



**Universal hammer driven fastener with plastic pin and short expansion zone**

# LTX-10

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Modern fastener with short expansion zone for fastening of polystyrene EPS foam on all substrates according to EAD 330196-01-0604.



ETA-16/0509



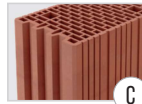
### SUBSTRATES (EAD 330196-01-0604 ABCDE)



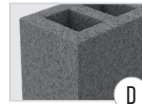
Concrete



Solid clay bricks  
MZ, Calcium  
silicate solid  
brick KS



Hollow bricks



Elements on LAC  
lightweight  
aggregate  
concrete



Autoclaved  
aerated  
concrete AAC

<b>FASTENER MATERIAL</b>	Polyethylene (PE)
<b>PIN MATERIAL</b>	Glass-fibre reinforced polyamide (PA)
<b>INSTALLATION METHOD</b>	· Surface mount · Immersed mount
<b>APPLICATION</b>	Universal fastener for fixing polystyrene
<b>TYPE OF INSULATION MATERIAL</b>	Styrofoam EPS



#### NEW IMPROVED DESIGN EMBEDMENT OF 30 AND 50 mm.

Owing to the new design of the expansion zone the fastener can be installed in all substrate categories while maintaining its high strength parameters.



#### IMPROVED DESIGN OF THE PIN'S HEAD

Improved design of the pin's head ensures good strength during installation.



#### INNOVATIVE DESIGN OF THE FASTENER

Greater stiffness of the support collar means better holding of the thermal insulation material.



#### INNOVATIVE DESIGN OF THE FASTENER

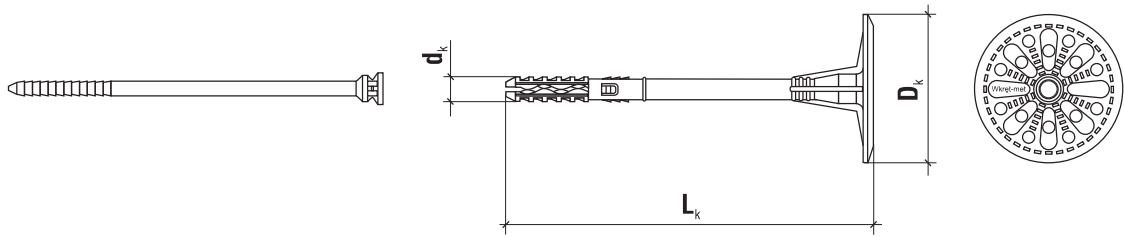
Large amount of pocket adhesives on the collar increases the adhesiveness of the mortar.

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Plastic pin

LTX-10

Length range: 70 - 260 mm

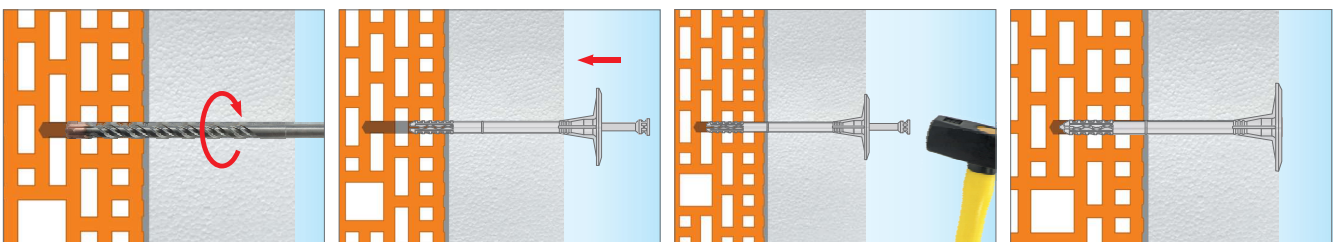


	Product code	Dimensions $d_k \times L_k$ [mm]	Insulation material thickness $t_{ix}$ [mm]				Pack unit [pcs.]
			New buildings		Old buildings		
			$t_{ad}$ adhesive layer of 10 mm		$t_{ad}$ adhesive layer of 10 mm + 20 mm of old plaster		
			without cutter	with cutter	without cutter	with cutter	
<b>LTX-10</b>							
<b>ø10</b>	LTX10070(200)	10x70	30/10*	50/30*	10/-*	30/10*	200
	LTX10090(200)	10x90	50/30*	70/50*	30/10*	50/30*	200
	LTX10110(200)	10x110	70/50*	90/70*	50/30*	70/50*	200
	LTX10120(200)	10x120	80/60*	100/80*	60/40*	80/60*	200
	LTX10140(200)	10x140	100/80*	120/100*	80/60*	100/80*	200
	LTX10160(200)	10x160	120/100*	140/120*	100/80*	120/100*	200
	LTX10180(200)	10x180	140/120*	160/140*	120/100*	140/120*	200
	LTX10200(200)	10x200	160/140*	180/160*	140/120*	160/140*	200
	LTX10220(100)	10x220	180/160*	200/180*	160/140*	180/160*	100
	LTX10260(100)	10x260	220/200*	240/220*	200/180*	220/200*	100

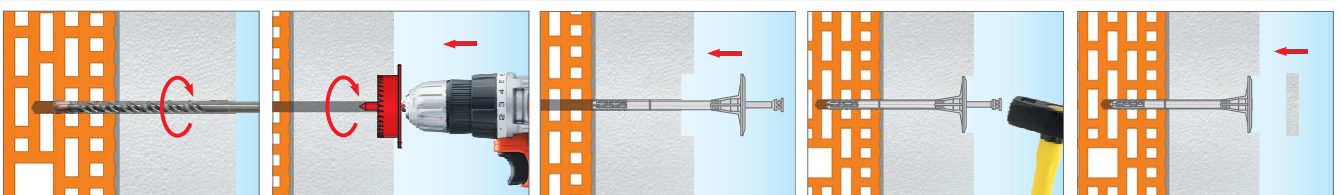
\* - for substrate use category E (Autoclaved aerated concrete)

Product marking - LTX10260(100)			
LTX	10	260	(100)
Fastener type	Diameter	Length	Number of pieces in a box

**INSTALLATION INSTRUCTIONS - surface mount**



**INSTALLATION INSTRUCTIONS - immersed mount with a polystyrene EPS disc (with plastic cutter)**



AVAILABLE ACCESSORIES

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# LTX-10 - TECHNICAL DATA

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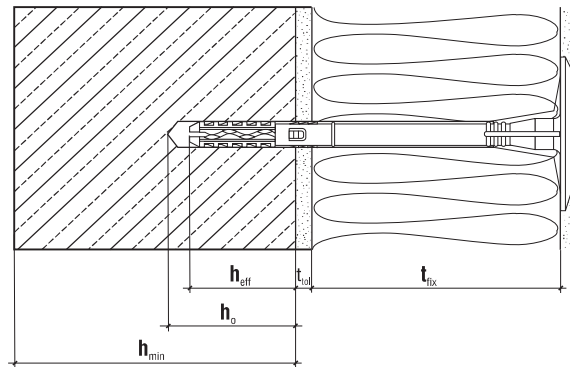


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### TECHNICAL PARAMETERS

Parameter	Unit	Value	
Fastener diameter	$d_k$ [mm]	10	
Collar diameter	$D_k$ [mm]	60	
Effective anchorage depth	$h_{eff}$ [mm]	30/50*	
Hole depth	$h_o$ [mm]	40/60*	
Point thermal transmittance	$\chi$ [W/K]	surface mount	Immerged mount
		0,001	0,000
Collar stiffness	S [kN/mm]	0,50	
Substrate category	-	<b>A B C D E</b>	
Fastener material	-	PE	
Pin material	-	PA + GF	
European Technical Assessment	-	ETA-16/0509	

\* - for substrate use category E (Autoclaved aerated concrete)



### LOAD RESISTANCE

EAD 330196- 01-0604 use cat.	Substrate	Density [kg/dm <sup>3</sup> ]	Characteristic pull-out resistance [kN]
A	Concrete C12/15	≥ 2,25	0,50
A	Concrete C20/25 - C50/60	≥ 2,30	0,75
B	Solid clay bricks	≥ 2,00	0,75
B	Calcium silicate solid brick	≥ 2,00	0,60
C	Calcium silicate hollow blocks	≥ 1,60	0,60
C	Vertically perforated clay bricks	≥ 1,20	0,60
C	Poroform 25	≥ 0,80	0,40
D	LAC lightweight aggregate concrete	≥ 0,88	0,60
E	Autoclaved aerated concrete AAC 2	≥ 0,35	0,50
E	Autoclaved aerated concrete AAC 7	≥ 0,65	0,60

### INSTALLATION DATA

Fastener type	LTX 10
Min. substrate thickness $h_{min}$ [mm]	100
Minimum fastener spacing $L_{os}$ [mm]	100
Minimum edge distance $C_{min}$ [mm]	100

Partial safety factor for fastener resistance  $\gamma_m = 2,0$  (valid in absence of national regulations)

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# LTX-10 - INSTALLATION ACCESSORIES

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## Plastic cutter for polystyrene EPS

**WK-FT**

diameter Ø66.7 mm

### Specifications:

- Plastic cutter for cutting holes in polystyrene EPS insulation material for insertion of polystyrene EPS disc.
- Controlled cutting depth, thrust collar with a diameter of 90 mm.



## Polystyrene disc (white, graphite)

**KS, KSG**

dimensions Ø67 x 17 mm

### Specifications:

- Polystyrene disc (white, graphite) for covering up work holes in polystyrene - installation immersed mount.

