

# BOLIX ZP

## Foam Adhesive for Bonding Polystyrene Insulation Boards



### PRODUCT DESCRIPTION:

- **yield per one can:**
  - up to 8m<sup>2</sup> for installation of insulation boards on walls
  - up to 12 m<sup>2</sup> for installation of EPS or XPS boards at DPC level and below DPC (at and below grade)
- **low-pressure**
- **dowelling after only 2h**
- **can be applied at temperatures ≤ 0 °C,**
- **excellent adhesion to mineral surfaces and to white and grey EPS boards and XPS boards**
- **very good thermal performance**

### USE:

BOLIX ZP is a low-pressure, single-component polyurethane foam adhesive used for bonding of polystyrene insulation boards, when installing EWI systems on new external walls and for retrofitting, refurb or overcladding of the existing wall insulation. Designed for insulating at DPC and below DPC level with EPS-P boards and XPS boards.

Suitable for:

- the installation of:
  - EPS and XPS insulation boards,
  - polystyrene ceiling tiles,
  - external window sills,
- filling gaps and interstices in thermal insulation or vertical movement joints in masonry walls,
- bonding polystyrene insulation boards,
- overcladding or applying a second layer of EPS boards over the existing EPS exterior wall system

Suitable surfaces:

- mineral (like concrete, masonry walls, cement and lime-cement renders, etc.),
- wood and engineered wood like OSB, chipboards, cement bonded particle boards - CP boards, plywood,
- hard PVC, polyester, polyurethane, etc.
- bitumen or asphalt waterproofing
- steel, aluminium and other metals.

**Adhesion test is recommended for bituminous and plastic surfaces.**

### SUBSTRATE PREPARATION:

The surface must be structurally sound, even, clean of surface contaminants such as dust, grease, algae, moss and other barrier materials that may affect adhesion. For insulation board installation in low temperatures, clean off any frost or icing from the surface. Remove any friable material such as peeling or flaking paint or plaster, loose or crumbling particles from the existing wall. Level larger gaps and irregularities with the mortar BOLIX W or BOLIX WB (concrete surfaces). Prior to installation of insulation boards to weak, porous substrates or of unknown condition, carry out an adhesion test. To test, attach a few samples of EPS boards (size 10x10x5 cm) to exterior wall in various spots and pull them off by hand after minimum 2 – 4 hours. The substrate is sufficiently sound and stable if the failure is in the polystyrene. Otherwise, prepare the surface e.g. sand, remove friable or crumbling material or prime and do the adhesion test again.

When attaching insulation panels on walls, install starter tracks, and when installing DPC insulation systems, in order to obtain a stable support, make sure that the attached insulation panels rest on the building's footing (if possible, support them during setting).

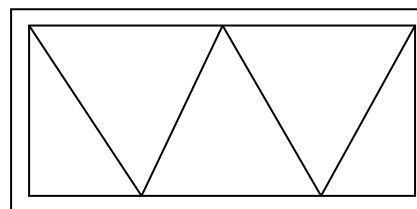
Prior to insulation of large-panel buildings, it is recommended to assess the fastening of the outer textured layer in the sandwich panel structures.

### PRODUCT PREPARATION:

The can should be warm (preferably the temperature should be +20°C). Shake the container well for at least 30 seconds and next attach the container to the dispensing unit (screw the can to the thread in the gun). (Note! Gun valve should be closed.) When screwed, open the valve and holding the can upside down, pull the trigger. Adjust and control the material flow rate by loosening or tightening the flow control knob or feed screw on the gun, or by pulling the trigger for the desired rate. Foam application can be interrupted. However for interruptions longer than 15 minutes, make sure that the can remains attached to the dispensing gun.

### APPLICATION:

For installation of EPS and XPS boards above grade, apply the foam in beads around the perimeter of the board, 2 cm away from the edge, with M/W shape strips enclosed.



For installation of insulation panels at grade or below-grade of buildings / structures covered with asphalt or bituminous waterproofing coating, apply the polyurethane foam adhesive to the panel in four vertical strips, using a gun, with a bead spacing between 20 ÷ 30 cm, 3 cm away from the edge of the panel. (for insulation boards wider than 100 cm, apply more beads to the board surface).



#### Masz pytania?

Zadzwoń!  
801-650-222

Napisz!  
serwis@bolix.pl

#### BOLIX SA

Ul. Stolarska 8  
34-300 Żywiec  
Tel. 33 475 06 00  
Fax. 33 475 06 12

#### Znajdź nas

www.trwaleocieplenie.pl  
www.facebook.com/bolixsa  
www.bolix.pl

# BOLIX®

# BOLIX ZP

## Foam Adhesive for Bonding Polystyrene Insulation Boards



Within maximum 10 minutes from foam application, place the board on the wall and press lightly with a straight edge screed, until it is flush with the previously installed board surface. Finish the operation within the skin formation time! The insulation boards can be readjusted within 25 min. (depending on conditions) from installation.

After 2 hours the boards are ready for further operations (sanding, dowelling). Above DPC, the insulation panels must be fixed to the substrate using mechanical fixings as per the technical design for EWI.

Do not use the fixings at DPC and below DPC, to protect the waterproofing.

Make sure that the installed insulation boards are flush to provide an even and continuous surface. Fill any interstices or gaps between insulation boards with polystyrene wedges matching coat thickness or the low-pressure installation foam BOLIX PM-L or BOLIX ZP.

Apply insulation boards in a running bond pattern.

To increase adhesion, accelerate hardening, or improve the texture, the surface may be sprayed with water.

The bonds obtain a full strength after 24 h from panel installation.

### LIMITATIONS AND RECOMMENDATIONS:

- Before application, protect or mask surfaces such as windows, doors, window sills, etc.
- Allow fresh cement and lime-cement renders to cure for minimum 28 days.
- Plan the surface area to be insulated taking into consideration weather conditions, surface type and workforce.
- Prior to insulation application identify all installations on the building façade or around it to prevent their damaging during mechanical fixing of the insulation (drilling).
- Protect from direct sunlight exposure, precipitation and wind operation during application and curing. Use scaffolding meshes.
- When exposed to sunlight, the graphite-enhanced polystyrene heats up quickly, what may result in deformations of the insulation boards. Therefore, it is recommended to apply the BOLIX PTE compound to graphite-enhanced EPS, which will reduce heat absorption by the EPS and in consequence reduce its thermal deformation.
- Low temperature, improper ventilation extend the drying and curing time of the foam adhesive.
- High air and surface relative humidity accelerates the setting of PU foam adhesive.
- The foam does not adhere to silicone, Teflon, polyethylene, polypropylene and polyamide.
- Not suitable for bitumen or asphalt substrates based on organic solvents.
- Clean the dispensing gun immediately after use. It is recommended to use the polyurethane foam cleaner BOLIX CP or acetone, hardened adhesive may only be removed mechanically.

- Protect the areas where the adhesive is exposed to UV radiation.
- For thermal insulation of below grade areas of buildings, the adhesive may only be used in damp proofing systems.
- Not suitable for pressing water, prolonged exposure to water, e.g. immersion caused by high groundwater levels, e.g. heavy-duty waterproofing.
- Insulation boards may be attached, when waterproofing coatings have completely dried out.

### PRECAUTIONS AND STORAGE:

Store in a closed container, upward (to prevent blockage of spray valve) in a well-ventilated room, in the temperatures between +5 and +25 °C (recommended room temperature) and away from all sources of ignition, heat and direct sunlight.

Transport in temperatures above +5 °C, although, due to thermal inertia, transport in temperatures below -15 °C for several hours is possible.

The product contains isocyanates. Before use, read the instruction manual, provided by the manufacturer, conditions for safe use of the product, specified on the packaging, and this technical data sheet. Pressurised container: protect from sunlight

and heat above +50°C. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Do not store in close proximity to ignition sources - do not smoke when installing the product. Keep out of the reach of children. May have an adverse effect on breast-fed infants. This product may cause an allergic reaction in people allergic to diisocyanates.

Persons suffering from asthma, eczema or skin ailments should avoid contact, including skin contact. The product should not be used in poorly ventilated rooms, unless a protective mask with a suitable gas filter (e.g. type A1 according to EN 14387) is used. More information on safety of use and hazards of the product is provided in the Safety Data Sheet.

### TOOLS:

- Foam gun

### TECHNICAL DATA:

**Ambient and surface temperature at application and curing:**  
from 0°C to +35°C

**Specific weight acc. to ISO 7390**  
20 - 25 kg/m<sup>3</sup>

**Colour:**  
light yellow

**Form:**  
Low-pressure

**Structure:**  
fine homogeneous cellular structure

**Skin formation:**  
approx. 10 min. \*

**Curing time prior to further operations:**  
≤ 2h (temp. +20°C and 50% relative humidity)

**Full hardening time:**  
up to 24h (full mechanical load) \*

**Coefficient of heat conductivity:**  
≥ 0.0348 W/(m\*K)



# BOLIX ZP

## Foam Adhesive for Bonding Polystyrene Insulation Boards

**Thermal resistance after hardening:**

-40°C ÷ +90°C (short-term up to +140 °C)

**Dimensionally stable:**

-5%

**Flammability acc. to DIN 4102-1:**

B3

**Product solubility:**

Solves in organic solvents like acetone prior to hardening

**Adhesion to concrete, MPa:**

- ≤ 0.3

Adhesion to insulation board MPa:

≤ 0.1 (failure in the foam)

**Packaging:**

750 ml can

**No. of containers per carton and net weight:**

12

**Shelf life:**

18 months from the date of production provided on the packaging

\*Strongly dependent on ambient temperature, air and surface humidity, temperature of the can, method of application, cross section of the coating applied, pre-wetting of the substrate, etc.

**APPROXIMATE YIELD:**

- above DPC insulation – **up to 8 m<sup>2</sup>**
- at and below DPC insulation – **up to 12 m<sup>2</sup>**

To determine precise coverage, perform a patch test on the surface.

**COMPOSITION:**

4,4'-methylene diphenyl diisocyanate, gas propellants mixture liquefied under pressure, containing propane-butane-isobutane

BOLIX S.A. guarantees product quality but has no control over its application and use. BOLIX takes no responsibility for contractors' and distributors' performance. The information supplied herein is given in good faith based on our current knowledge and latest application methods. The information provided cannot replace designer's and contractor's expertise and does not dismiss anyone from observing good practice and the OHS regulations. Should you have any further queries, carry out the tests or contact BOLIX Customer Technical Support. The publication of this Technical Data Sheet renders older editions invalid.


**Masz pytania?**

Zadzwoń!  
801-650-222

Napisz!  
serwis@bolix.pl

**BOLIX SA**

Ul. Stolarska 8  
34-300 Żywiec  
Tel. 33 475 06 00  
Fax. 33 475 06 12

**Znajdź nas**

www.trwaleocieplenie.pl  
www.facebook.com/bolixsa  
www.bolix.pl