF) min. / 40ºC (100ºF) max.
Ambient Temperature	5ºC (40ºF) min. / 40ºC (100ºF) 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 = 10 mm (1/4 in) Maximum width = 35 mm (1 1/4 in)
Sag Flow	0 mm (0 in) very good
Service Temperature	-40º to 70ºC (-40º to 158ºF)
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)

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How to Use

Substrate Preparation

Sikaflex® AT-Connection generally has strong adhesion to most clean, sound substrates. Clean all surfaces. Joint walls must be sound, clean, dry, frost-free, and free of oil and grease. Curing compound residues and any other foreign matter must be thoroughly removed. 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: 5º - 40ºC (40° - 100°F). For cold weather application, condition units at approximately 21ºC (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

Avoid direct contact. Uncured material can be removed from tools and equipment using a suitable solvent. Follow solvent manufacturer's warning and instructions for use. Cured product can only be removed mechanically. Wash thoroughly with soap and water after handling. Do not use solvents! Ventilate area and collect spill. If ventilation is poor, use properly fitted NIOSH respirator. Contain spill and collect with absorbent material. Dispose of excess product and container in accordance with applicable environmental regulations.

Limitations

- If there is overpainting of the sealant, surface cracking and higher tackiness as well as slight colour variation can occur.
- 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.
- 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 bituminous substrates, natural rubber, EPDM rubber or on building materials which might bleed oils, plasticizers or solvents which could attack the sealant.
- Do not use Sikaflex® AT-Connection to seal swimming pools.
- Not suitable for joints under water pressure or permanent water immersion.

Caution

Contains Trimethoxyvinysilane (CAS 2768-02-7). May cause eye/skin/respiratory irritation. Maybe be harmful if swallowed.

First Aid

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes; contact physician. For respiratory problems, remove to fresh air. In case of ingestion, dilute with water and do not induce vomiting; contact a physician. Wash clothing before re-use. Discard contaminated shoes

For more information, consult Sika Material Safety Data Sheet.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

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