TKK
PU FIX

FLAT ROOF ADHESIVE (gun grade)

ONE-COMPONENT LOW-EXPANDING POLYURETHANE ADHESIVE FOR BONDING OF INSULATION PANELS ON FLAT AND SLOPED ROOFS

FEATURES AND BENEFITS

- FLAT ROOF ADHESIVE is a polyurethane adhesive specially designed for thermal-insulation panel bonding (polystyrene, stone wool, polyurethane) to flat and sloped roofs.
- To be applied using a mounting gun Hardens with air humidity.
- Precise adhesive dosage and fast hardening enables a faster completion of finishing works and economical consumption.
- Mounting with polyurethane adhesives is cheaper, more precise, and faster compared to cement adhesives.
- The joint is safe and durable.
- A layer of polyurethane adhesive under the insulation panel provides additional thermal insulation.

TESTS AND CERTIFICATES

EN 13501 - 1	B - s1, d0
GEV-EMICODE	EC-1 PLUS (very low emission)

It complies with EAD 030351-00-0402. Given the results on testing the resistance to wind loads based on DIN EN 16002 (the test was carried out by I.F.I. Aachen) (tested load cycles of 5500 N/m2)

FIELD OF APPLICATION

The polyurethane adhesive is used for thermal-insulation panel bonding (polystyrene, stone wool, polyurethane) to flat and sloped roofs.

USAGE INSTRUCTIONS

Apply at least 3 evenly spaced horizontal lines of the adhesive to 1 m^2 of insulating material. The width of individual lines must be at least 30 mm. At the ends of the panels, the distance of the lines from the edge must not be less than 3–5 cm. After application, the panels can be adjusted for additional 10–15 minutes. The number of adhesive applications shall be in accordance with DIN 1055 Part 4, depending on the location and surface of the roof, the height of the building and the material to be adhered (see technical data sheet). Shake the can thoroughly before using it with the valve facing down and screw it

onto the gun using a black adapter. The release of adhesive is initiated by pressing the trigger. Set the desired adhesive outflow with the adjustable screw on the back of the gun. Always work with the can vertically and the valve pointing downwards for maximum efficiency. When changing the can, shake the new can thoroughly, remove the empty can, and immediately replace it with a new one, otherwise the PU adhesive in the adapter may solidify. In the event of a brief interruption in work, keep the can tight on the gun by tightening the screw on the back of the gun. If the work is interrupted for a longer time period, clean the fresh adhesive from the gun using the TKK PU FOAM CLEANER. The only way to remove the hardened adhesive from the gun nozzle and other surfaces is mechanically. The surfaces to which the adhesive is applied must be clean and free of dust and grease. Before application, it is recommended to moisten the surfaces with water, but only at temperatures above 0°C. The optimal can temperature during use is 20 – 25°C. One can suffices for installing 12–16 m^2 of insulation panels.

Resistance to wind loading per one line with a width of approx. 30mm is 0,5kN/m2 . Approx. 35ml of adhesive is used for one line. The number of line complies with DIN 1055, Part 4, depending on the region, type of roof surface, height of the building, as well as on the angles or edges of the material to be glued. Make an exact calculation of the wind pressure and thereto related amount of adhesive required. In the table below you can see how many number of lines of adhesive you should apply per m2 of surface. However, this is a simplified version and does not exclude the responsibility of the user to prepare a calculation of wind pressure and thereto related amount of adhesive required.

Height of the roof	**Interior (I)**	**Area of internal edge (H)**	**Area of external edge (G)**	**Angles (F)**
	No. of lines of adhesive/m	*No. of lines of adhesive/m*	*No. of lines of adhesive/m*	*No. of lines of adhesive/m*
Wind area 1, all categories of terrain				
Up to 20m	3	3	4	5
More than 20m	Special calculation	Special calculation	Special calculation	Special calculation
Wind area 2, categories of terrain 2 to 4				
Up to 12m	3	3	4	5
More than 12m to 20m	Special calculation	3	5	6
More than 20m		Special calculation	Special calculation	Special calculation
Wind area 3, categories of terrain 2 to 4				
Up to 12m	3	3	5	6
More than 12m to 20m	Special calculation	4	6	7
More than 20m		Special calculation	Special calculation	Special calculation

TECHNICAL DATA

Volume:		80 -90 linear meters (750 ml)
Adhesive density:	FEICA OCF TM 1019	12–16 kg/m^3
Application temperature:		max. +40°C (surface) +5°C do +25°C (can)
Tack free time:	FEICA OCF TM 1014	5–10 min.
Hardening time:		1,5–5 hours, depending on temperature and humidity
Temperature resistance:		–40°C to +90°C
Water absorption:	DIN 53428	max. 1 vol.%
Compressive strength:	FEICA OCF TM 1011	0.04–0.05 MPa
Tensile strength:	FEICA OCF TM 1018	0.15–0.18 MPa
Elongation at break:	FEICA OCF TM 1018	15–20%
Thermal conductivity:	DIN 52612	0.036 W/(m K) at 20°C
Flammability class:	DIN 4102-1	B - s1, d0

PACKAGING

750 ml aerosol can
other packing methods are available upon request

STORAGE

12 months (from +5°C to +25°C), even at lower temperatures (e.g. transport) for shorter periods. Higher temperatures shorten storage life. Store cans in an upright position.

HEALTH, SAFETY, HANDLING AND DISPOSAL INFORMATION

Additional safety information, safe handling instructions, information on personal protective equipment, and disposal information can be found in the safety data sheet. Safety data sheet available on request. You can also obtain a copy from your TKK sales representative.

WARNING

The information given is based on our tests and practical experience. However, due to specific conditions and working methods we recommend preliminary tests for each case of use.

FEICA is the Association of the European Adhesive and Sealant Industry and is a multinational association representing the European Adhesive and Sealant Industry.
All Feica standards for PU foam are available on:
http://www.feica.eu/our-industry/pu-foam-ocf/ocf-test-methods.aspx

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