KI-10N LONG EXPANSION ZONE FACADE FIXINGS WITH METAL PIN

Hammer-in facade fixing 60mm long expansion zone for high performance in masonry, as well as lightweight and aerated concrete

- ETA-07/0221

Product information

Features and benefits

- Easy installation with best performance in lightweight base materials
- Approved for use in base material categories B, C, D, and E
- Steel nail allows fast and trouble-free installation with correct expansion of the plug.
- Reduction of thermal bridge formation (value 0.3W/K) through the integration of an impact-resistant plastic overmoulding on the nail head.
- Plate stiffness (value 0.5 kN/mm) ensures smooth elevation surface and stable insulation system.
- Can be used with additional KWL insulation holding plate, available in 90, 110 and 140mm flange sizes.

Applications

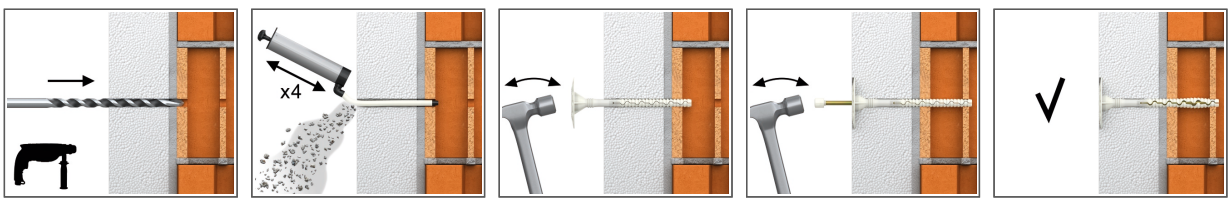
- Polystyrene (EPS) boards
- Mineral wool
- Light wood wool building boards
- Polyurethane (PU) boards
- Lightweight recycled panels

Base materials

Approved for use in:

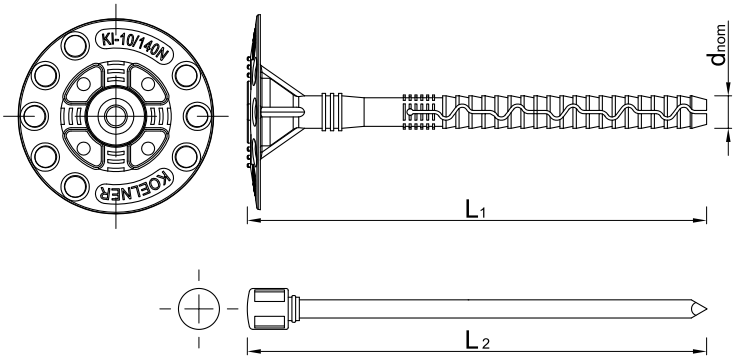
- Solid Brick (Use category B)
- Hollow Brick (Use category C)
- Vertically-perforated clay block (Use category C)
- Lightweight Concrete Block (Use category C)
- Reinforced components of lightweight aggregate concrete (Use category D)
- Aerated Concrete Block (Use category E)

Installation guide



1. Drill a hole of required diameter and depth
2. Lightly tap the plastic sleeve through the insulation material into hole with a hammer, until fixing depth is reached
3. Hammer the steel nail into the plastic sleeve until fixing is secure and flush with insulation material.
4. Embedment depth of min 60mm in approved materials.
5. Drilling depth of min 80mm in approved materials.
6. Temperature range when installed -35°C to +80°C.
7. In soft insulation panels the fixing should be combined with insulation retaining plates KWL-90, KWL-110, KWL-140.

Product information



Size	Product Code	Fixing			Fixture	
		Diameter	Length	Plate diameter	Min. thickness	Max. thickness
		d	L	D	t_{fix} B, C, D, E	t_{fix} B, C, D, E
		[mm]	[mm]	[mm]	[mm]	[mm]
Ø10	KI-140N	10	140	60	70	90
	KI-160N	10	160	60	90	110
	KI-180N	10	180	60	110	130
	KI-200N	10	200	60	130	150
	KI-220N	10	220	60	150	170
	KI-260N	10	260	60	190	210
	KI-300N	10	300	60	210	250

Installation data

Substrate			B, C, D, E
Fixing diameter	d	[mm]	10
Hole diameter in substrate	d_0	[mm]	10
Min. hole depth in substrate	h_0	[mm]	70
Installation depth	h_{nom}	[mm]	60
Min. substrate thickness	h_{min}	[mm]	100
Min. spacing	s_{min}	[mm]	100
Min. edge distance	c_{min}	[mm]	100

Basic performance data

Performance data for single anchor in tension without influence of edge distance and spacing

Substrate		Solid brick	Vertically perforated block	Lightweight aggregate concrete hollow block	Autoclaved aerated concrete block
Embedment depth h_{ef}	[mm]	60	60	60	60
MEAN ULTIMATE LOAD $N_{Ru,m}$					
KI-10N	[kN]	1.57	0.82	0.88	1.54
CHARACTERISTIC LOAD N_{Rk}					
KI-10N	[kN]	0.9	0.4	0.3	0.9
DESIGN LOAD N_{Rd}					
KI-10N	[kN]	0.45	0.2	0.15	0.45
RECOMMENDED LOAD N_{rec}					
KI-10N	[kN]	0.32	0.14	0.11	0.32

Fixing type		KI-10N
Plate resistance	[kN]	1.04
Plate stiffness	[kN/mm]	0.5
Point thermal transmittance ?	[W/K]	0.003

Product Commercial Data

Size	Product Code	Fixing			Quantity [pcs]			Weight [kg]			Bar Codes	Art No.
		Diameter [mm]	Length [mm]	Plate diameter [mm]	Box	Outer	Pallet	Box	Outer	Pallet		
Ø10	KI-140N	10	140	60	250	250	8000	8.0	8.0	286.0	5906675218144	20223
	KI-160N	10	160	60	250	250	8000	9.1	9.1	322.2	5906675218243	20230
	KI-180N	10	180	60	250	250	6000	9.8	9.8	264.0	5906675218342	20237
	KI-200N	10	200	60	250	250	6000	10.4	10.4	279.1	5906675218441	20244
	KI-220N	10	220	60	250	250	6000	11.9	11.9	315.1	5906675218540	20246
	KI-260N	10	260	60	200	200	4800	11.4	11.4	302.9	5906675218748	20249
	KI-300N	10	300	60	200	200	4800	12.3	12.3	325.2	5906675218649	20251