

HIT M & HIT M-A2

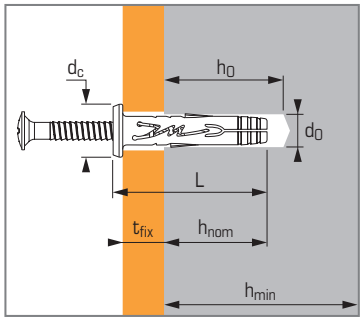
zinc coated & stainless steel version

Hammer-set anchor for light duty fixings for concrete and all materials types

ETA European Technical Assessment CE

INOX STAINLESS STEEL

EAD 330196-00-0604 - 06/0032



APPLICATION

- Insulation cladding
- Profiles for thin coat external
- Insulation systems
- Drywall track
- Wood
- Flashing
- Electrical accessories
- Collar

Use the ETA figures to design ETICS application.

MATERIAL

- **Body:** polyamid 6
- **Expansion nail:**
  - zinc coated steel: FR 15 (5 µm)
  - stainless steel: A2
- **Screw head type:** PZ2/PZ3

Technical data

Anchor size	Embedment depth (mm) h_{nom}	Max. thickness of part to be fixed (mm) t_{fix}	Drilling depth through part to be fixed (mm) L+8	Drilling depth in base material (mm) h_0	Drilling diameter (mm) d_0	Min. thickness of base material (mm) h_{min}	Cylinder head diameter (mm) d_c	Total anchor length (mm) L	Type of nail	Code Zinc coated steel nail	Code Stainless steel A2 nail
5X25/5 P	20	5	35	30	5	100	9	27	PZ2	050116	-
5X35/15 P		15	45					37		050117	-
6X30/5 P	25	5	40	35	6	100	11	32	PZ2	050118	060104
6X40/12 P		12	47					39		050119	-
6X50/25 P		25	60					52		050121	060105
6X65/40 P		40	75					67		050122	060106
6X40/12 V	25	12	47	35	6	100	10	39	PZ2	050129	-
6X50/25 V		25	60					52		050131	-
6X65/40 V		40	75					67		050132	-
6X30/5 M7X150	30	-	-	40	6	100	11	32	M7	050142	
8X40/10 P	30	10	50	40	8	100	13	42	PZ2	060090	060107
8X40/10 P20		10	50					42		055378	-
8X60/30 P		30	70					62		060091	060108
8X90/60 P		60	100					92		060092	060109
8X110/80 P		80	120					112		060093	-
8X130/100 P		100	140					132		060094	-
8X60/30 V	30	30	70	40	8	100	11,5	62	PZ2	060095	-
8X90/60 V		60	100					92		060096	-
8X110/80 V		80	120					112		060097	-
8X130/100 V		100	140					132		060098	-
8X160/125 P	30	125	166	40	8	100	15	158	PZ3	057601	-
8X180/145 P		145	186					178		057602	-
8X200/165 P		165	206					198		057603	-

(1) In masonry, the thickness of the part to be fixed may fluctuate, to ± 5 mm for Ø5 and Ø6 mm and to ± 10 mm for Ø8 mm, to allow a good contact between collar and the part to be fixed.

Characteristics loads (N_{Rk}, V_{Rk}) in kN

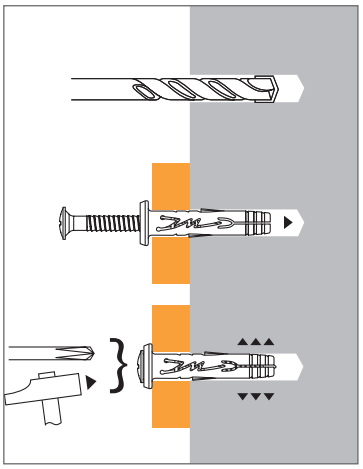
TENSILE

Base material \ Anchor size	Ø5	Ø6	Ø8
Concrete (C20/25)			
N_{Rk}	0,60	0,90	1,2
Solid concrete blocks B120 (fc = 13,5 N/mm²)			
N_{Rk}	0,30	0,40	0,50
Clay bricks (fc = 55 N/mm²)			
N_{Rk}	0,20	0,80	1,2
Hollow concrete blocks B40 not rendered (fc = 6,5 N/mm²)			
N_{Rk}	0,20	0,30	0,6
Hollow concrete blocks B40 rendered (fc = 6,5 N/mm²)			
N_{Rk}	0,95	1,70	2,25
Hollow clay bricks Eco-30 not rendered (fc = 4,5 N/mm²)			
N_{Rk}	0,30	0,40	0,50
Hollow clay bricks Eco-30 rendered (fc = 4,5 N/mm²)			
N_{Rk}	0,95	1,30	1,70
Engineering clay bricks not rendered (fc = 14,5 N/mm²)			
N_{Rk}	0,55	0,75	0,95
Engineering clay bricks rendered (fc = 14,5 N/mm²)			
N_{Rk}	0,95	1,30	1,70
Aerated concrete (Mvn = 500 kg/m³)			
N_{Rk}	0,15	0,2	0,3
Plasterboard BA13			
N_{Rk}	0,15	0,15	0,18
Plasterboard BA10 + polystyren			
N_{Rk}	0,18	0,18	0,2

SHEAR

	5X25/5 5X35/15	6X30/5 6X40/12 6X50/25	6X65/40	8X40/10 to 8X90/60	8X110/80 to 8X200/165
V_{Rk}	1,9	2,8	2,25	4,3	3,55
V_{Rk}	1,9	2,8	2,25	4,3	3,55
V_{Rk}	1,9	2,8	2,25	4,3	3,55
V_{Rk}	1,9	2,25	2,25	2,8	2,8
V_{Rk}	1,9	2,25	2,25	2,8	2,8
V_{Rk}	0,55	0,75	0,75	0,9	0,9
V_{Rk}	0,9	1,1	1,3	1,7	1,7
V_{Rk}	1,9	2,25	2,25	2,8	2,8
V_{Rk}	1,9	2,8	2,25	4,3	3,55
V_{Rk}	0,15	0,2	0,2	0,3	0,3
V_{Rk}	0,15	0,15	0,15	0,18	0,18
V_{Rk}	0,18	0,18	0,18	0,2	0,2

INSTALLATION



WARNING:
For anchor sizes 8X160/125P, 8X180/145P & 8X200/165P, setting only by screwing

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zinc coated & stainless steel version



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

$$N_{Rd} = \frac{N_{Rk}\ ^{(1)}}{\gamma_M} \qquad N_{rec} = \frac{N_{Rk}\ ^{(1)}}{\gamma_M \cdot \gamma_F} \qquad V_{Rd} = \frac{V_{Rk}\ ^{(2)}}{2{,}68} \qquad V_{rec} = \frac{V_{Rk}\ ^{(2)}}{3{,}75}$$

(1) Issue from ETA

(2) Derived from tests results

TENSILE

Anchor size / Base material	Ø5	Ø6	Ø8
Concrete (C20/25)			
N_{Rd}	0,3	0,45	0,6
N_{rec}	0,21	0,32	0,42
Solid concrete blocks B120 (fc = 13,5 N/mm²)			
N_{Rd}	0,15	0,2	0,25
N_{rec}	0,11	0,14	0,18
Clay bricks (fc = 55 N/mm²)			
N_{Rd}	0,1	0,4	0,6
N_{rec}	0,07	0,28	0,43
Hollow concrete blocks B40 not rendered (fc = 6,5 N/mm²)			
N_{Rd}	0,1	0,15	0,3
N_{rec}	0,07	0,11	0,21
Hollow concrete blocks B40 rendered (fc = 6,5 N/mm²)*			
N_{Rd}	0,35	0,63	0,84
N_{rec}	0,25	0,45	0,6
Hollow clay bricks Eco-30 not rendered (fc = 4,5 N/mm²)			
N_{Rd}	0,15	0,20	0,25
N_{rec}	0,10	0,14	0,17
Hollow clay bricks Eco-30 rendered (fc = 4,5 N/mm²)*			
N_{Rd}	0,35	0,49	0,63
N_{rec}	0,25	0,35	0,45
Engineering clay bricks not rendered (fc = 14,5 N/mm²)*			
N_{Rd}	0,21	0,28	0,35
N_{rec}	0,15	0,2	0,25
Engineering clay bricks rendered (fc = 14,5 N/mm²)*			
N_{Rd}	0,35	0,49	0,63
N_{rec}	0,25	0,35	0,45
Aerated concrete (Mvn = 500 kg/m³)*			
N_{Rd}	0,06	0,08	0,12
N_{rec}	0,04	0,06	0,08
Plasterboard BA13*			
N_{Rd}	0,06	0,06	0,07
N_{rec}	0,04	0,04	0,05
Plasterboard BA10 + polystyren*			
N_{Rd}	0,07	0,07	0,08
N_{rec}	0,05	0,05	0,06

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

* Base materials not submitted to ETA

SHEAR

Anchor size / Base material	5X25/5 5X35/15	6X30/5 6X40/12 6X50/25	6X65/40	8X40/10 to 8X90/60	8X110/80 to 8X200/165
Concrete (C20/25)					
V_{Rd}	0,7	1,05	0,84	1,61	1,33
V_{rec}	0,5	0,75	0,6	1,15	0,95
Solid concrete blocks B120 (fc = 13,5 N/mm²)					
V_{Rd}	0,7	1,05	0,84	1,61	1,33
V_{rec}	0,5	0,75	0,6	1,15	0,95
Clay bricks (fc = 55 N/mm²)					
V_{Rd}	0,7	1,05	0,84	1,05	1,33
V_{rec}	0,5	0,75	0,6	0,75	0,95
Hollow concrete blocks B40 not rendered (fc = 6,5 N/mm²)					
V_{Rd}	0,7	0,84	0,84	0,63	1,05
V_{rec}	0,5	0,6	0,6	0,45	0,75
Hollow concrete blocks B40 rendered (fc = 6,5 N/mm²)*					
V_{Rd}	0,7	0,84	0,84	1,33	1,05
V_{rec}	0,5	0,6	0,6	0,95	0,75
Hollow clay bricks Eco-30 not rendered (fc = 4,5 N/mm²)					
V_{Rd}	0,21	0,28	0,28	0,35	0,35
V_{rec}	0,15	0,2	0,2	0,25	0,25
Hollow clay bricks Eco-30 rendered (fc = 4,5 N/mm²)*					
V_{Rd}	0,35	0,42	0,49	0,63	0,63
V_{rec}	0,25	0,3	0,35	0,45	0,45
Engineering clay bricks not rendered (fc = 14,5 N/mm²)*					
V_{Rd}	0,7	0,84	0,84	0,32	1,05
V_{rec}	0,5	0,6	0,6	0,23	0,75
Engineering clay bricks rendered (fc = 14,5 N/mm²)*					
V_{Rd}	0,7	1,05	0,84	0,32	1,33
V_{rec}	0,5	0,75	0,6	0,23	0,95
Aerated concrete (Mvn = 500 kg/m³)*					
V_{Rd}	0,06	0,08	0,08	0,21	0,12
V_{rec}	0,04	0,06	0,06	0,15	0,08
Plasterboard BA13*					
V_{Rd}	0,06	0,06	0,06	0,13	0,07
V_{rec}	0,04	0,04	0,04	0,09	0,05
Plasterboard BA10 + polystyren*					
V_{Rd}	0,07	0,07	0,07	0,27	0,08
V_{rec}	0,05	0,05	0,05	0,19	0,06

Spacing data

IN CONCRETE

	Minimum distance between anchors and from edges (mm)	
Anchor size	$C_{cr,N\ mini}$	$C_{cr,V\ mini}$
Ø5	100	100
Ø6	100	100
Ø8	100	100