

KLEMIT[®]

PATENT

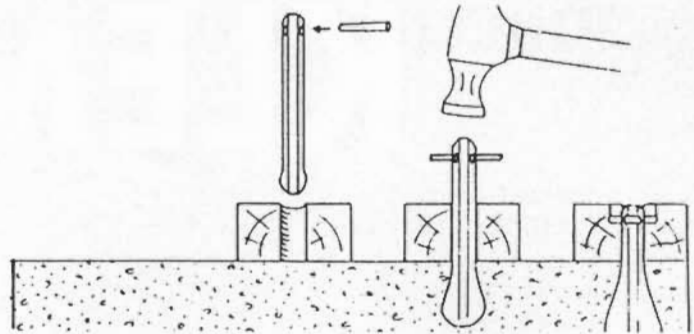


LENSON

KLEMIT® - "the Ultimate Solution"

Mounting instructions:

KLEMIT® is quite simply hammered into the aerated/lightconcrete. When fixing beams, boards etc these should be pre-drilled 16-18 mm.



Some examples of application

<p>Brickanchorage Hole Klemit</p>	<p>Insulation with structured surface Hole Klemit</p>	<p>Roof insulation Klemit SB75</p>
<p>Cable trays/ladders Hole Klemit M6/M8 Klemit</p>	<p>Flourescant lighting Hole Klemit M6/M8 Klemit</p>	<p>Pipe supports Hole Klemit</p>
<p>Pipe supports/threaded rods Lenlock/M6/M8 Klemit</p>	<p>Roof insulation</p>	<p>Under ceiling supports Hole Klemit M6/M8 Klemit</p>
<p>Ventilation pipes & systems M6/M8 Klemit</p>	<p>Sprinkler systems M6/M8 Klemit</p>	<p>Radiators etc M6/M8 Klemit</p>

KLEMIT® - the ultimate solution for application and fixing in aerated concrete and Leca®

KLEMIT is a patented fastener for fixing details in aerated/lightconcrete. **KLEMIT** combines the qualities of a nail, a screw and a rivet. As easily hammered in as a nail, grips as strongly as a screw and is as vibration safe as a rivet. **KLEMIT** is specially shaped so that it can be hammered directly into material without the need for pre-drilling. The patented "W" shape means it can be fastened extremely near to outer edges and at the same time give maximum

strength both across its entire length and against rotation. Correctly assembled, **KLEMIT** has high pull out values and is not affected by vibrations.

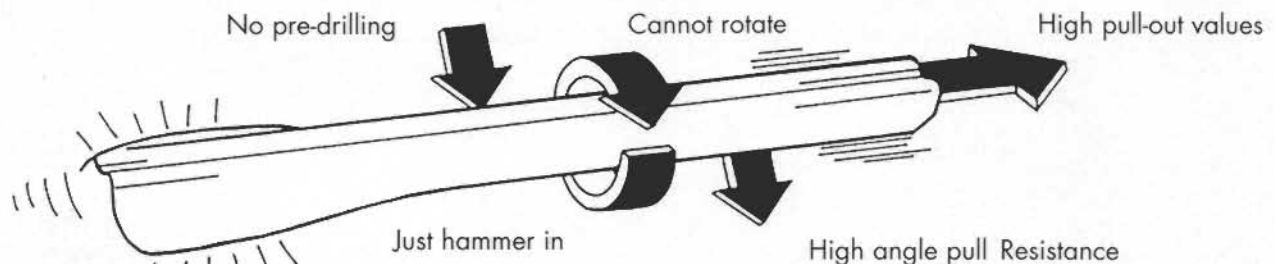
There are 3 standard **KLEMIT**'s:

Hole **KLEMIT** - for wood, steel etc

Nut **KLEMIT** - for M6 and M8 thread assembly

Plate **KLEMIT** SB75 - for insulation and roof assembly

It is difficult to find applications that cannot be solved with **KLEMIT**.



KLEMIT-range

Aluminium zinc plate (aluzinc) SS 14122 (az) or stainless steel SS 2343 (S)

Hole KLEMIT incl locking pin LP 32

Description	Length (mm)	Amount	Amount transport carton	Weight per packet
HL 100 U az/sr	100	50	300	1,3
HL 150 U az/sr	150	50	300	1,8
HL 175 U az/sr	175	50	300	2,0
HL 225 U az/sr	225	50	200	2,5

Nut KLEMIT M6 and M8

HL 100 M6/M8 az/sr	100	50	300	1,5
HL 150 M6/M8 az/sr	150	50	300	2,0
HL 175 M6/M8 az/sr	175	50	300	2,25
HL 225 M6/M8 az/sr	225	50	200	2,75

Plate KLEMIT (Only available in Aluzinc plate SS 142122. Produced on order, no stock-product.)

	Length (mm)	Amount	Weight per packet
HL 100 SB 75	100	50	2,4
HL 150 SB 75	150	50	2,9
HL 175 SB 75	175	50	3,15
HL 225 SB 75	225	50	3,65

KLEMIT accessories

Loose pin LP 32 Fz	50	500	0,25
Loose pin LP 100 Fz	50	500	0,75
Mounting adapter	TYP HK	1	0,75
"	TYP BK	1	0,5
"	TYP MK	1	0,65

Facts relating to - KLEMIT®

Function

KLEMIT embraces and grips the material on a wide area. The function of **KLEMIT** can be compared with a nail, when the material compresses against the nail to ensure a secure fastening.

Tests

Tests on **KLEMIT** have been done at several different test laboratories such as, The Swedish Governments Research Laboratory, International Siporex, Ytong AB and AB Norsk Leca.

Material

KLEMIT is produced from aluzincd steel plate, or stainless acid proof 0,7 mm plate.

Aluzinc steel plate has a better corrosion protection than regular galvanised plate. Tests in USA over a period of 13 years in a highly corrosive environment resulted in 3 times better results than with regular plate.

Tests in Sweden have given the same conclusions.

Steel maintains it's strength, which can not be said for

plastic and rubber. Steel is not affected by cold and can not burn.

Pull-out-strength

KLEMIT has to it's high outpulling values the following important qualities:

SHAKEPROOF: tests 2 times harder than normal, showed no breakage or fracture on any of the 6 tests.

SLIPFREE: When maximum values affect **KLEMIT**, the measured slipping was not more than 0,07 mm after 6 days.

CATASTROPHE - PROTECTION: When 20 mm of the **KLEMIT** is pulled out, **KLEMIT** regains 50-75% of the original pull-out strength. After overload it's possible to hammer **KLEMIT** in again and full pull-out strength is retained.

Shear - load

When shear - loads shall be taken up, **KLEMIT** should be assembled with the W-shape working against the load.

Recommended load - values for KLEMIT

Tensile values in kN (1 kN=100 kp)

Safetyfactor 3,0 already calculated in the figures below.

Material Quality * kg/m ³	Anchorage depth mm				
	60	80	100	120	140
400	-	-	0,27	0,36	0,44
450	-	0,36	0,47	0,58	0,70
500	0,31	0,50	0,66	0,82	-
600	0,78	1,15	-	-	-
Leca 0,65-3	0,33	0,50	0,66	0,82	-

* Volumeweight kg per one m³

Shearload in kN (1kN=100 kp)

Safetyfactor 2,5

Material Quality kg/m ³	Anchorage depth mm		
	60	80	100
400	-	0,40	0,43
450	0,40	0,70	0,70
500	0,50	0,80	0,80
600	0,60	0,90	-
Leca 0,65-3	0,50	0,80	0,80

Minimum recommended edge distance when shear forces working against edge of the block

Material Quality	
400	100
450	85
500	70
600	70
Leca 0,65-3	70

KLEMIT is a registered trade mark and is patented in 10 countries.

LENSON KLEMIT is marketed by:

Lenson Sweden Lenson Norway Lenson Finland IKL produkter Denmark Lenson Select U.K TOP-O NV Belgium
021-522 45 71

Producer:

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