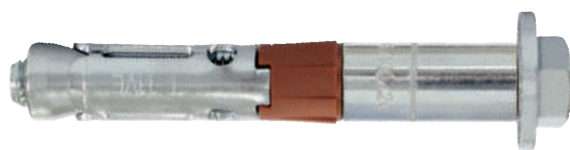


CHEVILLE DE SÉCURITÉ HAUTE PERFORMANCE

VERSION TÊTE HEXAGONALE

HVE


CARACTÉRISTIQUES

Matière :

Acier électrozingué

Avantages :

- Pose simple et rapide à travers l'objet à fixer
- Cheville femelle : démontable
- ATE béton option 1 pour béton fissuré et non fissuré
- Tenue au feu (120 minutes)
- Utilisation possible sous action sismique (performance catégorie C1)

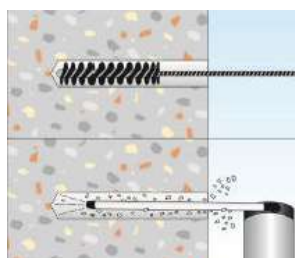
EXEMPLES D'APPLICATIONS

- Fixation de profils métalliques : garde-corps, poutres métalliques, sabots de charpente, consoles, chemins de câbles...
- Portes et portails industriels
- Supportage industriel

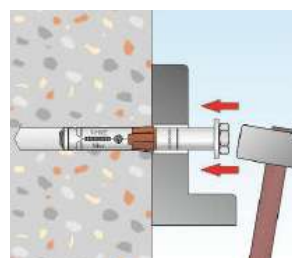
MISE EN ŒUVRE



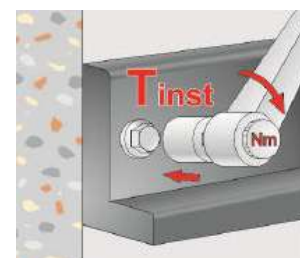
Percer le trou



Dépoussiérer le trou



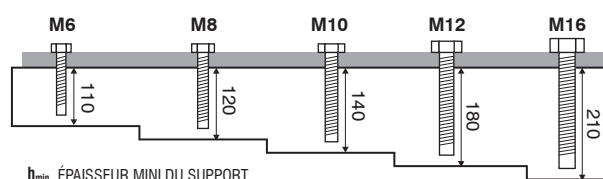
Monter la cheville au travers de la pièce à fixer



Serrer au couple indiqué dans les données de montage

DONNÉES DE MISE EN ŒUVRE

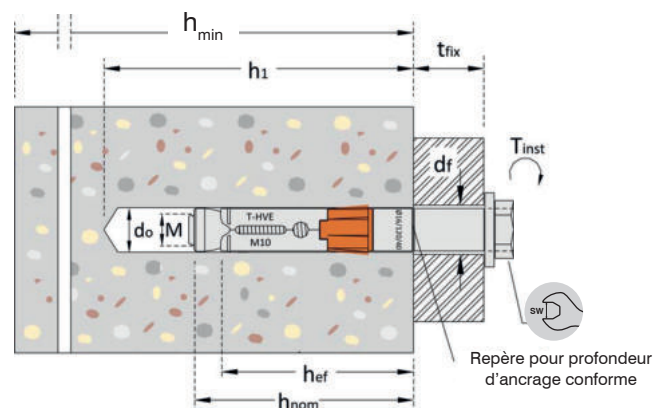
	M6	M8	M10	M12	M16	
S_{min}	55	110	80	135	130	ENTRAXE MINIMUM
C_{min}	70	100	90	175	180	DISTANCE AU BORDS MINI



DIMENSIONS & DONNÉES DE MONTAGE

Type	M	L	t _{fix}	Référence
		mm	mm	
HVE M6	M6	70	5	HVE10/5
		80	15	HVE10/15
		100	35	HVE10/35
HVE M8	M8	80	10	HVE12/10
		100	30	HVE12/30
		120	50	HVE12/50
HVE M10	M10	100	20	HVE16/20
		120	40	HVE16/40
		140	60	HVE16/60
HVE M12	M12	120	20	HVE18/20
		150	50	HVE18/50
HVE M16	M16	140	20	HVE24/20
		170	50	HVE24/50

		M6	M8	M10	M12	M16
Profondeur d'ancrage effective	h_{ef}	55	60	70	90	105
Ø perçage	d_o	10	12	16	18	24
Profondeur mini de perçage	h_1	80	90	100	120	140
Profondeur d'ancrage hors-tout	h_{nom}	65	70	80	100	120
Ø maxi de perçage dans pièce à fixer	d_f	12	14	18	20	26
Ouverture de clef	Sw	10	13	17	19	24
Couple de serrage	T_{inst}	15	30	50	100	160



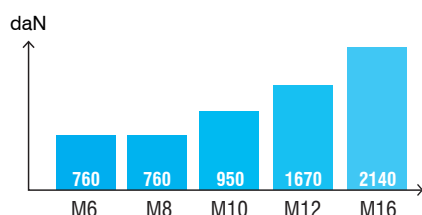
CHARGES DE SERVICE

Les charges publiées sont calculées à partir des valeurs caractéristiques données dans les ETA sur lesquels des coefficients partiels de sécurité issus de l'ETAG001 ainsi qu'un coefficient partiel d'action $\gamma_f = 1,4$ sont appliqués. Les valeurs sont données pour des profondeurs d'ancrage standard dans du béton C20/25.

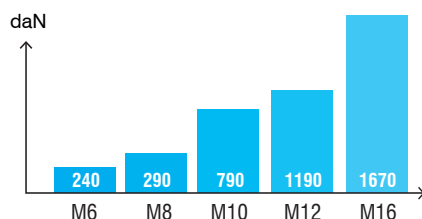
TRACTION



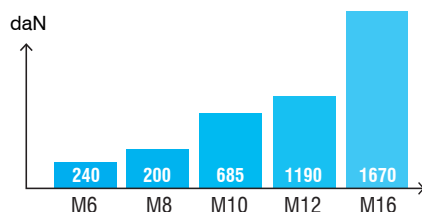
Béton non fissuré



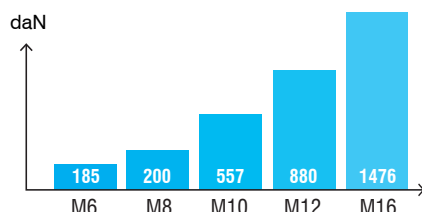
Béton fissuré



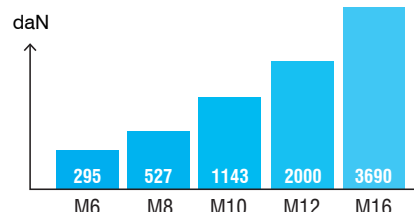
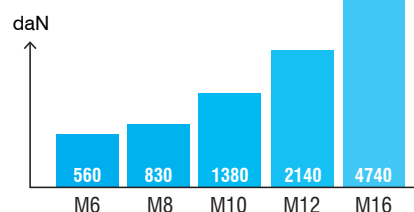
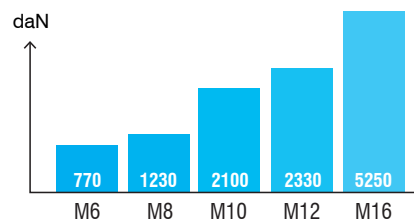
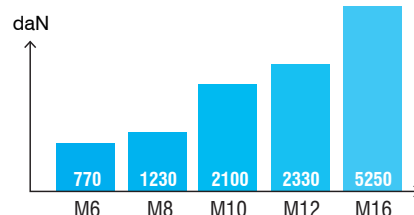
Sous contrainte sismique catégorie C1



Sous contrainte sismique catégorie C2



CISAILLEMENT



Pour les caractéristiques exactes de résistances et de pose, il convient de respecter toutes les exigences mentionnées dans l'agrément technique européen ETA 10/0060 ainsi que sur la notice de pose.

HIGH LOAD SAFETY BOLT

HEXAGONAL HEAD VERSION

HVE


FEATURES

Material :
Steel

Advantages :

- Easy and fast installation through the fixture

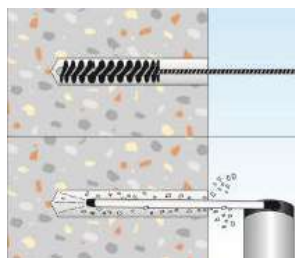
APPLICATION EXAMPLES

- For fixing metal profiles, railings, beams steel cladding brackets, industrial racking, consoles, cable trays....
- Industrial doors and gates

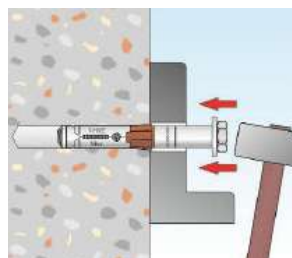
INSTALLATION



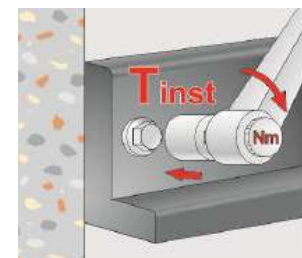
Drill the hole



Remove the dust from the hole with an air pump



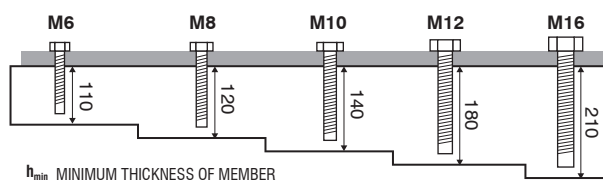
Put the Anchor into the hole through the fixture



Apply required torque

INSTALLATION DATAS

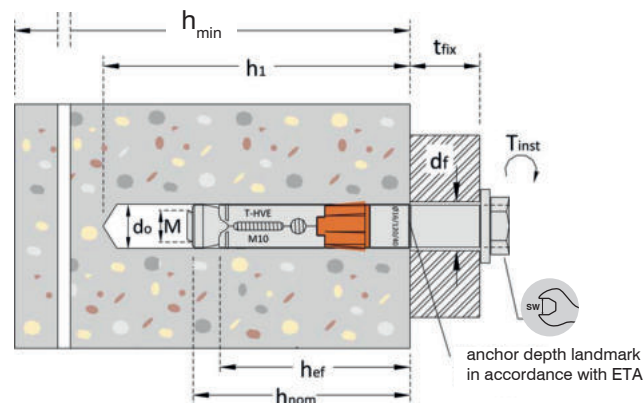
	M6	M8	M10	M12	M16	
S_{min}	55	110	80	135	130	MINIMUM SPACING
C_{min}	70	100	90	175	180	MINIMUM EDGE DISTANCE



DIMENSIONS & APPLICATION DATAS

Type	M	L	t _{fix}	Reference
		mm	mm	
HVE M6	M6	70	5	HVE10/5
		80	15	HVE10/15
		100	35	HVE10/35
HVE M8	M8	80	10	HVE12/10
		100	30	HVE12/30
		120	50	HVE12/50
HVE M10	M10	100	20	HVE16/20
		120	40	HVE16/40
		140	60	HVE16/60
HVE M12	M12	120	20	HVE18/20
		150	50	HVE18/50
HVE M16	M16	140	20	HVE24/20
		170	50	HVE24/50

		M6	M8	M10	M12	M16
Anchor length	h_{ef}	55	60	70	90	105
Ø drill hole	d_o	10	12	16	18	24
Min. drilling depth	h_1	80	90	100	120	140
Overall anchor embedment depth	h_{nom}	65	70	80	100	120
Ø clearance hole in the fixture	d_f	12	14	18	20	26
Wrench size/socket size	Sw	10	13	17	19	24
Required torque moment (N.m.)	T_{inst}	15	30	50	100	160



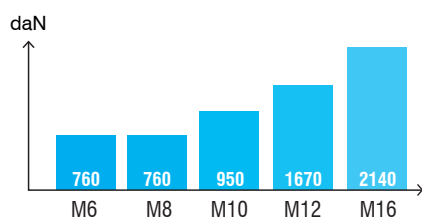
RECOMMENDED LOADS

Loads are calculated from published characteristic values in the ETA on which partial safety factors from the ETAG001 and a partial coefficient action $\gamma_f = 1.4$ are applied. Values are given for standard embedment depth for non-cracked concrete C20 / 25.

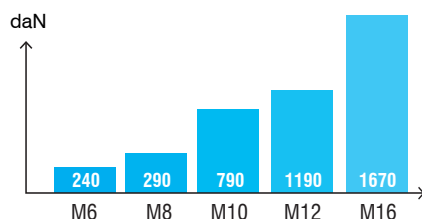
TENSILE



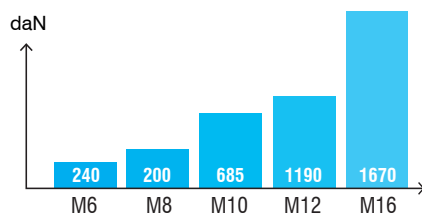
Non cracked concrete



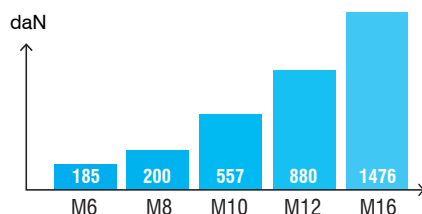
Cracked concrete



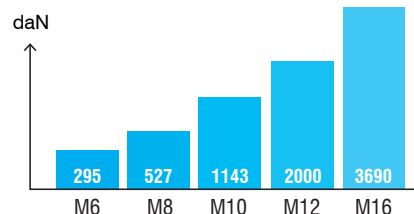
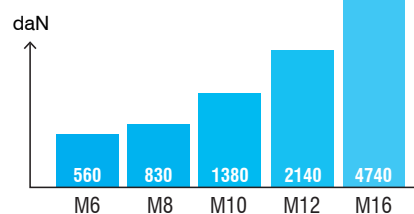
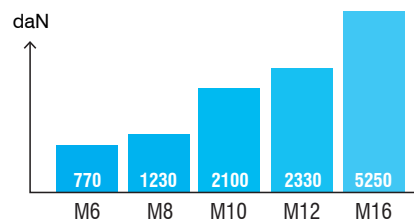
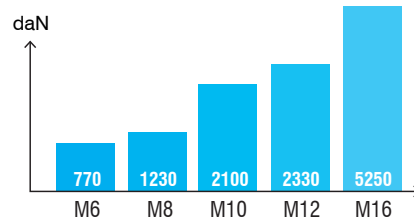
under seismic constraint C1



under seismic constraint C2



SHEAR



For accurate loads and implementation data, requirements specified in the ETA 10/0060 must be respected as well as the installation guide.

KOTWA DO DUŻYCH OBCIĄŻEŃ WERSJA Z ŁBEM SZEŚCIOKĄTNYM

HVE

 BETON
BETON SPĘKANY


CECHY

Materiał :

Stal ocynkowana

Zalety :

- Łatwe i szybkie przekładanie przez mocowany przedmiot
- Kotwa zewnętrzna : demontowana
- ETA beton opcja 1 dla betonu spękanego i niespękanego
- Odporność na ogień (120 minut)
- Można używać pod działaniem sejsmicznym (kategoria wydajności C1)

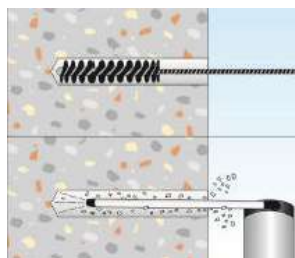
PRZYKŁADY UŻYCIA

- Mocowanie profili metalowych: balustrady, belki metalowe, wsporniki belki, wsporniki, kanały kablowe...
- Drzwi i portale przemysłowe
- Podpory przemysłowe

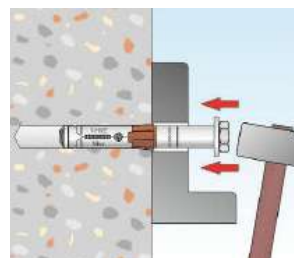
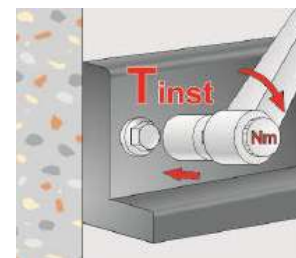
MONTAŻ



Wywiercić otwór

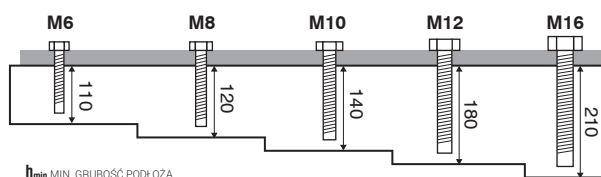


Usunąć pył z otworu


 Przełożyć kotwę przez
mocowany przedmiot

 Moment obrotowy
wskazany w danych
montażowych

DANE MONTAŻOWE

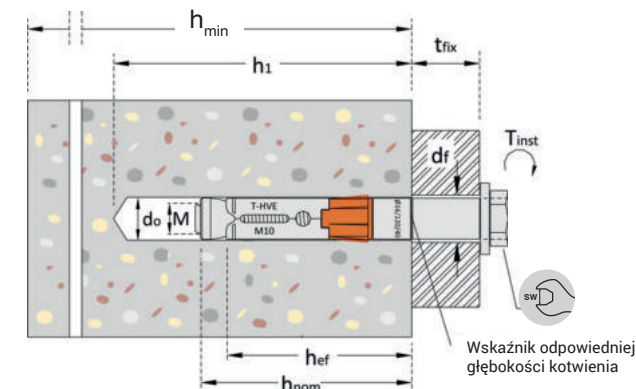
	M6	M8	M10	M12	M16	
S_{min}	55	110	80	135	130	MINIMALNY ROZSTAW
C_{min}	70	100	90	175	180	MIN. ODLEGŁOŚĆ OD KRAWĘDZI



WYMIARY I DANE MONTAŻOWE

Typ	M	L	t _{fix}	Symbol		M6	M8	M10	M12	M16	
		mm	mm								
HVE M6	M6	70	5	HVE10/5	Efektywna głębokość zakotwienia	h _{ef}	55	60	70	90	105
		80	15	HVE10/15	Ø wiertła	d _o	10	12	16	18	24
		100	35	HVE10/35	Min. głębokość otworu	h ₁	80	90	100	120	140
HVE M8	M8	80	10	HVE12/10	Całkowita głębokość kotwienia	h _{nom}	65	70	80	100	120
		100	30	HVE12/30	Ø maks. otworu w mocowanym przedmiocie	d _f	12	14	18	20	26
		120	50	HVE12/50	Rozmiar klucza	Sw	10	13	17	19	24
HVE M10	M10	100	20	HVE16/20	Moment dokręcenia	T _{inst}	15	30	50	100	160
		120	40	HVE16/40							
		140	60	HVE16/60							
HVE M12	M12	120	20	HVE18/20							
		150	50	HVE18/50							
HVE M16	M16	140	20	HVE24/20							
		170	50	HVE24/50							

<



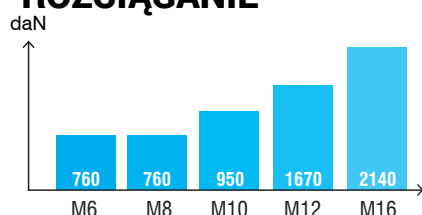
ZAKRES OBCIĄŻEŃ

Przedstawiony zakres został wyliczony na podstawie charakterystycznych wartości podanych w ETA, do których zostały przystawione częściowe współczynniki bezpieczeństwa pochodzące z ETAG001 oraz częściowy współczynnik działania $\chi_f = 1,4$. Podane wartości dotyczą standardowych głębokości kotwienia dla betonu C20/25.

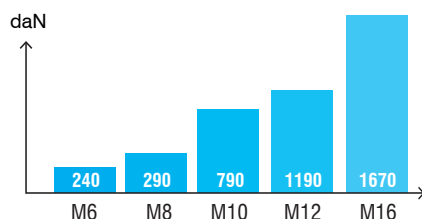
ROZCIĄGANIE



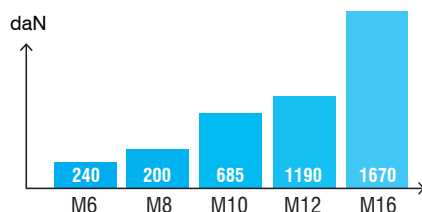
Beton niespękany



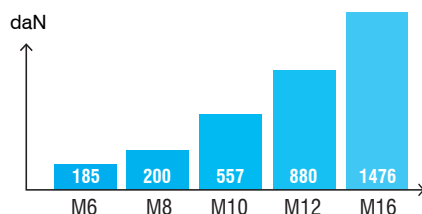
Beton spękany



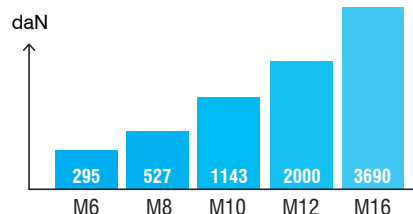
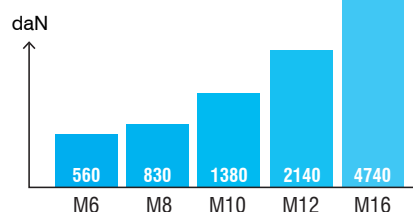
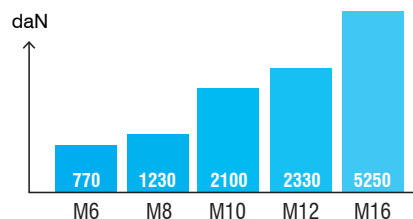
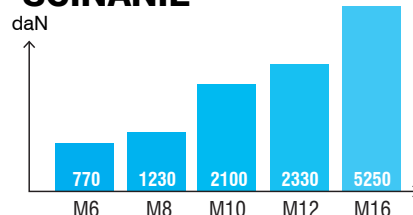
Pod wpływem sejsmicznym kategoria C1



Pod wpływem sejsmicznym kategoria C2



ŚCINANIE



Dla zachowania poprawnych cech wytrzymałości i montażu, należy przestrzegać wszystkich wymagań zawartych w europejskiej aprobatie technicznej ETA 10/0060, a także w instrukcji montażu.