

PRODUCT DATA SHEET - FIXPLUG-10

Section 1. PRODUCT DESCRIPTION

HAMMER DRIVEN FASTENER WITH PLASTIC PIN AND TELESCOPIC DESIGN SUPPORT WASHER - FIXPLUG-10

Hammer driven fastener with plastic pin and telescopic design support washer FIXPLUG-10 is made from polyethylene, and the pin from glass fibre-reinforced polyamide which improves its strength. The applied telescopic solution allows for problem-free facing of the support washer and polystyrene surface by its shallow recess. Fastener FIXPLUG-10 should be used to transfer loads of wind suction forces and applied as an additional mechanical fixing for the whole system, recommended for:

- Polystyrene EPS
- XPS polystyrene

Types of substrates on which the FIXPLUG-10 connector can be installed according to EAD 330196-01-0604:

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



innovative sleeve design



glass-fibre reinforced pin



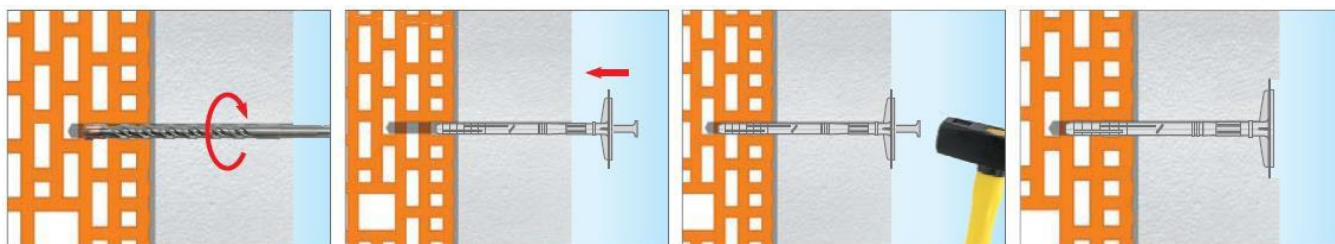
plate design



The connectors have the European Technical Assessment: ETA-15/0373

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 attached thermal insulation, t_{tol} - thickness of 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 body must be positioned so that the connector pressure plate is flush with the thermal insulation material.
12. Then insert the connector pin so that the pressure plate gently sinks approx. 2-3 mm into the polystyrene



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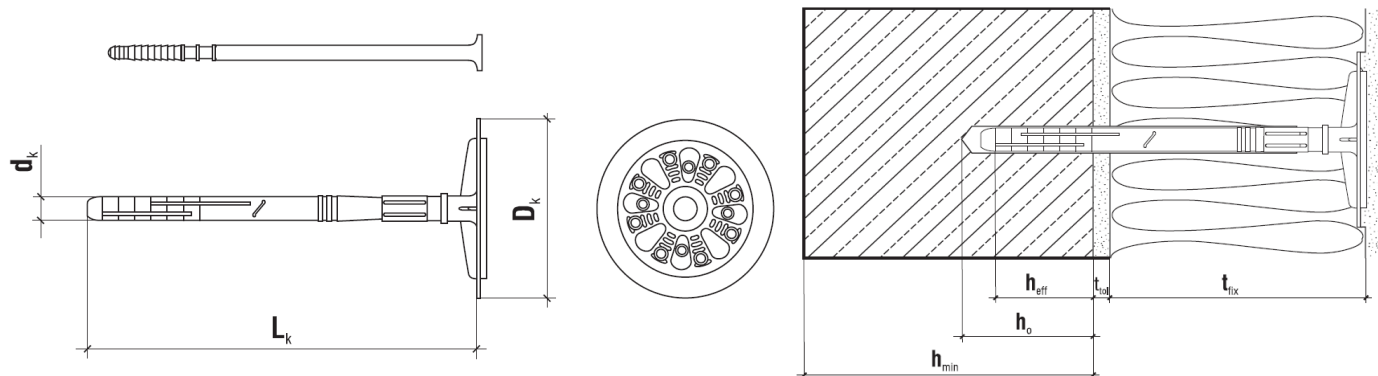
Section 3. SPECIFICATIONS

TECHNICAL PARAMETERS		
Parameter	Unit	Value
Connector diameter	d_k [mm]	10
Plate diameter	D_k [mm]	60
Anchorage depth	h_{eff} [mm]	30/50*
Depth of hole	h_o [mm]	40/60*
Point thermal conductivity	χ [W/K]	0.000
Plate rigidity	S [kN/mm]	0,60
Utility categories	[-]	ABCDE
Connector material	[-]	PE
Stem material	[-]	PA+GF
European Technical Assessment	[-]	ETA-15/0373

*for substrate categories C, D, E

STRENGTH PARAMETERS			
Substrate category	Type of substrate	Density [kg/dm ³]	Characteristic load capacity [kN]
A	Concrete C12/15	$\geq 2,25$	0,75
A	Concrete C16/20- C50/60	$\geq 2,30$	1.20
B	Solid ceramic brick	$\geq 2,00$	0,90
B	Solid silicate brick	$\geq 2,00$	0,90
C	Silicate channel blocks	$\geq 1,60$	0,60
C	Ceramic hollow brick	$\geq 1,20$	0,40
C	Lightweight concrete blocks	$\geq 0,80$	0,90
D	Lightweight concrete blocks	$\geq 1,05$	0,75
E	AAC2 aerated concrete	$\geq 0,35$	0,50
E	AAC7 aerated concrete	$\geq 0,65$	0,75

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



SELECTION TABLE						
Product code	Connector diameter and length (d _k x L _k)	Thickness of thermal insulation material t _{fix} [mm]				Quantity in pack [pcs.]
		New buildings (t _{tol} includes 10 mm of glue)		Old buildings (t _{tol} includes 10 mm of glue + 20 mm of old plaster)		
		AB	CDE	AB	CDE	
FIXPLUG-10120	10x120	80	60	60	40	200
FIXPLUG-10140	10x140	100	80	80	60	200
FIXPLUG-10160	10x160	120	100	100	80	200
FIXPLUG-10180	10x180	140	120	120	100	200
FIXPLUG-10200	10x200	160	140	140	120	200
FIXPLUG-10220	10x220	180	160	160	140	100
FIXPLUG-10260	10x260	220	200	200	180	100

Section 4. NOTES

- All previous versions of this Data Sheet are no longer valid
- 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 Sp. z o.o. is not responsible for the correctness and quality of the connection.