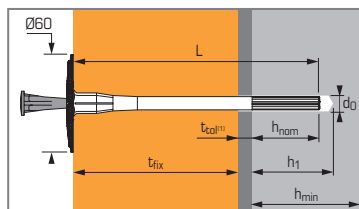




Plastic nail hammer-in anchor for fixing expanded polystyrene (EPS) and mineral wool insulation boards in external wall system (ETICS)



ETA 18/1095
EAD 330196-01-0604



⁽¹⁾ t_{col} = glue thickness (≤ 10 mm) + thickness of equalization layer or non-load bearing coating (≤ 20 mm)

APPLICATION

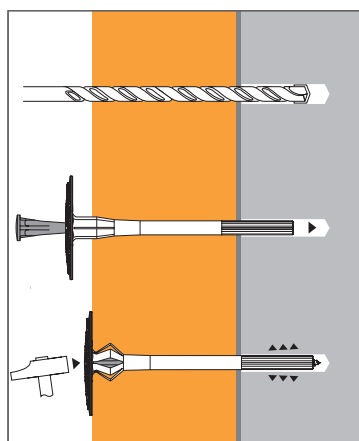
- Fixing all rigid insulation on solid or hollow material

MATERIAL

- Anchor body:** polypropylene⁽¹⁾
- Plastic nail:** PA 6 reinforced polyamide
- Thermal transmittance:** 0.000 W/k
- Plate stiffness :** 0,6 kN/mm
- Temperature range in use:** $\geq 0^\circ\text{C}$

⁽¹⁾ Caution: the anchor must be protected from UV rays by a screen (rendering, panelling, etc.)

INSTALLATION



Technical data

Anchor size	Embedment depth	Insulation thickness*	Base material thickness	Drilling depth	Drilling diameter	Total anchor lenght (mm)	Code
	(mm) h_{om}	(mm) t_{fix}	(mm) h_{min}	(mm) h₁	(mm) d₀	(mm) L	Head Ø60
8X115/70	35	70	100	45	8	115	078090
8X135/90		90				135	054827
8X155/110		110				155	054828
8X175/130		130				175	054829
8X195/150		150				195	054831
8X215/170		170				215	054832
8X235/190		190				235	054833
Plastic washer PP Ø90							057655
Plastic washer PA 6.6 Ø140							054929

* t_{fix} calculated with $t_{col} = 10$ mm

Characteristic loads (N_{Rk}) in kN

TENSILE

Base material	Anchor size $\varnothing 8$ $h_{nom} : 35$ mm	N_{Rk}
Concrete (C12/15)		0,6
Concrete (C20/25 to C50/60)		0,75
Solid clay brick - EN 771-1 (fbk = 20 Mpa ⁽¹⁾)		0,75
Calcium silicate solid units - EN 771-2 - fbk = 12 Mpa ⁽¹⁾		0,75
Lightweight concrete hollow block - EN 771-3 - fbk = 4 Mpa ⁽¹⁾		0,6
Lightweight aggregate concrete- EN 1520 (LAC) - fbk = 4 Mpa ⁽¹⁾		0,5
Perforated clay bricks - EN 771-1 - fbk = 10 Mpa ⁽¹⁾		0,5
Vertically perforated clay bricks - NORM B6124 - fbk = 10 Mpa ⁽¹⁾		0,4

⁽¹⁾ For others masonry types, jobsite tests could be performed.

Design loads (N_{Rd}) and recommended loads (N_{rec}) for one anchor without edge or spacing influence in kN

$$N_{Rd} = \frac{N_{Rk}^{(1)}}{\gamma_M} \quad (1) \text{ Issue from ETA}$$

$$N_{rec} = \frac{N_{Rk}^{(1)}}{\gamma_M \cdot \gamma_F}$$

TENSILE

Base material	Anchor size $\varnothing 8$ $h_{nom} : 35$ mm	N_{Rd}	N_{rec}
Concrete (C12/15)		0,30	0,21
Concrete (C20/25 to C50/60)		0,375	0,27
Solid clay brick - EN 771-1 (fbk = 20 Mpa ⁽¹⁾)		0,375	0,27
Calcium silicate solid units - EN 771-2 - fbk = 12 Mpa ⁽¹⁾		0,375	0,27
Lightweight concrete hollow block - EN 771-3 - fbk = 4 Mpa ⁽¹⁾		0,30	0,21
Lightweight aggregate concrete- EN 1520 (LAC) - fbk = 4 Mpa ⁽¹⁾		0,25	0,18
Perforated clay bricks - EN 771-1 - fbk = 10 Mpa ⁽¹⁾		0,25	0,18
Vertically perforated clay bricks - NORM B6124 - fbk = 10 Mpa ⁽¹⁾		0,20	0,14

$\gamma_M = 2$; $\gamma_F = 1,4$

⁽¹⁾ For others masonry types, jobsite tests could be performed.

Spacing data

IN CONCRETE

Minimum distance between anchors and from edges and minimum thickness of concrete member (mm)

S_{min}	C_{min}	h_{min}
100	100	100