

TERMOFLEX® PU CONTACT

universal polyurethane adhesive for manual application
 with low expansion coefficient for quick mounting
 and fixing thermal insulation boards from EPS, XPS and PUR



Scope of use

TERMOFLEX® PU CONTACT is single-component low expanding polyurethane foam for manual application, which hardens from the humidity in the air and it is designed for quick mounting of thermal insulation boards from expanded (EPS), extruded (XPS) polystyrene or hardened polyurethane foam (PUR). It has excellent adhesion and bonds very well to mineral bases (concrete, bricks, masonry, mortars), Styrofoam, bitumen insulation materials, wooden, metal and glass surfaces. It has very good thermal insulation characteristics, which additionally increase the thermal insulation effect and efficiently prevent the formation of thermal bridges between the boards.

The adhesive allows working at low temperatures and it is resistant to humidity. It hardens quickly and thus it facilitates finishing the working process rapidly. Approximately 2 hours after bonding, the boards can be smoothed with sand paper or fixed with dowels, after which an armored plaster can be applied within the same day. The great bonding strength determines the low indicative consumption and guarantees economy of the invested funds.

TERMOFLEX® PU CONTACT is an element of the integrated thermal insulation systems TERMOFLEX® CLASSIC and TERAPOR® ULTRA and it is suitable for both newly constructed and old buildings – in the process of their renovation or improving their thermal insulation. It is not suitable for bonding polyurethane, silicone and Teflon.



Properties

| | |
|---|---|
| easy mounting and exploitation | good thermal insulation characteristics |
| excellent bonding to mineral bases and EPS | prevents the formation of thermal bridges |
| rapid hardening | it allows working at low temperatures |
| it allows plastering of the boards in 2 hours | resistant to moisture |

Composition

Single-component low-expanding polyurethane foam.

Packaging and indicative consumption

Packaging:

Bottle 750 ml.

Indicative consumption:

One bottle is enough for mounting around 8-12 m² thermal insulation boards.

Expiration date and storage

Store and transport in tightly sealed original packaging in dry and cool place (between +10°C and +20°C). The bottles have to be vertically placed with the nozzle facing upwards!

Keep away from high temperatures. They reduce the durability of the product.

The product is good for use 12 months after production date of an unopened original packaging..

Instructions for use

Preparation of the base

The surface should be clean, dry and stable. It must be free of dust, dirt and other contaminations, that can influence in a negative way on the bonding and it should not contain any separating substances (grease and others). All unsound parts and layers with low mechanical resistance must be removed. Larger irregularities should be aligned with lining lime-cement plaster TERAFLEX® MASTER FIX three days before mounting the thermal insulation boards. The wearing and the adhesion of the existing plasters and paint coatings have to be checked. Surfaces covered with mold and fungus are cleaned mechanically (with a wire brush), and then cleaned with an appropriate cleaning agent. The efflorescence on the base are swept and dry brushed. Old walls without coatings or with such that are sufficiently strong are cleaned from dust with a brush and then washed with water under pressure and allowed to dry completely. At bases soaked with water, the source of moisture is removed and then allowed to completely dry. When working at low temperatures, caution should be taken that there is no frost, ice or snow on the base.

The dry and porous surfaces should be wet before the application of the foam. Wetting them improves the adhesion and accelerates the hardening of the polyurethane foam.

The adhesion of TERMOFLEX® PU CONTACT to the prepared bases is checked by bonding EPS pieces with dimensions 10x10 cm in several sections which are detached manually after 2–4 hours. The adhesion to the base is considered to be satisfactory when the integrity of the polystyrene is destroyed, without affecting the adhesive layer or the integrity of the base.

Method of work

The optimal working temperature of the bottle is 20 – 25 °C. At a lower temperature, prior to use, the bottle should be stored at a temperature of about +20°C for at least 12 hours or to be warmed in a container of warm water (up to t=40°C) for about 20 minutes.

Before use the bottle should be shaken well for a few seconds with the valve facing down. The safety cap of the nozzle is removed and the bottle is screwed to the adapter ring of the gun. Press the trigger (for about 2 seconds) of the gun, so that the foam will enter into the extrusion tube. During application hold the gun with the bottle vertically positioned with the nozzle facing downwards. For even application of the adhesive it is necessary to observe the required distance between the gun and the boards. The quantity of the adhesive can be regulated through the trigger and the gun's valve. Before replacing the empty bottle with a full one, shake well the full one, then unscrew the empty one and screw the new one. The replacement has to be done quickly in order to prevent the hardening of the foam in the gun adapter. The hardened PU foam can be removed only mechanically.

When there are short working breaks, it is not necessary the bottle to be removed from the gun. When the breaks are longer (more than 24 hours), the bottle should be removed and the gun cleaned with TERAFLEX® PU CLEANER, cleaner for polyurethane foam. If the bottle is not completely used, its valve should also be well cleaned with TERAFLEX® PU CLEANER cleaner for polyurethane foam.

TERMOFLEX® PU CONTACT is applied on the periphery (on about 2 cm from the edges) of the thermal insulation board and in the middle in the form of the letter W. After its application on the board, you must wait for 1 minute before fixing it to the wall. After fixing it you should press the board well on the wall. Leveling the boards and their alignment can be done within 10 to 15 minutes after their fixation. In case there are joints between the boards, they can be filled up and sealed with the adhesive.

Two hours after fixing the boards the adhesive acquires appropriate mechanical properties and you can continue with the grinding of the boards, their fixing with dowels and plastering. The hardening can be accelerated and the adhesion improved when the foam is sprayed with water. The cured polyurethane adhesive should be protected from UV-rays.

Attention!

To be used at temperatures of the base and the environment of between 0°C and +35°C. The ambient temperature must not be below 0°C within the next 8 hours!

The process of drying and hardening of the material varies depending on weather conditions.

The bottle is under pressure! Keep away from sunlight and temperatures above 50°C!

It contains flammable substances!

Do not use near flame or source of fire!!

After use do not burn or open with force!

Do not spray on flame or scorching objects!

Keep away from sources of inflammation!

Do not smoke during work!

Do not transport it in the trunk of vehicles (never in the passenger compartment)!

Contains substances harmful to health!

It is necessary to wear protective gloves and glasses!

During work do not consume food!

In case of health problems when working with the product, consult a doctor!

Keep out of reach of children!

Hazard description:

Contains:
 diisocyanate - 4,4 - diisocyanate

Hazard symbol:

Xn - Harmful to the health!

F+ - Highly flammable!

| Precautionary phrases | |
|-----------------------|---|
| R 12 | Extremely flammable. |
| R 20/22 | Harmful if inhaled or swallowed. |
| R 36/37/38 | Irritating to eyes, respiratory system and skin. |
| R 42/43 | May cause sensitization by inhalation and skin contact. |
| R 48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| S 2 | Keep out of reach of children. |
| S 23 | Do not breath spray. |
| S 28 | After contact with skin, wash immediately with plenty of soap and water. |
| S 36/37 | Wear suitable protective clothing and gloves. |
| S 46 | If swallowed seek medical help immediately and show the packaging or label. |
| S 51 | Use only in well-ventilated areas. |

Classification

Meets the requirements of the European and Bulgarian legislation and it is in accordance with standard:

| European standard | Class | Test report |
|----------------------|-------|---|
| ETAG 004 EN 12090 | - | № P 425/09-460-1 № 10-120/31.05.2010 |

Technical data

Testing protocols are issued by Notified Body (NB) for assessment of the conformity SNB & CEI, Ljubljana, Slovenia.

| Indicator | Measure | Testing method | Testing result |
|--|-------------------|----------------|--|
| Volume (after free expansion of 800 ml) | l | - | 40 – 45 |
| Specific weight | kg/m ³ | - | 18 – 20 |
| Operating temperature (minimal) | °C | - | + 5 (of the base) 20 – 25 (of the bottle) |
| Fastening (at 18°C and 60% air humidity) | min | - | 10 – 15 |
| Hardening | h | - | 1 – 2 |
| Temperature resistance | °C | - | 40 – 90 |
| Change of the volume after hardening | % | - | maximum 1% |
| Moisture absorption | % volume | DIN 53428 | maximum 1% |
| Compressive strength | MPa | DIN 53421 | 0,04 – 0,05 |
| Tensile strength | MPa | DIN 53455 | 0,07 – 0,08 |
| Elasticity (until breaking) | % | DIN 53455 | 20 – 30 |
| Thermal conductivity | W/(mK) | DIN 52612 | 0,036 |
| Reaction to fire | - | EN 13501-1 | E (Euro class) |

The information contained in the current document is based on our knowledge and recent technical achievements and experience that we have at the time of our last version. The technical recommendations concerning the application, which we offer in order to facilitate buyers and those working with our products are non-binding and are neither grounds for legal contract relations, nor for additional obligations resulting from the purchase contract. They do not dispense buyers from the necessity to verify products application according to the instructions for every specific use. We as manufacturers guarantee the quality of the product, but cannot influence the circumstances and methods of its use. Application of the product should be performed by qualified personnel.