

SikaTack® -Panel

The mounting system for ventilated façade panels

Description The SikaTack-Panel System is an adhesive system for economic, concealed mounting of ventilated façade panels.

The system consists of the permanently-elastic adhesive SikaTack-Panel and SikaTack-Panel-fixing tape, adhesive on both sides, for attaching panels as well as the corresponding products for pre-treating the substrates. With the SikaTack-Panel-System, façade panels are invisibly attached to normal substructures.

Uses Concealed attachment of ventilated façade panels for the following areas:

- Residential and commercial buildings
- New buildings and renovations
- Interior finishing work

Generally suitable are:

- Trespa Meteon
- Max Exterior
- Plastica (subject to preliminary test)
- Abet (subject to preliminary test)
- Resoplan
- Alucobond
- Megaceram
- Perstop Exteriör (subject to preliminary test)

If new or other untested panels are used, they must be checked first .

Project-related DIN A4-size specimen panels must be sent to our technical department in good time.

Advantages

- General approval from Construction Supervision, Germany „ Deutsches Institut für Bautechnik“ Berlin, Reg. No.: Z-36.4-18
- 1-component products, ready to use
- Economical, rapid mounting
- Uniform tension over the whole façade panel
- Resistant to weather and ageing
- Movement-absorbing fixing
- Free and creative look for façades
- Aesthetic, easy-to-maintain façade surfaces, free of irregularities
- Silicon-free



System components

SikaTack-Panel Technical characteristics:

	Characteristic values	Remarks
Chemical basis	1-comp. polyurethane, moisture curing	
Density	1.18 kg/l	DIN 53 479
Tensile strength	4.0 MPa	Stress failure DIN 53 504, DIN EN 1465
Tensile-shear strength	2.5 MPa	Failure stress, DIN EN 53 283
Application temperature	+ 5 to + 35°C	
Tack free time	20 mins.	23°C/ 50% r. h,
Curing speed	4 mm/24h	23°C/ 50% r. h,
Service temperature	- 40 to + 90°C	
Building-material class	B2 DIN 4102 part 1	
Colour	Ivory	

Packaging: Cartridges à 310 ml (12 cartridges per box) / Unipacs à 310 ml (12 cartridges per box)
Unipacs à 600 ml (20 unipacs per box)

Shelf life: 9 months, stored in original sealed containers and dry conditions at temperatures between + 10°C and + 25°C.

SikaTack-Panel pre-treatment products:

	SikaCleaner 205	SikaTack-Panel Primer
Chemical basis	Bonding agent in alcohol solution	Solvent-containing, pigmented epoxy resin formulation
Colour	Transparent, colourless	Black
Density (DIN 51 757)	0.8 g/cm ³	1.0 g/cm ³
Application temperature	+ 5°C to +35°C	
Flash point	+ 14°C	- 4°C
Packaging	1000 ml bottle	1000 ml bottle
Shelf life	12 months from date of production, stored in original sealed containers and dry conditions at temperatures between + 10°C and + 25°C	

SikaTack-Panel fixing tape:

A double-faced self-adhesive fixing tape is used for immediate fixation of façade panels until final curing of the actual adhesive SikaTack-Panel and to assure that the minimum film-thickness of the adhesive is 3 mm.

Characteristic values		Remarks
Chemical basis	Closed-cell polythene foam tape	
Colour	Black	
Dimension	12 x 3 mm	
Density	0.05 g/cm ³	DIN 51 757
Tensile strength	approx. 0.3 MPa	
Tensile-shear strength	approx. 0.3 MPa	
Application temperature	+5°C to + 35°C	
Service temperature	- 20°C to + 50°C	
Packaging	25 x 33 m rolls / carton	

Important

Long-term strength is provided by SikaTack-Panel adhesive. *It is not permissible to include the mechanical values of the tape in the calculation of strength applicable over the long term.* It must be applied onto the full length of the substructure.

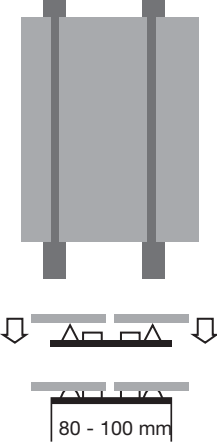
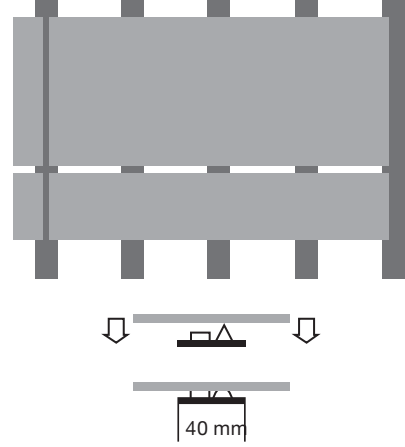
Planning

Aluminium substructure: Substructure approved by the construction supervisory authority (L, or T or H shapes or equivalent) consisting of the alloy AlMgSi 0.5 F 22 at least in accordance with DIN 1748-1.

Timber substructure: Perpendicular battens made of spruce or pine, planed, max. moisture in wood 15 % in accordance with DIN 1052. The adhesive area must be untreated and free of wood-treating agents. Any coatings on the surface must be removed with a 1 mm plane. The joints between the individual battens must be at least 1 cm.

Dimensioning: The dimensioning of the perpendicular substructure depends on the façade construction. The distances between the (substructure elements) and their width are determined by the static requirements and by the requirements arising from the information on the type of panel used.

Each construction project requires individual planning.

Construction examples	Single field	Multiple field
<p>Required width of substructure elements for applying SikaTack-Panel</p>		

The whole height of the façade panel must be glued.

Calculated permissible values of load-bearing capacity:

- Width of adhesive joint 10 mm
- Tensile stress: 0.15 MPa
- Shear stress: 0.15 MPa
(permissible reduction factor S = 1.0)

For correct dimensioning of the façade and for correct anchoring of the vertical **aluminium or timber substructure**, the known technical building regulations which are relevant are to be applied.

The vertical shaped aluminium sections or the wooden battens must be parallel and even in order to ensure uniform, force-free adhesion of the facade panels to all shaped sections and over the whole length of each shaped section. The joints of the vertical shaped substructure sections must not be glued over by façade panels.

Expansion joints:

The distances between the panels at the butt joint must be sufficiently wide to avoid compression of the panels in the case of maximum expansion due to thermal movement. The data of the panel manufacturer are to be complied with as well as the expansion coefficient of the substructure battens. At top and bottom edge of the project leave a sufficiently large opening for ventilation.

Performance

Application conditions

Bonding work can be carried out in a workshop or at site. The work must, however, be protected against weathering and dust.
During application, the air temperature must not fall below + 5°C or exceed + 35°C. The relative air humidity must not be more than 75 %. For 5 hours after mounting, the temperature should not fall below the minimum temperature of +5°C. The temperature of the building components to be bonded (facade panels, subconstruction) must be at least 3°C higher than the dewpoint temperature of the air in order to avoid the formation of condensation on the surfaces.
Applicators must have appropriate technical training.
Records must be kept.

Pre-treatment of adhesive surfaces

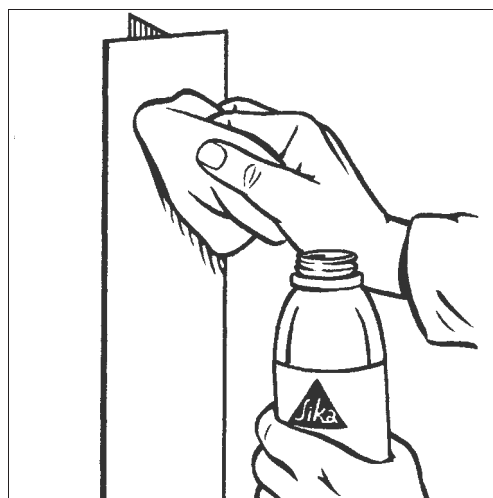
The adhesive surfaces must be clean, dry and free of oil and grease. After application of the primer, the surface to be bonded must be protected against dirt, dust, grease etc.

Aluminium substructure

Grind with grinding fleece (e.g. Scotch Brite very fine)

Aluminium substructure

- Clean the surface with a clean, grease- and fluff-free cellulose cloth or cleaning paper soaked in **SikaCleaner-205** by wiping the surface in one direction (dirty cloths must be replaced).
- Ventilation time 10 minutes.
- Shake the **SikaTack-Panel Primer** thoroughly (the steel balls in the container must be clearly audible).
- Apply one thin coat of **SikaTack-Panel Primer** uniformly all over the surface by brush or felt
- Ventilation time at least 30 minutes, maximum 8 hours



Timber substructure

- Remove dust
- Shake **SikaTack-Panel Primer** thoroughly (the steel balls in the container must be clearly audible).
- Apply one thin coat of **SikaTack-Panel Primer** uniformly over the whole surface with a brush or felt.
- Ventilation time at least 30 minutes, maximum 8 hours.

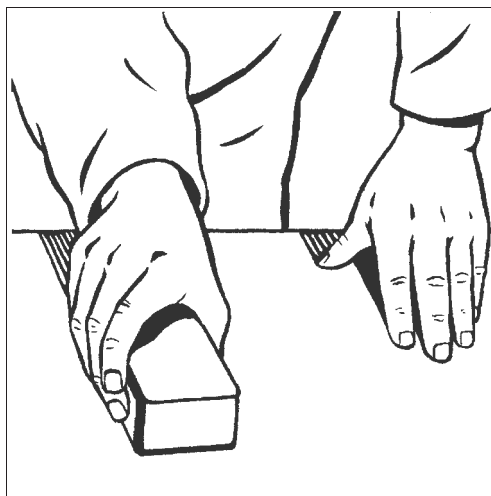


Caution

Don't use cloudy or whitish Sika Cleaner 205 or gelled or non-homogeneous Primer anymore. Fully-cured Primer can only be removed mechanically. Sika Cleaner 205 leaves a cloudy film. Only treat the adhesive surface. Under all circumstances minimum ventilation times for Sika primers and cleaners must be complied to. Splashes on visible surfaces must be removed immediately with a clean cloth or cleaning paper

Pretreatment of façade panels

- The adhesive surfaces must be clean, dry and free from grease.
- Manual grinding with grinding fleece (e.g. Scotch Brite very fine) or mechanical grinding of the surfaces to be bonded with an eccentric grinder, grain 80.



- Clean the adhesive surface with a clean, grease-free and fluff-free cloth or cleaning paper soaked in **Sika Cleaner-205** by wiping in one direction (dirty cloths must be replaced)
- Ventilation time 10 minutes.
- CAUTION: Contamination on the adhesive surface of the large MEGACERAM ceramic tiles must be removed with a cloth and
- **Sika Colma Cleaner**, ventilation time 10 minutes.

Ceramics and cementitious panels do not clean with Sika Cleaner-205.



- Shake **SikaTack-Panel Primer** thoroughly (the steel balls in the container must be clearly audible).
- Apply one thin coat of **SikaTack-Panel Primer** uniformly over the whole surface with a brush or felt.
- Ventilation time min. 30 minutes, max. 8 hours.

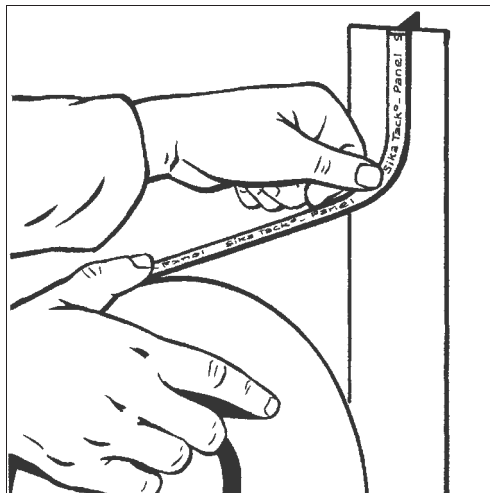
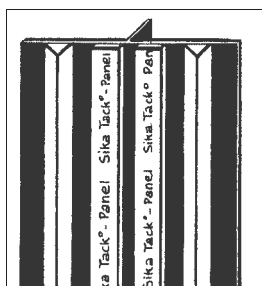
Please comply to the information provided by the panel manufacturer with regard to storage (prevention of distortion). Prior to bonding the panels avoid exposure to direct sun light.



Important: This are just general pretreatment instructions for each type of façade panel are differences possible.

Bonding

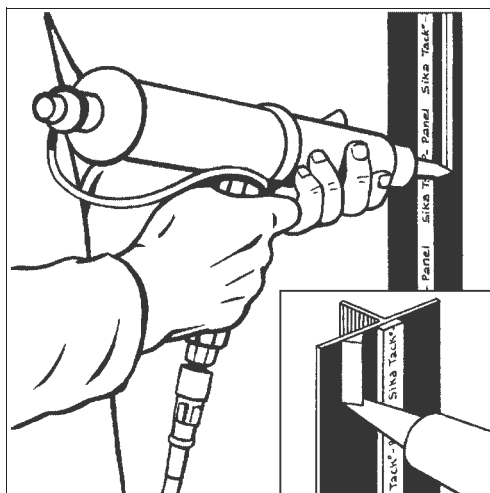
- Apply **SikaTack-Panel fixing tape** over the whole length of the vertical shaped sections and parallel to the edges. Do not pull off the protective foil yet.



– Application of adhesive

SikaTack Panel as a triangular bead by means of the supplied triangular nozzle (width 8 mm, height 10 mm) in at least 5 mm distance to the fixing tape and the side edge of the shaped section.

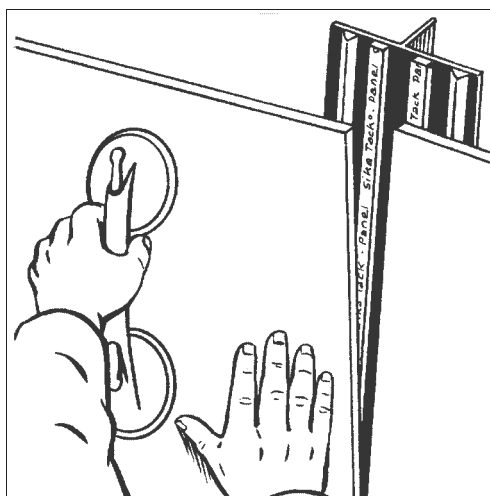
Application with Sika hand-pressure gun or Sika compressed-air gun



– Panel mounting

Remove the protective foil of the SikaTack Panel fixing tape. Place the façade panel to be fixed in the required position on the adhesive bead without the façade panel touching the fixing tape. In order to simplify mounting, the panels can be placed on aligned rulers or setquares. Position the façade panels exactly and press them firmly on until they contact the SikaTack Panel fixing tape.

Mounting of the panels must be completed within 10 minutes after application of the adhesive on the shaped sections



Removal of adhesive remnants

For cleaning tools and in order to remove not fully cured adhesive, we recommend Cleaning Agent-5 or Sika Colma-Cleaner. Fully cured adhesive can only be removed mechanically.

Material consumption

Material	Application	Consumption
Sika Tack -Panel Cartridge à 310 ml Unipac à 600 ml	Triangular bead 8 x 10 mm	~ 44 ml/m ¹ , corresponds to 7 m ¹ /cartridge, 13 m ¹ / unipac
SikaCleaner 205 250 ml bottle 1000 ml bottle	Width 50 mm	~ 3,5 ml/m., corresponds to ~ 285 m ¹ /1000 ml bottle
SikaTack-Panel Primer 1000 ml bottle	Width 50 mm	~ 8 ml/m ¹ , corresponds to 125 m ¹ /1000 ml bottle
SikaTack-Panel Fixing Tape Roll à 33 m		1m ¹ /1m.

Precautionary measures/ Disposal

Detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the safety data sheets.

Local regulations as well as health and safety advice on containers must be observed.

In liquid state the products as well as the Thinner contaminate water and should not get into drains, water or ground.

In any case remnants of thinner and material must be removed according to local regulations. Fully cured material can be disposed of as household waste.



Sika Egypt for Construction Chemicals
El Abour City
1st industrial zone (A)
Section # 10 Block 13035
Tel.: +202-46100714/15/16/17/18
Fax: +202-46100759
Mob: +2012-3908822/55
www.sika.com.eg



Sika - Construction Chemicals
from Switzerland - For the World

Facade