

TEKAPUR ROOFING ADHESIVE (gun grade)

PROPERTIES

Tekapur Roofing Adhesive gun grade is a one-component low-expanding polyurethane adhesive suitable for fastening thermal insulation material onto flat and pitched roofs (polystyrene, mineral wool, polyurethane).

Advantages of Tekapur Roofing Adhesive compared to other methods of fastening:

- easy application;
- decreased consumption of material;
- economical;
- fast hardening, water tightness and resistance to low temperatures;
- fast progress of works;
- a layer of polyurethane adhesive under an insulation plate provides additional thermal insulation;
- it is watertight as due to its composition the maximum water absorption is 1%.

Given the results of testing method ETAG 006, 5.1.4.1, the product is resistant to wind loading (the test was carried out by I.F.I. in Aachen) (tested load cycles of 8000N/m²).

TESTS AND CERTIFICATES

- EN 13501 - 1 B - s1, d0
- GEV-EMICODE EC-1 PLUS (very low emission)
- Tested in accordance with ETAG - guidelines 006

USE

It is used for fastening thermal insulation materials onto flat and pitched roofs (polystyrene, mineral wool, polyurethane).

TECHNICAL DATA

Volume		80–90 linear metres (750ml)
Specific density of the adhesive	FEICA OCF TM 1019	12–16 kg/m ³
Application temperature		max. +40°C (surface) +5°C to +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		from -40°C to +90°C
Water absorption	DIN 53428	max. 1 vol.%
Compression strength	FEICA OCF TM 1011	0,04–0,05 MPa



Tekapur Roofing Adhesive gun grade is a low-expanding one-component polyurethane adhesive for rational, clean, economical, sustainable and safe fastening of thermal insulation plates onto flat and pitched roofs. It is applied with a gun. It is hardened by air humidity.



Fast hardening



Low post-expansion



Thermal insulation

Tensile strength	FEICA OCF TM 1018	0,15–0,18 MPa
Elongation at break	FEICA OCF TM 1018	15–25 %
Thermal conductivity	DIN 52612	0,036 W/(m K) at 20°C
Flammability class	EN 13501–1	B–s1, d0

APPLICATION

Surfaces should be dry, stable, firm and clean. Before applying the polyurethane adhesive, the surface should be moistened with water. Moist surfaces with thin layer of water or surfaces with standing water on them are not suitable. The optimal temperature of application is between 20 and 25°C.

Onto 1m² of insulation material at least three horizontal lines of polyurethane adhesive should be applied – equally apart from one another. Each line of the adhesive should be at least 30mm wide. Lines on the outer side should be at least 3–5cm from the edges of the board to be glued onto the surface. Adjusting the plates is possible 10–15 minutes after application of the adhesive.

Precise dosage contributes to lower consumption of the product. One can will enable you to glue approximately 8 to 12m² of insulation material. 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)
	<i>No. of lines of adhesive/m</i>	<i>No. of lines of adhesive/m</i>	<i>No. of lines of adhesive/m</i>	<i>No. of lines of adhesive/m</i>
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

Any rifts in the insulation material can be filled with Tekapur Roofing Adhesive. If the adhesive expands, cut the hardened adhesive using a sharp knife.

Surfaces should be clean, free of dust, grease and other impurities. Dry and porous surfaces should be moistened with water. The optimal temperature of can at work is room temperature. At lower temperature put the can into warm water with max. temperature of 40°C for about 20 minutes. Before use shake can thoroughly with the valve upside down.

Then screw the can onto the gun and press the trigger for about 2 seconds so that the gun is filled with polyurethane adhesive. During foam application hold the gun in vertical position. Apply pressure on the trigger to allow the outflow of the polyurethane adhesive. The output of the adhesive can be regulated with the adjustment screw on the back side of the gun. When replacing the can, shake the new can vigorously, unscrew the empty can and immediately replace it with a new one. The can replacement has to be fast to prevent the adhesive to harden in the adapter. Hardened polyurethane adhesive residues in front of the nozzle can be removed only mechanically. At short work interruptions the can can be left screwed onto the gun, but screw on the back side of the gun must be tightened. The can must be under pressure and at least half full, otherwise the adhesive will harden in the gun. At longer work interruptions, clean the gun with the Tekapur cleaner. If you do not use the entire can clean the valve with Tekapur Cleaner. Hardened adhesive can only be removed mechanically.

PACKAGING

- aerosol can of 750ml
 - other packagings are available by agreement
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STORAGE

18 months (from +5°C to +25°C) or at lower temperatures for shorter periods of time (e.g. during transport).

Higher temperatures shorten storage life.

Store the cans in an upright position.

HEALTH, SAFETY HANDLING AND DISPOSAL INFORMATION

Additional information on safety, safe handling instructions and personal protective equipment as well as disposal information are available in a safety data sheet. Safety data sheet is available upon request. You can also ask your TTK distributor for a copy.

WARNING

Instructions contained in this document are based on our research and experience, however, due to specific conditions and working methods we recommend that you perform preliminary tests prior to any application of our products.



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>