

## PRODUCT DATA SHEET - LMX-8

### Section 1. PRODUCT DESCRIPTION

#### HAMMER DRIVEN FASTENER WITH METAL PIN AND SHORT EXPANSION ZONE

##### LMX-8

Guided connector LMX-8 with a steel pin with a short expansion zone is made of polyethylene and the pin is made of galvanised steel with a polyamide-coated head, which helps minimise the thermal transmittance of the connector point. Connector LMX-8 should be used to transfer wind suction loads and provide additional mechanical support for the entire system, recommended for:

- Polystyrene EPS
- XPS polystyrene
- mineral wool (with TDX-90 and TDX-140 pressure plate)
- lamellar wool (with TDX-90 and TDX-140 pressure plate)

Types of substrates on which the LMX-8 connector can be installed according to EAD 330196-01-0604:

| A                                                                                 | B                                                                                 | C                                                                                 | D                                                                                 | E                                                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |  |
| Concrete                                                                          | Solid ceramic brick, silicate                                                     | Ceramic block                                                                     | Lightweight aggregate elements                                                    | Aerated concrete                                                                  |

The connectors have the European Technical Assessment: ETA-16/0509



**NEW IMPROVED DESIGN**  
-30 and 50 mm anchorage

The head of the metal pin is covered with plastic

innovative sleeve design

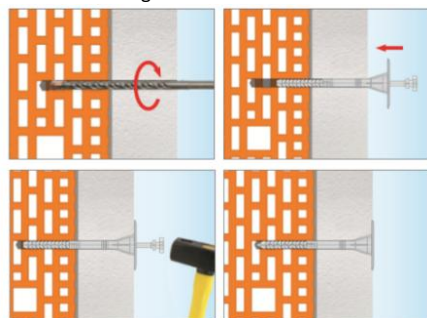
short expansion zone



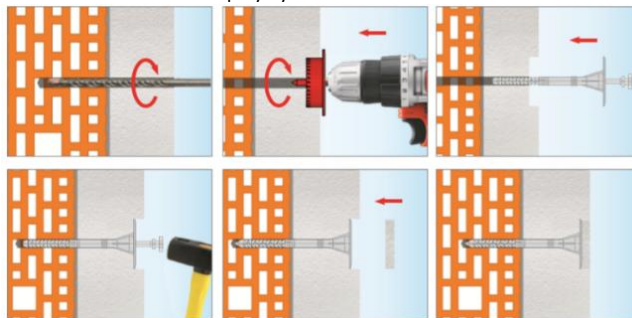
### Section 2. INSTALLATION METHOD

1. Before starting the installation, it is necessary to recognise the support and select the fasteners intended for it
  2. The appropriate connector length must be chosen so that the expansion zone is in the wall construction material
  3. The minimum length of the connector is:  $L_d = t_{fix} + t_{tol} + h_{eff}$ , where:  $t_{fix}$  - thickness of the applied thermal insulation,  $t_{tol}$  - thickness of the levelling layers (adhesive mortar + existing plaster),  $h_{eff}$  - anchorage depth of the connector in the substrate (stated in the data sheet and technical approval)
  4. Before installation, the substrate must be prepared according to the recommendations of the ETICS insulation system manufacturer
  5. Thermal insulation panels must be adequately fixed with adhesive mortar
  6. The diameter of the holes drilled must correspond to the diameter of the fasteners used
  7. Holes in substrates made of solid materials should be at least 10 mm deeper than the anchoring depth of the connector
  8. Holes in solid materials must be cleaned of drill residue using a back-and-forth motion of the drill at reduced speed, repeating the operation four times.
  9. Holes in substrates with voids and aerated concrete must be drilled without the use of a hammer, as this would cause the inner walls of the substrate to crack, reducing the tear resistance of the connectors.
  10. The connectors must be fixed so that the installation location coincides with the position of the adhesive mortar on the thermal insulation board.
  11. The connector housing must be positioned so that the connector plate is flush with the heat-insulating material
  12. Then insert the connector pin to fix it permanently
  13. The connectors can be installed in milled housings with the **WK-FT** cutter, the so-called flush-mounted installation
- After installing the connector, mask the mounting point with **KS/KSG** polystyrene discs - so-called flush-mounted installation

surface mounting



recessed installation with polystyrene disc



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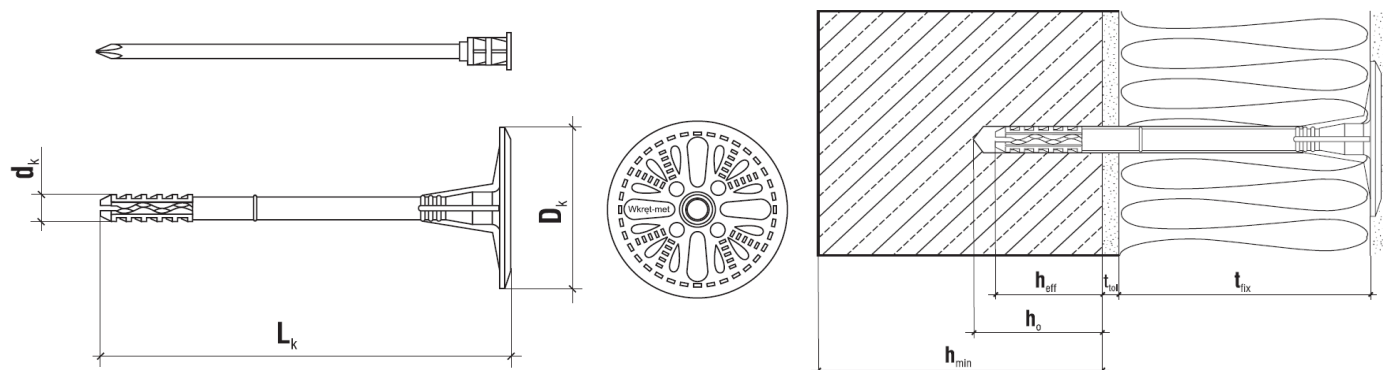
**Section 3. SPECIFICATIONS**

| TECHNICAL PARAMETERS          |                |                                    |                       |
|-------------------------------|----------------|------------------------------------|-----------------------|
| Parameter                     | Unit           | Value                              |                       |
| Connector diameter            | $d_k$ [mm]     | 8                                  |                       |
| Plate diameter                | $D_k$ [mm]     | 60                                 |                       |
| Anchorage depth               | $h_{eff}$ [mm] | 25/65*                             |                       |
| Depth of hole                 | $h_o$ [mm]     | 35/75*                             |                       |
| Point thermal conductivity    | $\chi$ [W/K]   | Surface mounting                   | Built-in installation |
|                               |                | 0,004                              | 0,002                 |
| Plate rigidity                | S [kN/mm]      | 0,50                               |                       |
| Utility categories            | [-]            | A B C D E                          |                       |
| Connector material            | [-]            | PE                                 |                       |
| Stem material                 | [-]            | Galvanised steel, PA coated header |                       |
| European Technical Assessment | [-]            | ETA-16/0509                        |                       |

\*for category E substrates (aerated concrete)

| STRENGTH PARAMETERS |                             |                               |                                   |
|---------------------|-----------------------------|-------------------------------|-----------------------------------|
| Substrate category  | Type of substrate           | Density [kg/dm <sup>3</sup> ] | Characteristic load capacity [kN] |
| A                   | Concrete C12/15             | $\geq 2,25$                   | 0,50                              |
| A                   | Concrete C20/25- C50/60     | $\geq 2,30$                   | 0,75                              |
| B                   | Solid ceramic brick         | $\geq 2,00$                   | 0,75                              |
| B                   | Solid silicate brick        | $\geq 2,00$                   | 0,75                              |
| C                   | Silicate channel blocks     | $\geq 1,60$                   | 0,75                              |
| C                   | Ceramic hollow brick        | $\geq 1,20$                   | 0,60                              |
| C                   | Porotherm 25                | $\geq 0,80$                   | 0,40                              |
| D                   | Lightweight concrete blocks | $\geq 0,88$                   | 0,75                              |
| E                   | AAC2 aerated concrete       | $\geq 0,35$                   | 0,75                              |
| E                   | AAC7 aerated concrete       | $\geq 0,65$                   | 0,90                              |

Partial safety factor  $\gamma_M = 2$  in the absence of regulation



| SELECTION TABLE |                                                                     |                                                                |             |                                                                                  |             |                            |
|-----------------|---------------------------------------------------------------------|----------------------------------------------------------------|-------------|----------------------------------------------------------------------------------|-------------|----------------------------|
| Product code    | Connector diameter and length<br>(d <sub>k</sub> x L <sub>k</sub> ) | Thickness of thermal insulation material t <sub>fix</sub> [mm] |             |                                                                                  |             | Quantity in pack<br>[pcs.] |
|                 |                                                                     | New buildings<br>(t <sub>tol</sub> adhesive layer of 10mm)     |             | Old buildings<br>(t <sub>tol</sub> adhesive layer of 10mm + 20mm of old plaster) |             |                            |
|                 |                                                                     | Without cutter                                                 | With cutter | Without cutter                                                                   | With cutter |                            |
| LMX-08095       | 8x95                                                                | 60/20*                                                         | 80/40*      | 40/-*                                                                            | 60/20*      | 200                        |
| LMX-08115       | 8x115                                                               | 80/40*                                                         | 100/60*     | 60/20*                                                                           | 80/40*      | 200                        |
| LMX-08135       | 8x135                                                               | 100/60*                                                        | 120/80*     | 80/40*                                                                           | 100/60*     | 200                        |
| LMX-08155       | 8x155                                                               | 120/80*                                                        | 140/100*    | 100/60*                                                                          | 120/80*     | 200                        |
| LMX-08175       | 8x175                                                               | 140/100*                                                       | 160/120*    | 120/80*                                                                          | 140/100*    | 200                        |
| LMX-08195       | 8x195                                                               | 160/120*                                                       | 180/140*    | 140/100*                                                                         | 160/120*    | 200                        |

\*for category E substrates (aerated concrete)

**Section 4. NOTES**

1. All previous versions of this Data Sheet are no longer valid
2. The data in this Product Data Sheet are in accordance with the current state of knowledge and are given in good faith. If the recommendations on how to use and install the product are not followed, Klimas Wkręt-met Sp. z o.o. is not responsible for the correctness and quality of the connection.