

POWER THERMO Low expansion PU adhesive foam for insulation boards

PROPERTIES

DUROSTICK POWER thermo is a minimal expansion polyurethane bonding foam with exceptional adhesive strength, designated for professional use. It is an one-component product, that is also free of solvents. It cures by reacting with humidity in the atmosphere. It presents excellent grip, absorbs vibrations and improves soundproofing. An easy to use product that is also very easy to transport and store. In addition, its application speed is such that it saves time and money.

APPLICATIONS

POWER thermo is suitable for bonding EPS and XPS insulation boards onto building facade surfaces. It has exceptional adhesion to brick, aircrete, concrete, plaster, cement, wood and metal. It is ideal for both new construction as well as facade renovations. It participates in the external thermal insulation system for buildings, THERMOSEAL of DUROSTICK as a bonding product for polystyrene boards.

USE

1. Surface preparation

The substrate must be sound, clean, free from dust, grease, oils, salts, mold etc. If fungi and/or algae are present on the application surface(s), remove them using the special purpose mold cleaner in spray form, DUROSTICK D-95 CLEANER. If any oils are present on the application surface(s), remove them using the biodegradable cleaner, BIOCLEAN INDUSTRIAL of DUROSTICK. In both cases, surfaces must be rinsed thoroughly with water and allowed to dry completely.

2. Application

- Shake the can well before any use.
- Apply using a professional grade, special purpose gun for polyurethane foam.
- Place and screw the foam can (container) onto the gun.
- Adjust the flow of the product by rotating the flow control screw at the top of the gun.
- Lightly soak the surface before applying the foam. Moisture is necessary because it improves adhesion and speeds up the cure time of the product.

- Apply the product around the edges of the insulation board, approximately 3-5cm away from its edges. Continue by applying successive strips between the outer edges, spaced 25-30cm from each other. The recommended strip thickness is approximately 10-12mm wide. Instead of applying straight strips between the outer edges of the insulation boards, apply the product in the shape of a 'W' or an 'M'.
- Install the insulation board to the building structure/facade within 5 minutes. The starting line/course of the insulation boards should be supported at their lower part with metal starting profiles to prevent the boards from slipping. Minor adjustments of the board(s) level and plumb are possible, but only when they are done within 10-15 minutes from the initial installation.
- Allow the product to cure for 30-40 minutes and install the mechanical fasteners/plugs.

NOTES

- For small pauses during application, the foam container can be left on the gun, so long as the flow control screw is tightened. If during the application and for any reason, it is necessary to stop using the product for a prolonged period of time, then, the gun needs to be cleaned thoroughly using a special purpose spray.
- Replacing the POWER thermo can/container must be done quickly so as not to allow the foam to harden into the gun.

LIMITATION OF USE

- Not recommended for bonding insulation boards on surfaces made of polyethylene (PE), polypropylene (PP) and silicone.
- Not recommended for bonding insulation boards in areas with permanent underwater use or in groundwater level areas in general.

CLEANING

The cured (dried) foam can only be removed by mechanical means, putty knife or razor blade. While the foam is still fresh on the application area and/or in the gun itself, clean it using a special purpose spray.



TECHNICAL SPECIFICATIONS

Base	Polyurethane, ABSENCE OF SUBSTANCES (H)-CFC, PCB-H, formaldehyde
Density after curing	32-40kg/m ³
Application temperature	From +5 °C to +35 °C
Temperature resistance after curing	From -40 °C to +90 °C
Touch dry/skin formation	7-8min (20 °C, R.H. > 30%)
Time for foam curing	1h / R.H. 93%, 18h R.H. 15% max 24h
Tensile strength at break (DIN 53455)	0.13MPa
Fire resistance classification	Class B3, per DIN 4102
The product does not constitute food for insects and rodents	
Does not promote fungi or mold creation	

CONSUMPTION

An 830ml POWER thermo container is sufficient for bonding insulation boards on an area of 10-13m². The product is also suitable to fill the gaps between the insulation boards, where necessary, to avoid the creation of thermal bridges.

STORAGE

Store at temperatures between + 5 °C to + 25 °C, in an upright position, for 12 months from production date.

SAFETY DIRECTIONS

The product is classified as highly flammable and harmful. It is recommended to keep away from the reach of children and apply it in well ventilated areas. Before use, refer to the cautions on the product packaging or the Material Safety Data Sheet.

PACKAGING

Carton box with 12 cans of 830ml each one