

## INSTALLATION INSTRUCTIONS FOR THERMO-BEAM



### PRODUCT DESIGNATION

Thermo-beam

EMO-TB-240/260-01  
EMO-TB-240/225-01

EMO-TB-205/260-01  
EMO-TB-205/225-01



### PREPARATION OF OPENING FOR INSTALLATION OF DOOR AND WINDOW JOINERY

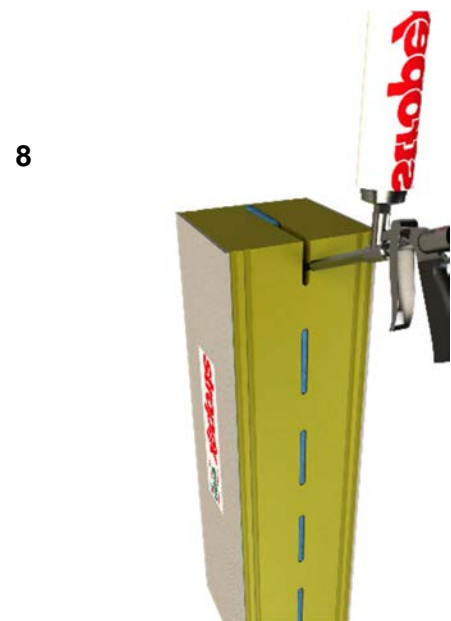
A substrate, where the thermo-beam will be installed, should be load-bearing, even and free from contaminations. Cementitious, cementitious-calciferous, adhesive bases should be bonded and seasoned. It is forbidden to install door and window joinery in non-machined and non-prepared openings.

1. Installation of Thermo-BEAM with KZN lintels manufactured by Stropex dedicated for installation of shutters in the thermal insulation layer.
  - KZN lintels manufactured by Stropex are off-the-shelf lintels for installation of shutters in thermal insulation layer with a maximum span from L=90 cm to L=360 cm, what allows installing door and window joinery with maximum span approx. 340 cm
  - Its bottom surface is equipped with so-called guides - that is off-the-shelf fixing components allowing mechanical fixing of thermo-beam to the lintel using special screw fasteners allowing also to correct level of the lintel.
  - Thermo-BEAM suspended from concrete lintel forms its extension and it is used as a "lintel" for the installed window.
2. In case of ordinary lintels e.g. cast lintels (executed on construction site), L-19 or other lintels it is necessary to agree with the site manager or supplier - manufacturer of this lintel, whether it is allowed to drill, make any openings, which could damage the reinforcement inside the lintel, what could result in weakening of lintel design. Therefore, to install guides to ordinary lintels it is necessary to receive prior consent of the site manager.
3. Then, it is necessary to check cleanness of the guides located in the lintel. If there are any contaminants formed e.g. during construction works you should remove them and then check, by placing screw fastener into the guide, whether it moves smoothly in this guide.



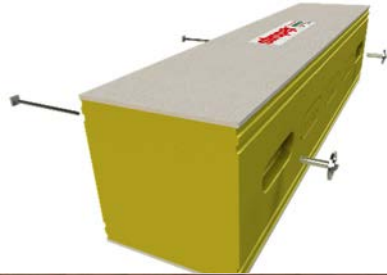
## PREPARATION OF THERMO- BEAM FOR INSTALLATION

1. Thermo-beam should be cut to the width of the assembly opening taking into account approx. 15 mm of expansion joint necessary to seal the joint.
2. To improve PUR adhesion with a sealing-fixing adhesive, the upper part of the Thermo-BEAM should be matted with sandpaper.
3. Thermo-BEAM should be dry lied in installation opening to determine suitable openings through which the screw fasteners will pass through; if it appears that any guide is not aligned with erection opening then it is necessary to cut PUR between the openings.
4. The remaining openings should be filled with PUR foam (on the ground). When the PUR foam is bonded its excess should be cut with sharp knife.
5. Commercial blanking plugs made of PUR, intended for installation in bottom part of Thermo-BEAM directly before filling the through installation openings with foam, are also available in the Stropex offer.
6. In case of cutting and the opening of extreme assembly openings, these should be protected on sides and also filled with foam.



**INSTALLATION OF THERMO-BEAM TO LINTEL**

1. Thermo-BEAM should be equipped with screw fasteners.
2. Thermo-BEAM should be installed by inserting profiled ends of screw fasteners into guides in the KZN lintel.
3. Tighten screw fasteners to maintain approx. 15mm gap between lintel and Thermo-BEAM and then insert assembly wedges into expansion joint between Thermo-BEAM and lintel on one side and another next to the guides located in the lintel.
4. Tighten Thermo-BEAM prepared in a described way to the lintel using screw fasteners with Allen key, size 5
5. After tightening Thermo-BEAM and checking the correctness of its position user may proceed to fill the expansion joint with adhesive-sealant between the lintel and wall structure.



9



**ADDITIONAL REMARKS ON INSTALLATION**

It is recommended to use the following products during assembly works:  
 - caulking foams: Summer and winter polyurethane foams TYTAN (AT-15-6749/2011) or another equivalent with at least the same parameters and properties.  
 - adhesive-foams: Tytan EOS adhesive. or another equivalent with at least the same parameters and properties.  
 - adhesive-sealants: Vaporseal sealant or another equivalent with at least the same parameters and properties.  
**IMPORTANT:** Preparation for rendering (fig. 9) - To reduce the risk of occurrence of micro-cracks on connections of Thermo-BEAM - wall structure - Lintel it is appropriate to prepare gypsum board, adhesive for gypsum boards and lathing. The board should be cut in such way that it overlaps the wall structure min. 10 cm from the left and right. In upper part in case of KZN lintel, we approach with the board to floor slab that is approx. 8-9 cm. For higher lintels, it is appropriate to maintain overlap min. 10 cm as for wall structure. Gypsum board fixed in this way should be additionally protected with lathing on connection with wall structure.

**INSTALLATION CONDITIONS**

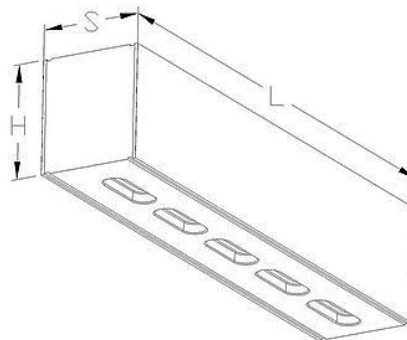
Installation works should be carried out in conditions appropriate for installation of insulation and fixing materials such as: fixing foam, assembly belts, mechanical or chemical fasteners and other materials in accordance with the product data sheets of these products

**GENERAL RECOMMENDATIONS FOR USE**

After installation, it is not necessary to carry out any general maintenance for the product.  
 If the installation of windows and external insulation is not expected in the next 14 days then the external surface of PUR and sealants should be protected against sunlight by painting them with acrylic paint or primer for plaster mass.  
 It is necessary to matt the surface of the sill with sandpaper before paint application. **NOTE** discolourations caused by UV sun rays and little air pockets in the rigid mass of polyurethane foam does not deteriorate conditions of Thermo-BEAM, have only aesthetic dimension.

**THERMO-BEAM (DIMENSIONS)**

<b>Name: EMO-TB-240/260-01</b>	<b>Name: EMO-TB-240/225-01</b>
Dimensions: S-240/H-260	Dimensions: S-240/H-225
<b>Name: EMO-TB-205/260-01</b>	<b>Name: EMO-TB-205/225-01</b>
Dimensions: S-200/H-260	Dimensions: S-200/H-225







Height H [mm]	Width S [mm]	Length L [m]
225	200	6.00
	240	
260	200	
	240	

**PRODUCT APPROVALS AND AUTHORIZATIONS**

AT-15-9681/2016    
 AT-15-9629/2016

**TESTS AND RESULTS**

-  AIR PERMEABILITY CLASS 4
-  WATER RESISTANCE CLASS E1200
-  WIND LOAD RESISTANCE CLASS 5
-  ENERGY SAVING AND PASSIVE BUILDING NF40

## EMO Energooszczędny Montaż Okien







P.P.H.U Stropex Sp.j.  
 63-300 Pleszew, ul. Piaski 39  
 +48 62 742 73 58  
 stropex@stropex.pl  
 www.stropex.pl

