

Torggler

Polyurethane Foams

PANEL F

Single-component, quick-hardening polyurethane adhesive for bonding plasterboard and insulation panels.



- Excellent adhesion on various types of porous and non-porous substrates
- It solves any adhesion problem on smooth or moulded boards (adhesion to polystyrene according to ETAG 004)
- Extremely fast installation: after 2 hours it can be dowelled and immediately smoothed afterwards
- Installation time reduced up to 50% compared to cement glue
- Significant reduction of processing and overall costs: with one can it is possible to install about 12 m² of insulation panels
- Avoids the formation of thermal bridges
- Extremely clean construction site



APPLICATION AREAS

- Renovation of interior walls by bonding plasterboard panels
- Thermal insulation of perimeter walls, from the internal side, by gluing coupled insulation panels (plasterboard+EPS or plasterboard+XPS)
- Bonding of various types of insulation panels (EPS, XPS, PU, rock or glass wool, etc.) in the construction of external thermal insulation systems
- Perimeter underfloor thermal insulation

FEATURES

PU Foam Panel F is a one component, quick-hardening polyurethane adhesive, packaged in an aerosol can, specifically developed and tested for bonding various types of insulation panels for underfloor perimeter insulation and thermal insulation applications in general. The reduced post-expansion and the high texture and adhesion of the fresh adhesive make it possible to install panels of various types with different thickness, such as EPS, XPS, PU, rock or glass wool, etc., on various types of substrates (mineral substrates, brick, concrete, plaster, wood, metal, glass, plastic, slated or aged/oxidised bituminous membranes) in accordance with the ETAG 004 tests for external thermal insulation systems. It can be used to fill cracks that may occur during the installation of the boards. Its particularly homogeneous and fine cell structure contributes to acoustic and

thermal insulation without creating any discontinuity. Despite the excellent performance of PU Foam Panel F in terms of technical and application characteristics in the installation of external thermal insulation systems, traditional mechanical fastening systems (dowels, etc.) that guarantee the anchorage of the boards through the thickness of the substrate are still needed to prevent the risk of adhesive detachment in case of insufficiently solid and consistent surfaces.

WARNINGS

Panel F, although extremely valid from a technical-application and performance point of view in the laying of coatings, does not exclude the traditional mechanical sealing systems (dowels, etc.) which guarantee the anchorage of the panels in the thickness of the substrate to prevent the risk of adhesive detachment should the surface not be sufficiently solid and consistent.

In case of bonding on new bituminous membranes, prefer Bitumen Seal adhesive/sealant.

The Panel F can be a pressurised container. Please read the information on the safety data sheet carefully.

INSTRUCTIONS FOR USE

The substrates must be free of oil, grease and dust. Especially in the case of application on non-porous substrates, it may be useful to dampen the substrates beforehand in order to provide the fresh product with the necessary humidity, for complete curing.

1. Shake the spray can for at least 15 seconds before use and repeat this step after work intervals.
2. Remove the protective cap. Turn the spray can upside down so that the valve is facing downwards and screw it onto the dispensing gun. Point the barrel of the gun in the desired direction and press the applicator.
3. Apply the adhesive on the back of the panel 3 cm away from the edge forming a perimeter bead of about 2-3 cm. Apply a bead of the same size in the centre in the shape of a "W".
4. Wait one minute before positioning the panel on the wall: the purpose of waiting is to avoid that the post-expansion of the adhesive, even if limited, may lead to macroscopic misalignments between the panels installed. The panels must in any case be applied within the time of surface film formation of the product. As an indication, this time is 3 minutes at 20 °C, but for a precise check it is advisable to carry out a test on the construction site in order to avoid the formation of a hardened surface film that is no longer adhesive.
5. Align the panel with the surrounding panels by pressing firmly and using a fixed base to prevent it from slipping later.
6. Depending on the temperature and humidity at the time of application, the adhesive will be sufficiently hardened within 15-45 minutes and then, after 2 hours, any unevenness can be cut and smoothed.
7. In case of installation of external thermal insulation boards, after 2 hours apply the mechanical fastenings according to the standards.
8. If the wall to be covered with plasterboard (insulated or not) is not perfectly coplanar, in order to guarantee a correct alignment of the boards and therefore the creation of a regular and flat façade, draw reference marks and use wedges and screws to adjust the position and keep them in place until the adhesive has hardened (1 hour is normally sufficient).

Cleaning

Any traces of non-hardened PU Foam Panel F, e.g. on clothing, window frames, etc., can be cleaned with Cleaner for PU-foams. The hardened product can only be removed mechanically (scraping or grinding). Possible residues in the valve can be easily removed when it has fully hardened. This product contains flammable components, so use only in well-ventilated areas.

TECHNICAL SPECIFICATIONS

| PARAMETER | VALUE |
|--|-------------------------|
| Colour | green |
| Outdoor temperature during application | from +5 °C to +35 °C |
| Operating temperature | from -40 °C to +120 °C |
| Surface film formation (at 23 °C and 50% r.H.) (MIT 98*) | 3 minutes |
| Shearing (bead of 20 mm diameter at 23 °C and 50% r.H.) (MIT R/8*) | 9 minutes |
| Density (after contrasted expansion) (MIT 50*) | 14-16 kg/m ³ |

| | |
|---|--|
| Post-expansion % bead | 18-20 |
| Volume yield (litres) | 46-50 |
| Surface of installed panels (m ²) | 12 |
| Dimensional change (23 °C – 50% r.H.) (MIT 52*) | <3% |
| Adhesion to polystyrene (ETAG 004) | 0,2 N/mm ² (panel breakage) |
| Fire behaviour (DIN 4102) | B3 |
| UV resistance | poor, tends to yellow |

* Torggler's Internal Methods (MIT) are available on request.

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|----------------|-----------------|
| Packaging size | 12x750 ml |
| Packaging | can |
| Application | Gun application |
| Pallet | 42 cardboards |
| Color | Natural yellow |

CONSUMPTION

Adhesive yield is highly dependent on spray can and ambient temperatures. At low temperatures, both the pressure at which the fresh material escapes from the valve and the yield of the hardened product are greatly reduced. In order to obtain a good yield, we recommend a spray can temperature of approx. +20 °C. Consumption depends on the type of elements to be installed and the installation method: approximately one spray can glues 8 to 12 m² of insulation panels and up to 3 plasterboard panels. The values indicated refer to laboratory conditions and may vary considerably depending on the actual application and environmental conditions.

STORAGE

Store in a cool place in an upright position. Storage in a horizontal position quickly leads to incrustations under the valve which irreparably compromise the extrusion of the adhesive. PU Foam Panel F is stable for at least 12 months when stored upright, in a cool and dry place (between 15 and 25 °C) and in its original unopened packaging.

The information contained in this document is reported on the basis of our experience and knowledge; therefore, any recommendations and suggestions made are without any guarantee and must be verified before using the product by those who intend to use it, who assume all responsibility that may result from its use since the conditions of use are not under our direct control. In case of doubt, it is always advisable to make preliminary tests and/or ask for the intervention of our technicians. Torggler reserves the right to modify, replace and/or delete the items, as well as to change the product data in this document without prior notice; in this case the indications given here may no longer be valid. Always refer to the latest version of the data sheet, available at www.torggler.com. Version 11.08.2021.