

PRODUCT DATA SHEET

SikaTack® Panel-50

1-component silicone for panel bonding in ventilated facades

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	1-component silicone
Color (CQP001-1)	Grey
Cure mechanism	Moisture-curing
Density (uncured)	1.4 kg/l
Non-sag properties (CQP061-4 / ISO 7390)	Good
Application temperature	ambient 5 – 40 °C
Skin time (CQP019-1)	25 minutes ^A
Curing speed (CQP049-1)	(See diagram)
Shore A hardness (CQP023-1 / ISO 7619-1)	38
Tensile strength (CQP036-1 / ISO 527)	2.1 MPa
Elongation at break (CQP036-1 / ISO 37)	450 %
Tear propagation resistance (CQP045-1 / ISO 34)	7 N/mm
Service temperature	-40 – 150 °C
Shelf life (CQP016-1)	9 months ^B

CQP = Corporate Quality Procedure

^A) 23 °C / 50 % r. h.^B) storage below 25 °C
DESCRIPTION

SikaTack® Panel-50 is a non-sag, 1-component silicone of paste-like consistency for structural joints in ventilated facades and interior wall cladding between the vertically installed sub-structure and the panel that will be subjected to dynamic and static stresses and elevated facade temperatures. It cures on exposure to atmospheric humidity to form a durable elastomer. SikaTack® Panel-50 is part of the SikaTack® Panel system for the economic, concealed fixing of ventilated facades.

PRODUCT BENEFITS

- Elastic fixing system, vibration and movement absorbing
- Provides creative opportunities for facade design
- Withstands high dynamic and static stresses and elevated facade temperatures
- Uniform tension over the whole facade panel (no stress points)
- 1-component product, ready to use
- Outstanding UV and weathering resistance
- Bonds well to a wide variety of substrates

AREAS OF APPLICATION

SikaTack® Panel-50 is suitable for structural joints in ventilated facades and cladded interior walls between the vertically installed sub-structure and the facade panel that will be subjected to dynamic and static stresses and even elevated facade temperatures. Suitable substrates are anodized and coated aluminum, glass, metal composite, high pressure laminate and ceramic materials.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

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CURE MECHANISM

SikaTack® Panel-50 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat slower (see diagram 1).

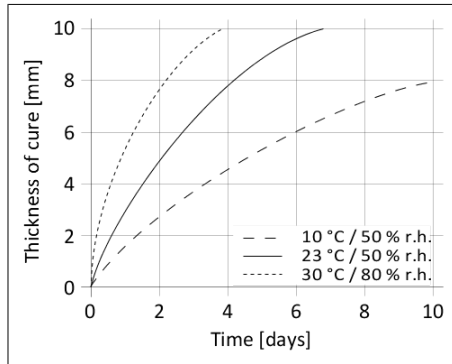


Diagram 1: Curing speed SikaTack® Panel-50

METHOD OF APPLICATION

Surface Preparation

Surfaces must be clean, dry and free from grease, oil and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond.

Application

The standard geometry for bonding façade panels is at least 12 x 3 mm. The supplied nozzle (10 x 8 mm) ensures proper dimension of the compressed bead (see figure below).

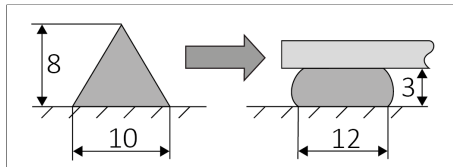


Figure 1: Recommended bead configuration

The optimum temperature for substrate and adhesive is between 15 °C and 25 °C. Do not apply at temperatures below 5 °C or above 40 °C.

To avoid condensation on the surfaces, the temperature of the bonding components (e.g. façade panels, sub-frames) must be at least 3 °C higher than the dew point of the air.

The skin time is significantly shorter in hot and humid climate. The panel must always be installed within 75 % of the skin time determined under local climate conditions (see General Guideline "SikaTack® Panel System"). Never join bonding parts if the adhesive has built a skin. SikaTack® Panel-50 can be processed with hand, pneumatic or electric driven piston guns.

Removal

Uncured SikaTack® Panel-50 can 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 have to be washed immediately using hand wipes such as Sika® Cleaner-350H or a suitable industrial hand cleaner and water.

Do not use solvents on skin.

Application Limits

SikaTack® Panel-50 used for panel bonding is always used in conjunction with SikaTack® Panel Fixing Tape. SikaTack® Panel Fixing Tape ensures the correct joint thickness and keeps the bonded panels initially in place. By curing SikaTack® Panel-50 builds up strength and takes over the long-term load bearing.

SikaTack® Panel Fixing Tape is not a structural component.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

- Safety Data Sheets
- General Guideline SikaTack® Panel System

PACKAGING INFORMATION

Cartridge	300 ml
Unipack	600 ml

BASIS OF PRODUCT DATA

All technical data stated in this document 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 enduse 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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