

TECHNICAL DATA SHEET

PENOSIL Polystyrol FixFoam 877

Foam adhesive for fixing insulation boards

Universal foam adhesive for various construction works indoors and outdoors. Usable all year around ensuring good results at temperatures from -5 up to +30 °C. Foam adhesive has great gluing and thermal insulation properties, low curing pressure and low post expansion. Adheres well to most materials like polystyrene, plasterboards, OSB, chipboard, wood, concrete, stone, metal and PVC.

Main benefits

- Great gluing properties
- Suitable for all season use, from -5 °C up to +30 °C
- Low curing pressure and post expansion
- For thermal and sound insulation
- Filling and insulating narrow joints
- Works in all weather conditions
- Strong structure
- Easier, faster, cleaner than traditional adhesive mortar

Fields of application

- Fixing of polystyrol insulation boards on facades and foundations
- Fixing of PIR insulation
- Adhering and installing SIP boards
- Fixing of interior design boards
- Fixing of windowsills
- Gluing of construction blocks
- Reducing the impact of thermal bridges

**Colour**

Orange.

Package

1000 ml aerosol can, content 750 ml, 12 pcs in a box.

Storage conditions and shelf life

Guaranteed shelf life is 12 months from production date if stored in unopened packaging in a cool and dry place at +5 °C to +30 °C. Do not expose to temperature over +50 °C, do not keep near heat sources or in direct sunlight. Store and transport in vertical position.

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Adhering

- Polystyrene
- PIR
- Plasterboards
- OSB
- Chipboard
- Wood
- Concrete
- Stone
- Metal
- PVC
- Ceramic

Technical classifications and certificates

- DIN 4102-1 B2 - reaction to fire test
- EOTA TR046- adhesion test
- EMICODE® EC 1 Plus - very low emission
- M1 - low emission & odour
- French VOC class A+

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Technical data

Properties	Value	Unit
Tack free time (EN 17333-3)	6..8	min
Cutting time (30 mm bead, EN 17333-3)	<30	min
Correction time	7	min
Load time	2	h
Dimensional stability (EN 17333-2, moistened surfaces)	<1	%
Temperature resistance of cured foam adhesive	-50...+90	°C
Fire class of cured foam adhesive (DIN 4102-1)	B2	
Thermal conductivity (EN 12667, EN 17333-5)	0,033	W/(m·K)
Sound reduction index R _{st,w} (EN ISO 10140)	62	dB
Post expansion (8 mm joint)*	<1,5	mm
Shear strength (8 mm)*	>47	kPa
Bond strength (8 mm)*	0,12	MPa
Bond strength (8 mm, at temp +5 °C)*	0,10	MPa
Bond strength (8 mm, at temp -5 °C)*	0,08	MPa
Average shear strength in masonry**	>0,43	MPa
Average compression strength in masonry**	>2,6	MPa

The values specified were obtained at +23 °C and 50% relative humidity, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrates.

* Tested according to EOTA TR046 - Test methods for foam adhesives for ETICS.

** Tested with autoclaved aerated concrete blocks. All tested specimens broke from the block.

Application instructions

Application conditions

Air temperature during use: -5 °C to +30 °C, best results at +20 °C.

Can temperature during application: +5 °C to +25 °C, best results at +20 °C.

Foam can has to be warmed with water or air (max. +30 °C) before starting work in low temperatures.

Surface preparation

The surfaces must be clean from dust, loose particles and grease. Moisten dry substrate to ensure better results.

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Application method

Application with foam gun: shake the can vigorously at least 20 times. Hold the foam can in upright position, turn the gun to the can by holding the gun handle with one hand, and turn the can with the other hand. Make sure that the gun is not pointed at other persons when turning it. The can must not be screwed to the gun with the valve upside down or by turning the gun on the can. The foam output can be adjusted by the gun trigger.

Instructions for gluing insulation boards and interior design boards: apply the foam adhesive to boards as an even flow, parallel with the sides of the board (3–4 cm from the edge) and one strip in the middle, parallel to the longest side (up to 25 cm between adhesive strips). After applying the foam adhesive to the board wait 2–3 min and then press the board to the wall. The level of installed boards can be adjusted within up to 5 minutes. Output (for 750 ml) when fixing insulation boards is 10 m² of wall surface. The foam adhesive has sufficient strength for fixing insulation boards. Always follow building design, building regulations, standards or other relevant guidelines concerning additional mechanical fastening when covering insulation boards with cladding materials. Use of insulation support anchors is always recommended.

In general, it is not recommended to use this product on bituminous surfaces. In some cases, e.g. fixing insulation boards on bitumen treated foundations before backfilling, the product has sufficient adhesion. Always test before use.

Fixing of windowsills: before fixing the windowsill make sure that the base surface is levelled. Spacers must be used to support the windowsill; foam can only be used as an adhesive. Apply foam adhesive to the base surface 3–4 cm from the edge. Weights must be used to fix the windowsill until the foam adhesive is cured.

Gluing of construction blocks: foam adhesive can be used for non-bearing interior walls. Consult a sales agent, a dealer or an architect regarding compatibility with various stone-based materials and other technical issues.

First row of blocks must be well levelled using mortar.

Substrate should be moistened as the foam cures due to moisture. A moistened surface ensures better results.

Foam adhesive should be applied to both vertical and horizontal surfaces. Wait for a few minutes after applying the foam adhesive and then press the stone surfaces together.

Foam adhesive can be used only in case even distribution of loads from block to block is ensured. Not suitable for distributing or carrying loads.

Cleaning

Use PENOSIL Foam Cleaner to clean tools and surfaces from uncured foam. Hands and clothes can also be cleaned from uncured foam with PENOSIL Cleaning Wipes. Remove cured foam mechanically after softening with PENOSIL Foam Remover.

Limitations

- Foam does not adhere to Teflon, polyethylene and silicon surfaces.
- Cured foam is sensitive to UV-light and direct sunlight and therefore must be covered with suitable opaque material.
- Due to the wide variety of possible substrates, we recommend a preliminary compatibility and adherence test. If necessary, prime surfaces to improve adhesion.
- Due to the wide variety of influences during and after application, the customer must always test the product first.
- Please observe the expiration date!

Safety regulations

Pressurized canister. Use only in well-ventilated areas. Do not smoke during application! Use protective gear when necessary. Keep out of the reach of children. See label and safety data sheet (SDS) for more information.

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Note: The instructions in the present documentation are based on tests carried out by the manufacturer and are presented in good faith. Due to variations in materials and substrates as well as the various application possibilities that are beyond our control, the manufacturer is not liable for the results achieved. In any case, it is recommended to test the product suitability at the place of application. Manufacturer reserves the right to modify products without prior notice.
This TDS replaces and supersedes all previous data sheets on the same product

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Wolf Group Head Office
Suur-Paala 10
13619 Tallinn
Estonia

Tel +372 605 9300
Fax +382 605 9315
info@penosil.com