

SikaTack® Panel-50

Panel adhesive for ventilated facades

Typical Product Data

Chemical base	1-C silicone
Color (CQP ¹ 001-1)	Grey
Cure mechanism	Moisture-curing
Cure type	Neutral
Density (uncured) (CQP 006-4)	1.37 kg/l
Non-sag properties (CQP 061-4 / ISO 7390)	1 mm
Application temperature	5 – 40 °C
Skin time ² (CQP 019-2)	15 minutes
Tack-free time ² (CQP 019-1)	180 minutes
Curing speed (CQP 049-1)	See diagram 1
Shore A-hardness (CQP 023-1 / ISO 868)	40
Tensile strength (CQP 036-1 / ISO 37)	2.2 MPa
Elongation at break (CQP 036-1 / ISO 37)	480 %
Tear propagation resistance (CQP 045-1 / ISO 34)	7 N/mm
100% modulus (CQP 036-1 / ISO 37)	0.9 MPa
Tensile lap-shear strength (CQP 036-2)	1.7 MPa
Movement accommodation (ASTM C 719)	± 25%
Service temperature (CQP 513-1)	-40 – 150 °C
	4 hours 180 °C
	1 hour 200 °C
Shelf life (CQP 016-1)	storage below 25°C 9 months

¹⁾ CQP = Corporate Quality Procedure

²⁾ 23°C (73°F) / 50% r.h.

Description

SikaTack® Panel-50 is a non-corrosive one part neutral-curing silicone adhesive which combines mechanical strength with excellent elasticity.

SikaTack® Panel-50 is part of a system for the economic, concealed fixing of ventilated facades. With the SikaTack® Panel system, facade panels are invisibly attached to their substructure.

Product Benefits

- 1-part product, ready to use
- Elastic, accommodates thermal movements
- Withstands high dynamic stresses
- Approved for permanent dead-load transfer
- Vibration and movement absorbing fixing system
- Provides creative opportunities for facade design
- Uniform load-transfer (no stress points)
- Weathering resistant
- Bonds well to a wide variety of substrates

Areas of Application

SikaTack® Panel-50 is suitable for structural joints in ventilated facades between the vertically installed substructure and the facade panel that will be subjected to dynamic and static stresses. Suitable substrates are aluminum (incl. anodized), wood, fiber cement, ceramic materials, glass and plastics. Seek manufacturer's advice before using on plastics that are prone to stress cracking. This product is suitable for experienced professional users only. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.



Cure Mechanism

SikaTack® Panel-50 cures by reaction with atmospheric moisture. The reaction thus starts at the surface and proceeds to the core of the joint. The curing speed depends on the relative humidity and the temperature (see diagram 1). Heating above 50 °C to speed-up the vulcanization is not advisable as it may lead to bubble formation. At low temperatures the water content of the air is lower and the curing process proceeds more slowly.

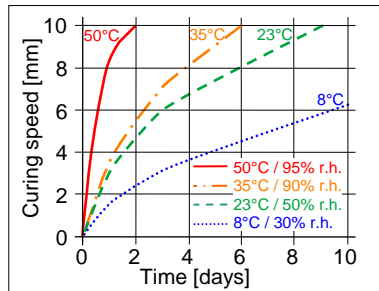


Diagram 1: Curing speed for SikaTack® Panel-50

Chemical Resistance

SikaTack® Panel-50 is resistant to fresh water, seawater, aqueous cleaning solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, alcohol, concentrated mineral acids, caustic solutions and solvents.

The above information is offered for general guidance only. Advice on specific applications will be given on request.

Method of Application

Surface preparation

Surfaces must be clean, dry and free from all traces of grease, oil and dust.

Advice on specific applications is available from the Technical Department of Sika Industry.

Application

To ensure uniform thickness of adhesive when compressed, we recommend applying the adhesive in the form of a triangular bead. In order to guarantee a minimum bead dimension of 12 x 3 mm it is to cut the nozzle approx. 10 x 8 mm (see figure 1). For best results use the triangular nozzle supplied. Do not apply at temperatures below 5 °C or above 40 °C. The optimum temperature for substrate and adhesive is between 15 °C and 25 °C. We recommend the use of a compressed air piston type application gun.

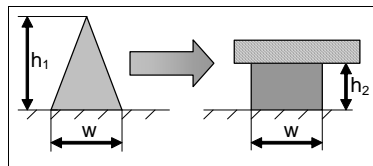


Figure 1: Recommended bead configuration

Removal

Uncured SikaTack® Panel-50 may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.

Hands and exposed skin should be washed immediately using Sika® Handclean towels or a suitable industrial hand cleaner and water. Do not use solvents!

Overpainting

SikaTack® Panel-50 is an elastic adhesive and cannot be overpainted.

Further Information

Copies of the following publications are available on request:

- Safety Data Sheet

Packaging Information

Unipack	600 ml
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Bases 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.

Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Disclaimer

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.

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