# **PARAFOAM PANELGLUE NBS**



#### **CHARACTERISTICS**

- Foam adhesive
- One-component PU gunfoam
- Ready-to-use
- Excellent adhesion to almost all building materials
- Accurately controlled application with NBS gun
- CFC- en HCFC-free (ozone friendly)
- Extreme low curing pressure and post expansion
- Glued parts are chargeable after ± 2 hours
- Resistant to wind load

#### **APPLICATIONS**

- Bonding insulation panels based on polystyrene (XPS, EPS) and polyurethane (PUR, PIR) in external thermal insulation composite systems (ETICS).
- Bonding lightweight insulation panels: polystyrene-based (XPS, EPS) and polyurethanebased (light PUR and light PIR) in indoor applications (testing the adhesion in advance).
- Bonding of wall panels in indoor applications such as MDF, plasterboard boards, gyproc, composite sheets and OSB panels.
- Bonding of aerated concrete blocks in non-load bearing inner walls.
- Bonding of flat roof insulation on flat roof (warm roof).
- Filling joints and cavities between insulation panels (if not exposed to UV rays).
- Bonding of window sills.

TECHNICAL CHARACTERISTICS	
Type of product	Polyurethane-prepolymer
Shear strength (N/mm²)	0.047 (8 mm foam thickness - EOTA TR046-ETICS)
Tensile strength EPS on concrete at 23°C (N/mm²)	0.12 (8 mm Schaumdicke - EOTA TR046-ETICS)
Gluing capacity	Bonding of insulation panels and wall panels at $\emptyset$ 30 mm adhesive grill (where 40% of the panel surface is covered after pressing the panel): $\pm$ 8 - 12 m². Bonding of aerated concrete construction bricks for a non-load-bearing inner wall at $\emptyset$ 30 mm adhesive grill: Up to 12 m² wall surface.
Application temperature	-5°C - +30°C
Temperature resistance	-50°C - +90°C
Curing system	Reaction by humidity
Chargeable after	± 2 h
Temperature product when applying	+5°C - +25°C (ideal at 20°C)
Thermal conductivity: EN 12667, TM 1020 (W/mk)	0.034
Fire class: DIN4102-1	B2
Shelf life of unopened product	15 months
Storage conditions	Transport and store upright in a dry, cool place at +5°C to +30°C.

# **PACKING AND COLOURS**

12 x can 750ML/box - 672 pieces/pallet

Orange

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#### **METHOD OF USE**

#### **Preparation**

- Use in well-ventilated rooms. Good ventilation is important during application and curing of the product.
- It is recommended to carry out tests on every surface before use.
- Chilled cans must be warmed up in lukewarm water. The can must not be heated above +30°C. Cans which are too hot must be cooled in water. Shake the can occasionally during this process to obtain the required temperature faster.
- Check whether the substrate has sufficient bearing capacity. Check the adhesion of existing coatings. Non-load-bearing layers or loose parts must be removed. Pre-treat powdery surfaces with a suitable fixative.
- The surfaces must be free from dust and grease. Slightly moistening dry substrates promotes curing and adhesion.
- Wear gloves and safety glasses.
- Shake foam can vigorously at least 20 times before use.
- Keep the can in upright position when screwing onto the NBS gun. Move the gun to the can by holding the gun handle with one hand and screwing the can with the other hand. Do not turn the can during screwing.

# **Application**

- Hold the can upside down when extruding the foam. During application, a distance of 1-2 cm between the
  nozzle and the substrate must be maintained. The dispensing volume can be controlled by using the gun
  trigger and the adjustment screw.
- When filling deep joints, apply several layers of foam and moisten between the layers.
- Shake the can regularly during the procedure.
- Keep the PU foam can with the PU foam gun upright after use.
- Can also be applied without a foam gun, by using the EasyGun Adapter.

# Bonding of insulation panels in indoor applications and external thermal insulation composite systems (ETICS)

- Bonding of external thermal composite systems must be carried out only after the necessary preliminary study and knowledge. The insulation panels used must be suitable for external thermal insulation (see insulation panel manufacturer's instructions).
- Apply the adhesive foam in beads of at least 30 mm diameter along the edges of the panel (± 3 to 4 cm from the edge) and in the middle parallel to the longest side of the panel so that 40% of the surface is covered after pressing the panel down.
- After applying the adhesive foam to the insulation panel, wait 2-3 minutes and then press the panel onto the façade and bring it into the correct position.
- If additional mechanical fixing of the panels is necessary, this should be done immediately after the insulation panel has been installed on the façade.
- The adhesive foam will be tack-free after 5 minutes. If the adhesive foam is already tack-free before the panel has been installed on the façade, it must be reapplied.
- The insulation panels must be installed row by row from the bottom up to provide them with support. The insulation panels must be mitred at the corners. Please follow the panel manufacturer's instructions.
- During the curing process, the adhesive foam may expand a little. In that case, push the panel back slightly.
- After ± 2 hours, the adhesive foam will be sufficiently cured and work can proceed.

## Bonding of insulation panels: flat roof insulation

- The processing temperature must be at least +5°C.
- Bonding of flat roof insulation must be carried out only after the necessary preliminary study and prior
  knowledge for warm roof applications. The insulation panels used must be suitable for flat roof insulation (see
  insulation panel manufacturer's instructions). Maximum unevenness between insulation and substrate is 1 cm.
  Shake the foam can regularly during the procedure. Primer the substrate if necessary (see manufacturer's
  instructions for roof waterproofing/vapour barrier).

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- Commence bonding of the insulation panels at the furthest point from the roof access point, working towards the access point without stepping on the bonded panels.
- Apply the adhesive foam to the insulation panels in beads of at least 30 mm diameter every 20 cm. At corners and edges of the roof, at least twice as much adhesive foam should be applied. In case of uneven substrates, beads of at least 50 mm diameter must be applied so that 40% of the surface is covered after pressing the panel onto the substrate. The use of adhesive foam and the correct number of adhesive beads is determined by EN 1991-1-4, which takes into account the region, roof area, height of building and position on roof.
- After applying the adhesive foam to the insulation panel, wait 2-3 minutes and install the insulation panel on the flat roof within 5 minutes, pressing it firmly into the bead area.
- Do not walk on the panels for at least 2 hours after application.
- If the insulation panels have been moved or displaced during the curing time of the adhesive foam, the foam should be reapplied to the panels to ensure a good bond.
- The roof waterproofing can be applied after complete curing of the adhesive foam

## Bonding of wall panels in indoor applications

- Apply the adhesive foam in beads of at least 30 mm diameter at the edges of the panel. In the middle of the
  panel, apply the adhesive foam in a w-shape so that 40% of the surface is covered after pressing the wall
  panel down.
- After applying the adhesive foam to the panel, wait 2-3 minutes and then press the panel against the substrate and bring it into the correct position. The adhesive foam will be tack-free after 5 minutes. If the adhesive foam is already tack-free before the panel has been installed on the substrate, it must be reapplied.
- The panel should be supported until the adhesive foam has fully cured. During the curing process, the PU adhesive foam may expand a little. In that case, push the panel back slightly.
- After ± 2 hours, the adhesive foam will be sufficiently cured and work can proceed.

# Bonding of aerated concrete bricks for non-load-bearing internal walls

- Parafoam Panelglue NBS is suitable only for the bonding of aerated concrete blocks on non-load-bearing inner
  walls with a maximum height of 3 m (= 1 storey height). The adhesive foam can be used only when an even
  distribution of loads from block to block is ensured.
- The bottom row of bricks should be placed with mortar to make them perfectly level.
- For the subsquent rows of bricks, apply the adhesive foam in two beads of 30 mm diameter parallel to the brick edge (± 3 to 4 cm from the edge) on both the horizontal and vertical surfaces of the bricks. Always moisten the brick surface before applying the adhesive foam.
- Wait 2-3 minutes and then position the brick. Do not wait more than 5 minutes.
- Once the adhesive foam that escapes at the sides has hardened, cut it off.
- Each row of bricks must be level. Sand the stones if necessary.
- Shake the foam can regularly.
- The gap between the ceiling and the wall can also be filled with Parafoam Panelglue NBS.

## Bonding of wall panels in indoor applications

- · Check if the surface is level.
- Use spacers to support the windowsill.
- Apply the PU foam in beads of 30 mm diameter parallel to the edge (± 3 to 4 cm from the edge).
- Place weights on the windowsill until the adhesive foam has fully cured (after ± 2 hours).

## Cleaning

• Fresh foam spills must be removed immediately within the tack-free time with PU Foam & Gun Cleaner. Cured foam can be removed mechanically or with Parafoam Remover.

## **SAFETY**

Consult the safety information on the packaging and the safety data sheet for more information.

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## **POINTS OF ATTENTION**

- Does not adhere to PE, PP, PTFE, silicone, oil, grease and similar surfaces.
- Do not expose to UV exposure for long periods. In case of prolonged exposure, cover the product.
- The specified technical values are obtained at +23 °C and 50% relative humidity, unless otherwise indicated. These values may vary depending on environmental factors such as temperature, humidity, and type of substrate.

## **TECHNICAL APPROVALS**

French VOC emission class A+

Test reports flat roof insulation: WTCB TDI-21-051-1-DE-TDI-1172: Powerdeck F on Derbicoat HP Selfix WTCB TDI-21-051-2-DE-TDI-1172: Eurothane Silver on Derbicoat HP Selfix



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