System Product Data Sheet
Edition 25/01/2006
Identification no:
02 05 01 09 001 0 000002
SikaPlan® FJ-System

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Vapour control / waterproofing system for ventilated facades

System Description

The SikaPlan® FJ-system is used to provide vapour control layers and waterproof barriers for ventilated facades.

Uses

For ventilated façades:

The flexible SikaPlan® FJ membranes are fixed between structure and the installed cladding units (or windows etc.) using SikaBond®-FJ adhesive. This provides a secure and durable vapour control and waterproof seal. SikaPlan® FJ membranes are used for wide movement and connection joints, which must be watertight in:

- Residential and commercial buildings etc..
- New construction and refurbishment projects.

Characteristics / Advantages

- Fast and secure application.
- Very easy to apply.
- Very flexible membrane.
- No pre-treatment of membrane and substrates.
- Good adhesion on substrate and membrane.
- Alternative membrane grades available.
- Suitable for use on uneven substrates.
- Adjustment of membrane possible until 30 min. after fixing.
- Ideally suited for use in site conditions.
- No additional mechanical fixings necessary.

Tests

Approval / Standards

SikaPlan FJ-05 and SikaPlan FJ-70
DIN 4102, Part 1, Building material class B2
Water vapour transmission according to DIN 53122-1

Product Description

SikaPlan® FJ-05 and SikaPlan® FJ-70

Uses

- SikaPlan® FJ membranes are fibre reinforced and they provide vapour control layers and waterproof barriers for ventilated facades.

Form	SikaPlan® FJ-05	SikaPlan® FJ-70
Colours	Anthracite	Anthracite
Packaging	Roll of 25 m Width: From 10 cm up to 50/ 130 cm (10/ 15/ 20/ 25/ 30/ 35/ 40/ 45/ 50/130)	Roll of 25 m Width: From 10 cm up to 50/130 cm (10/ 15/ 20/ 25/ 30/ 35/ 40/ 45/ 50/130)

Storage

Storage Conditions / Shelf Life	Unlimited if stored properly in undamaged original sealed containers, in dry conditions and protected from direct sunlight at temperatures between +10°C and +25°C.

Technical Data	**SikaPlan® FJ-05**	**SikaPlan® FJ-70**
Chemical Base	Elastic EPDM fibre reinforced.	Elastic Butyl fibre reinforced.
Areal Weigth	420 g/m^2	600 g/m^2
Thickness	0.35 mm	0.45 mm
Density	1.45 g/cm^3	1.50 g/cm^3
Diffusion Resistance Coefficient μ	12 887	145 850
Equivalent Air Layer Thickness s_d -Value	~ 5 m	~ 70 m
Fire Rating	B2	B2
Service Temperature	-40°C to +90°C	-40°C to +90°C

Mechanical / Physical Properties	**SikaPlan® FJ-05**	**SikaPlan® FJ-70**
Elongation at Break	Longitudinal: 20% Transverse: 180%	Longitudinal: 20% Transverse: 180%
Tear Propagation Resistance	Longitudinal: 20 N/mm Transverse: 12 N/mm	Longitudinal: 17 N/mm Transverse: 16 N/mm

Resistance	**SikaPlan® FJ-05**	**SikaPlan® FJ-70**
Ozone Resistance	Good	Good

System Information

Application Conditions / Limitations	**SikaPlan® FJ-05**	**SikaPlan® FJ-70**
Ambient Temperature	+5°C to +40°C	+5°C to +40°C

Product Description — SikaBond®-FJ

Uses	■ 1-part adhesive designed for the SikaPlan®-FJ System.

Form

Colour	Dark grey
Packaging	600 ml unipacs, 20 sausages per box.

Storage

Storage Conditions / Shelf -Life	12 months from date of production if stored properly in undamaged original sealed containers in dry conditions and protected from direct sunlight at temperatures between +10°C and +25°C.

Technical Data

Chemical Base	1-part Polyurethane, moisture curing.	
Density	1.30 kg/l	(DIN 53 479)
Skinning- / Laying Time	60 min. (+23°C / 50r. h.)	
Curing Rate	3 mm/24h (+23°C / 50 r. h.)	

Service Temperature	-40°C to +70°C

Mechanical / Physical Properties

Tear Strength	~ 7.0 N/mm^2	(DIN 53 515)
Shore A Hardness	~ 40 after 28 days (+23°C / 50% r. h.)	(DIN 53 505)
E-Modulus	~ 0.7 N/mm^2	(DIN EN ISO 8340)
Elongation at Break	~ 400% (+23°C / 50% r. h.)	(DIN 53 504)
Elastic Recovery	> 70% (+23°C / 50% r. h.)	(DIN EN ISO 7389 B)

System Information

System Structure	**The system configuration as described must be fully complied with and may not be changed.**

Application Details

Consumption / Dosage

Material	Application	Consumption
SikaBond®-FJ Unipac 600ml	Triangular bead 8 x 10 mm	~ 44ml / m^1, corresponds to 13m^1 / Unipac 600 ml
SikaPlan® FJ		1m^1 / m^1

Substrate Quality	Clean and dry, homogeneous, even, free from oils and grease, dust and loose or friable particles. Paint, cement laitance and any other contaminants must be removed.
Substrate Preparation	For adhesion no priming is required. Clean surface by brush and/or vacuum.

Applications Conditions / Limitations

Substrate Temperature	During application and until SikaBond®-FJ has fully cured the substrate must be +5°C min. and +35°C max.
Ambient Temperature	+5°C min. / +35°C max.
Substrate Humidity	Dry
Relative Air Humidity	Between 30% and max. 90%.
Dew Point	The substrate must be at least 3°C above dew point to reduce the risk of condensation.

Application Instructions

Application Method / Tools

SikaPlan® FJ-05 and SikaPlan® FJ-70

For correct application the following tools are required: caulking gun, protective gloves, carpet knife, spatula and a plastic roller.

Protect visible areas from contamination by the adhesive etc. with masking tape.

Apply SikaBond®-FJ adhesive to the structure with a caulking gun.

Spread adhesive bead with a spatula to a thickness of about 1 mm. On the frames the levelled adhesive should be between 2 to 3 cm wide and on the structure side the adhesive should be spread to a width of 4 to 5 cm.

Form the SikaPlan® FJ membrane into a loop. Press the membrane into the adhesive. Overlaps have to be at least 10 cm and sealed with SikaBond®–FJ.

Press the SikaPlan® FJ membrane firmly into the adhesive using a plastic roller. The membrane must be fully bonded for a width of at least 4 cm.

Bed the SikaPlan® FJ membrane edges in excessive adhesive using a spatula.

The newly bonded membrane can be finally adjusted for up to 30 minutes after installation if necessary.

Cleaning of Tools

Clean all tools and application equipment with Sika® Colma-Cleaner / Sika® TopClean-T immediately after use. Hardened/cured material (adhesive) can only be mechanically removed.

Notes on Application / Limitations	This product should only be used by trained and experienced contractors. SikaPlan® FJ-70 is in generally applied on the building side with higher vapour pressure (warmer building side). SikaPlan® FJ-05 is generally applied on the building side with lower vapour pressure (cooler building side). Ensure adequate provision of insulation (mineral wool or similar) within the joint prior to sealing to prevent thermal bridging or internal condensation. Design details should be confirmed by the responsible engineer. SikaPlan® FJ-05 SB and SikaPlan® FJ-70 SB are not resistance to mineral oils, petroleum, benzene, fuel, and toluene etc. SikaPlan® FJ is not suitable for permanent immersion or where there will be standing water.
Notes	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.
Local Restrictions	Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

Health and Safety Information

Protective Measures	To avoid rare allergic reactions, we recommend the use of protective gloves. Change soiled work clothes and wash hands before breaks and after finishing work. During application and curing in closed rooms, pits and shafts, etc., sufficient ventilation must be provided. Uncured material is water pollutant and must not be discharged into drains drainage systems or the ground water, waterways or the ground. Local regulations as well as health and safety advice on packaging labels must be observed.
Important Notes	Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities. Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the material safety data sheet.

Legal Notes

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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