MECHANICAL FIXINGS

- alkali-resistant
- durable
- flexible

Use

Additional thermal insulation fixing – protects thermal insulation system against forces related to wind loads (suction).

Properties

Fixings with plastic pin – recommended for fixing polystyrene boards.
Fixings with metal pin – recommended for fixing both polystyrene and mineral wool boards.
They don't cause thermal bridging in the point of penetration through the thermal insulation.

Thermal insulation mechanical fixing

Installation of mechanical fixings can start not earlier than after approx. 24 hours since the insulation material application. Drill a hole of depth recommended for the given fixing length. Then, remove dust from hole and insert the fixing. Next, hammer in (in case of hammered in fixings) or screw in (in case of screwed in fixings) the pin. The structure of thermal insulation material must not be damaged by mechanical fixings. Fixing head should keep the plane of thermal insulation material.

Technical requirements

For fixings A-KI: AT-15-7920-2009
For fixings TFIX-8M: ETA-07/0336
For fixings KI-10N: ETA-07/0221
For fixings KI-10M: ETA-07/0291

Important additional information

From technological point of view, application of fixings is not required for walls up to 12 m high with appropriately reliable and strong substrate (concerns systems with polystyrene). Check local regulations on the requirements on mechanical fixing.

If in doubt concerning the bearing capacity of substrate, it is recommended to carry out pull-off test.

The number of fixings should not be lower than 4 pieces for each 1 m². Increase the number of fixings in the building corner zones. Detailed data concerning number, type and length of pins as well as their arrangement should be included in the technical design of external thermal insulation.

The depth of fixings anchoring in the wall structural layer depends on substrate type and should be selected in concordance with requirements of the fixings manufacturer.

Types of substrates: type A – concrete, type B – clay brick, sand–lime clay brick, type C – sand-lime and clay hollow brick, type D – lightweight concrete blocks, lightweight concrete aggregate bricks, type E - aerated concrete.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.

At the time of publication of this product Technical Data Sheet all previous ones become void.

Date of update: 2024-03-11

Fixing A-KI for polystyrene, with plastic pin, hammered in, diameter 10 mm, substrate type B, C, D, E	Symbol/index	Available length [mm]	Depth of anchoring [mm] A B	Insulation thickness [mm] A B	Depth of anchoring [mm] C D E	Insulation thickness [mm] C D E	Collective packaging
	A-KI-90	90	25	50	50	30	250
	A-KI-120	120	25	80	50	60	250
	A-KI-140	140	25	100	50	80	250
	A-KI-160	160	25	120	50	100	250
	A-KI-180	180	25	140	50	120	250
	A-KI-200	200	25	160	50	140	250

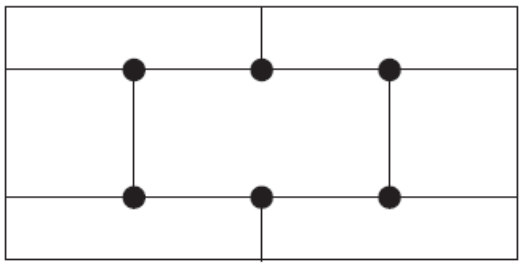
Fixing TFIX 8M for polystyrene and mineral wool, with metal pin, hammered in, diameter 8 mm, substrate type A, B, C.	Symbol/index	Available length [mm]	Depth of anchoring [mm]	Insulation thickness [mm]	Collective packaging
	TFIX 8M-095	95	25	60	200
	TFIX 8M-115	115	25	80	200
	TFIX 8M-135	135	25	100	200
	TFIX 8M-155	155	25	120	200
	TFIX 8M-175	175	25	140	200
	TFIX 8M-195	195	25	160	200
	TFIX 8M-215	215	25	180	100
	TFIX 8M-235	235	25	200	100
	TFIX 8M-255	255	25	220	100
	TFIX 8M-275	275	25	240	100
	TFIX 8M-295	295	25	260	100

Fixing KI-10N for polystyrene and mineral wool, with metal pin and long expansion zone, hammered in, diameter 10 mm, substrate type B, C, D, E.	Symbol/index	Available length [mm]	Depth of anchoring [mm]	Insulation thickness [mm]	Collective packaging
	A-KI-120-N	120	60	50	250
	A-KI-140-N	140	60	70	250
	A-KI-160-N	160	60	90	250
	A-KI-180-N	180	60	110	250
	A-KI-200-N	200	60	130	250
	A-KI-220-N	220	60	150	250
	A-KI-260-N	260	60	190	250
	A-KI-300-N	300	60	230	250

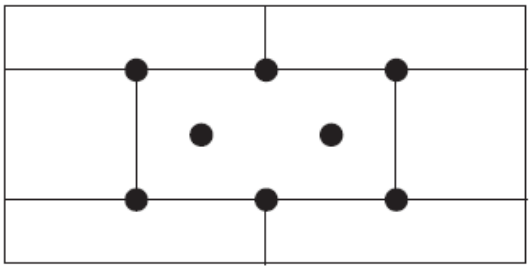
Additional accessories		
Symbol/index	Product type	Collective packaging
KWL-140	Pressing collar for lamella wool, diameter 140 mm, to be used with KI-10N fixings	200
KFS (cutter)	Thermal insulation hole cutter	1
KFS (plug)	Polystyrene plug	250

Fixing KI-10M for polystyrene, with metal pin, hammered in, diameter 10 mm, substrate type A, B, C, D, E	Symbol/index	Available length [mm]	Depth of anchoring [mm] A B C	Insulation thickness [mm] A B C	Depth of anchoring [mm] D E	Insulation thickness [mm] D E	Collective packaging
	KI-090M	90	25	55	40	40	250
	KI-120M	120	25	85	40	70	250
	KI-140M	140	25	105	40	90	250
	KI-160M	160	25	125	40	110	250
	KI-180M	180	25	145	40	130	250
	KI-200M	200	25	165	40	150	250
	KI-220M	220	25	185	40	170	250
	KI-260M	260	25	225	40	210	200

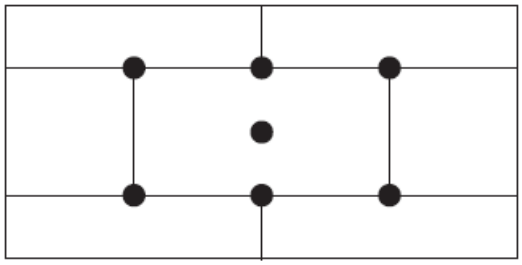
Fixing arrangement for polystyrene or mineral wool boards:



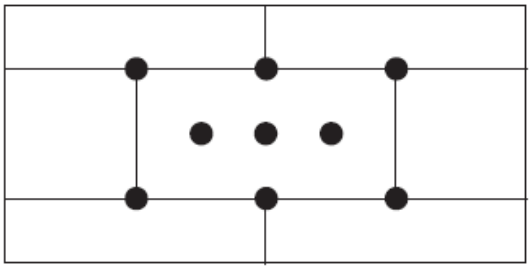
1.00 x 0.50 m	slab size	1.20 x 0.60 m
4.00 pcs/m²	no. of mechnical fasteners	2.78 pcs/m²



1.00 x 0.50 m	slab size	1.20 x 0.60 m
8.00 pcs/m²	no. of mechnical fasteners	5.56 pcs/m²



1.00 x 0.50 m	slab size	1.20 x 0.60 m
6.00 pcs/m²	no. of mechnical fasteners	4.17 pcs/m²



1.00 x 0.50 m	slab size	1.20 x 0.60 m
10.00 pcs/m²	no. of mechnical fasteners	6.94 pcs/m²