Chemical anchor capsule, for use in non-cracked concrete

CA-QU

ETA assessed Option 8 (non-cracked concrete).

PRODUCT INFORMATION

DESCRIPTION
Chemical anchor, epoxy acrylate resin, quartz and catalyst.

OFFICIAL DOCUMENTATION
- ETA 08/0350 option 8, M8 to M24 for non-cracked concrete.
- Declaration features DoP CA-QU
- Certificate EVCP 1109-BPR-0044 for use in concrete.

VALID FOR

Stud

DIMENSIONS
Stud M8 - M24

RANGE OF CACULATION LOADS
From 11.1 to 50.0 kN (non-cracked).

BASE MATERIAL
Non-cracked concrete quality C20/25.

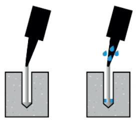

Concrete


Solid brick

ASSESSMENTS
- ETA 08/0350 Option 8: non-cracked concrete.

STRUCTURAL FIXINGS IN UNCRACKED CONCRETE ETA 08/0350

ÉMISSIONS DANS L'AIR INTÉRIEUR A+

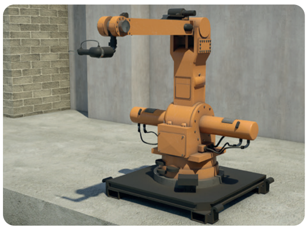
DRILL HOLE CONDITION

Dry Wet

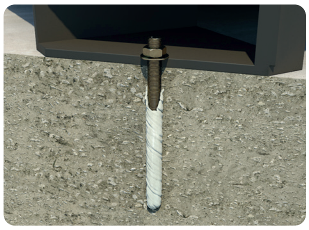
CHARACTERISTICS AND BENEFITS
- Easy installation.
- For use in non-cracked concrete.
- Used for medium-high loads.
- Temperature range -40°C to +80°C (maximum long-term temperature +50°C).
- Variety of lengths and diameters: M8-M24-assessed studs, flexible assembly.
- For static or quasi-static loads.
- Version in zinc plated steel, stainless steel A2 and A4.
- Available in INDEXcal.

MATERIALS
Standard stud:
Carbon steel 5.8, 8.8.

Stainless standard stud:
Stainless steel A2-70 and A4-70.

APPLICATIONS
- For indoor and outdoor use.
- Fixing machinery and elements with vibrations.
- Not suitable for ceiling installation.
- Structural applications.



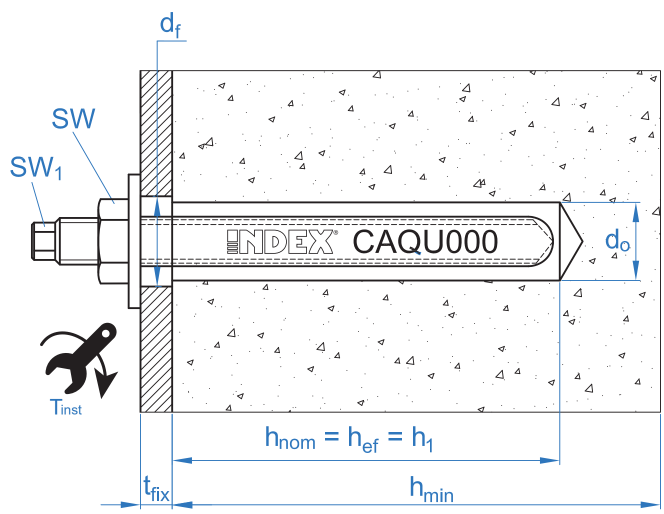


MATERIALS

Item	Component	Zinc-plated	Stainless steel A2/A4
1	Capsule	Glass ampoule with base component, cold curing resin and hardener	
2	Stud	Steel class 5.8, 8.8, ISO 898-1, zinc-plated ≤ 5 μm	A2-70 (AISI 304) A4-70 (AISI 316)
3	Washer DIN 125	Zinc-plated ≤ 5 μm	A2-70 (AISI 304) A4-70 (AISI 316)
4	Nut DIN 934	Class resistance 5 according to DIN 934, zinc-plated ≤ 5 μm	A2-70 (AISI 304) A4-70 (AISI 316)

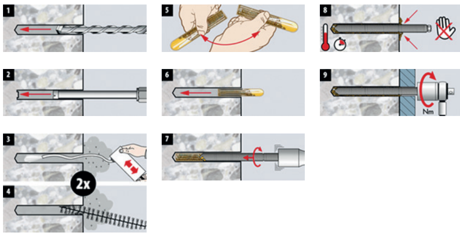
INSTALLATION INFORMATION

METRIC			M8	M10	M12	M16	M20	M24
	Chemical capsule		CAQU008	CAQU010	CAQU012	CAQU016	CAQU020	CAQU024
	Zinc-plated stud		EQAC08110	EQAC10130	EQAC12160	EQAC16190	EQAC20260	EQAC24300
	Stainless steel stud A2		EQA208110	EQA210130	EQA212160	EQA216190	EQA220260	EQA224300
	Stainless steel stud A2		EQA408110	EQA410130	EQA412160	EQA416190	EQA420260	EQA424300
d_0	Bit diameter	[mm]	10	12	14	18	25	28
T_{inst}	Installation tightening torque	[Nm]	10	20	40	80	120	180
d_p	capsule diameter	[mm]	9	11	13	17	22	24
l_p	capsule length	[mm]	80	80	95	95	175	210
d_f	pitch diameter at the plate to be fixed	[mm]	9	12	14	18	22	26
$h_1 = h_{nom} = h_{ef}$	depth of the drill hole	[mm]	80	90	110	125	170	210
h_{min}	minimum base material thickness	[mm]	110	120	140	160	220	260
t_{fix}	minimum fixture thickness	[mm]	17	25	32	44	66	62
$s_{cr,N}$	critical distance between anchors	[mm]	240	180	220	250	340	420
$c_{cr,N}$	critical distance from the edge	[mm]	120	90	110	125	170	210
$s_{cr,sp}$	critical distance from cracking	[mm]	240	180	220	250	340	420
$c_{cr,sp}$	critical distance from the edge	[mm]	120	90	110	125	170	210
s_{min}	minimum distance between anchors	[mm]	40	45	55	65	85	105
c_{min}	cmin: Minimum distance from the edge	[mm]	40	45	55	65	85	105
SW	SW: Installation key		13	17	19	24	30	36
SW_1	SW1: nut stud key		5	7	7	12	13	13



Code	INSTALLATION PRODUCTS
	Percussion drill
BHDSXXXXX	Concrete drill bits
MOBOMBA	Blower pump
MORCEPKIT	Cleaning brush
	Torque wrench
	Hexagon socket

INSTALLATION



CA-QU

Concrete resistances of C20/25 for insulated anchor, without edge distance or anchor spacing effects

Characteristic resistance N_{Rk} and V_{Rk}

TENSILE FORCE

Metric			M8	M10	M12	M16	M20	M24
N_{Rk}	Non-cracked concrete	[kN]	20	30	40	50	75	90

SHEARING

Metric			M8	M10	M12	M16	M20	M24
V_{Rk}	Steel class 5.8	[kN]	9	14	21	39	61	88
	Steel class 8.8		15	23	33	63	98	141
	Stainless steel Class A4-70		13	20	29	55	86	124
	Stainless steel Class A4-80		15	23	33	62	98	141

Calculated resistance N_{Rd} and V_{Rd}

TENSILE FORCE

Metric			M8	M10	M12	M16	M20	M24
N_{Rd}	Non-cracked concrete	[kN]	11.1	16.7	22.2	27.8	41.7	50.0

SHEARING

Metric			M8	M10	M12	M16	M20	M24
V_{Rd}	Steel class 5.8	[kN]	7.2	11.2	16.8	31.2	48.8	70.4
	Steel class 8.8		12.0	18.4	26.4	50.4	78.4	112.8
	Stainless steel Class A4-70		8.3	12.8	18.6	35.3	55.1	79.5
	Stainless steel Class A4-80		11.3	17.3	24.8	46.6	73.7	106.0

Maximum recommended load N_{rec} and V_{rec}

TENSILE FORCE

Metric			M8	M10	M12	M16	M20	M24
N_{rec}	Non-cracked concrete	[kN]	7.9	11.9	15.9	30	29.8	35.7

SHEARING

Metric			M8	M10	M12	M16	M20	M24
V_{rec}	Steel class 5.8	[kN]	5.1	8.0	12.0	22.3	34.9	50.3
	Steel class 8.8		8.6	13.1	18.9	36.0	56.0	80.6
	Stainless steel Class A4-70		6.0	9.2	13.3	25.2	39.4	56.8
	Stainless steel Class A4-80		8.1	12.4	17.7	33.3	52.6	75.7

Simplified calculation method. European Technical Assessment ETA 08/0350

Simplified version of the calculation method according to Eurocode 2 EN 1992-4. Resistance is calculated according to the data shown in assessment ETA 08/0350.

- Influence of concrete resistance.
- Influence of the distance from the edge of the concrete.
- Influence of the spacing between anchors.
- Influence of rebars.
- Influence of the base material thickness.
- Influence of the load application angle.
- Influence of the effective depth.
- Valid for a group of two anchors.
- Valid for dry or wet drill holes.

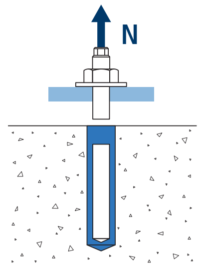
The calculation method is based on the following simplification:
No different loads act on individual anchors, without eccentricity.

INDEXcal
For a more precise calculation and taking into account more constructive arrangements we recommend the use of our INDEXcal calculation program. It can be downloaded free from our website **www.indexfix.com**

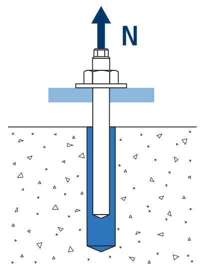
CA-QU

TENSILE LOADS

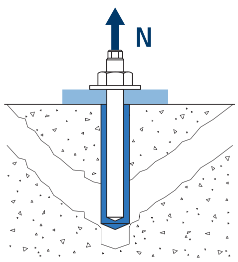
- Calculated steel resistance: $N_{Rd,s}$
- Calculated extraction resistance: $N_{Rd,p} = N^o_{Rd,p}$
- Calculated concrete cone resistance: $N_{Rd,c} = N^o_{Rd,c} \cdot \Psi_{s,N} \cdot \Psi_{c,N} \cdot \Psi_{re,N}$
- Calculated concrete cracking resistance: $N_{Rd,sp} = N^o_{Rd,c} \cdot \Psi_{s,sp} \cdot \Psi_{c,sp} \cdot \Psi_{re,N} \cdot \Psi_{h,sp}$

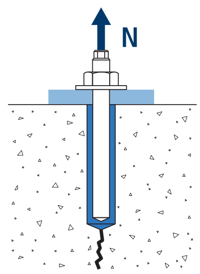


Calculated steel resistance									
$N_{Rd,s}$									
Metric			M8	M10	M12	M16	M20	M24
N^o_{Rd}	Steel class 5.8	[kN]	12.0	19.3	28.0	52.0	82.0	118.0
	Steel class 8.8		19.3	30.7	44.7	84.0	130.7	188.0
	Stainless steel Class A4-70		13.9	21.4	31.6	58.8	92.0	132.1
	Stainless steel Class A4-80		18.1	28.8	41.9	78.8	122.5	176.3



Calculated extraction resistance								
$N_{Rd,p} = N^o_{Rd,p}$								
Metric			M8	M10	M12	M16	M20	M24
$N^o_{Rd,p}$	Steel class 5.8	[kN]	11.1	16.7	22.2	27.8	41.7	50.0



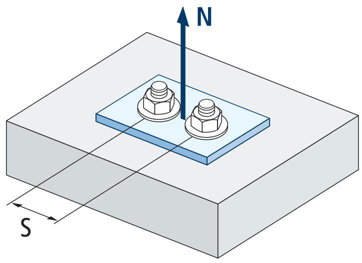


Calculated concrete cone resistance								
$N_{Rd,c} = N^o_{Rd,c} \cdot \Psi_{s,N} \cdot \Psi_{c,N} \cdot \Psi_{re,N}$								
Calculated concrete cracking resistance*								
$N_{Rd,sp} = N^o_{Rd,c} \cdot \Psi_{s,sp} \cdot \Psi_{c,sp} \cdot \Psi_{re,N} \cdot \Psi_{h,sp}$								
Metric			M8	M10	M12	M16	M20	M24
$N^o_{Rd,c}$	Steel class 5.8	[kN]	19,6	23,3	31,5	38,2	60,6	83,2

CA-QU

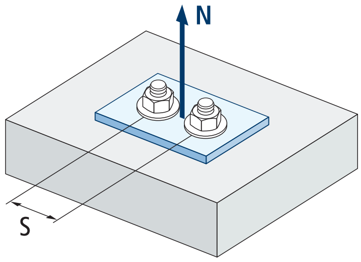
Influence of spacing between anchors (concrete cone) $\Psi_{s,N}$

s [mm]	CA-QU					
	M8	M10	M12	M16	M20	M24
40	0.58					
45	0.59	0.63				
50	0.60	0.64			**Value not permitted**	
55	0.61	0.65	0.63			
60	0.63	0.67	0.64			
65	0.64	0.68	0.65	0.63		
70	0.65	0.69	0.66	0.64		
75	0.66	0.71	0.67	0.65		
80	0.67	0.72	0.68	0.66		
85	0.68	0.74	0.69	0.67	0.63	
90	0.69	0.75	0.70	0.68	0.63	
95	0.70	0.76	0.72	0.69	0.64	
100	0.71	0.78	0.73	0.70	0.65	
105	0.72	0.79	0.74	0.71	0.65	0.63
110	0.73	0.81	0.75	0.72	0.66	0.63
120	0.75	0.83	0.77	0.74	0.68	0.64
140	0.79	0.89	0.82	0.78	0.71	0.67
160	0.83	0.94	0.86	0.82	0.74	0.69
180	0.88	1.00	0.91	0.86	0.76	0.71
200	0.92		0.95	0.90	0.79	0.74
220	0.96		1.00	0.94	0.82	0.76
240	1.00			0.98	0.85	0.79
250				1.00	0.87	0.80
260					0.88	0.81
280					0.91	0.83
300					0.94	0.86
320					0.97	0.88
340		**Value without reduction = 1**			1.00	0.90
360						0.93
380						0.95
400						0.98
420						1.00



$$\Psi_{s,N} = 0.5 + \frac{s}{2 \cdot s_{cr,N}} \le 1$$

CA-QU



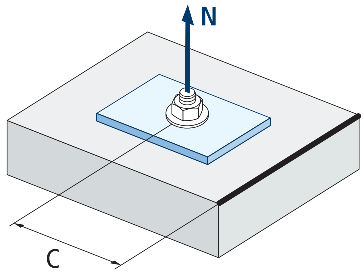
$$\Psi_{s,sp} = 0.5 + \frac{s}{2 \cdot S_{cr,sp}} \leq 1$$

Influence of spacing between anchors (cracking) $\Psi_{s,N}$

s [mm]	CA-QU					
	M8	M10	M12	M16	M20	M24
40	0.58					
45	0.59	0.63				
50	0.60	0.64			**Value not permitted**	
55	0.61	0.65	0.63			
60	0.63	0.67	0.64			
65	0.64	0.68	0.65	0.63		
70	0.65	0.69	0.66	0.64		
75	0.66	0.71	0.67	0.65		
80	0.67	0.72	0.68	0.66		
85	0.68	0.74	0.69	0.67	0.63	
90	0.69	0.75	0.70	0.68	0.63	
95	0.70	0.76	0.72	0.69	0.64	
100	0.71	0.78	0.73	0.70	0.65	
105	0.72	0.79	0.74	0.71	0.65	0.63
110	0.73	0.81	0.75	0.72	0.66	0.63
120	0.75	0.83	0.77	0.74	0.68	0.64
140	0.79	0.89	0.82	0.78	0.71	0.67
160	0.83	0.94	0.86	0.82	0.74	0.69
180	0.88	1.00	0.91	0.86	0.76	0.71
200	0.92		0.95	0.90	0.79	0.74
220	0.96		1.00	0.94	0.82	0.76
240	1.00			0.98	0.85	0.79
250				1.00	0.87	0.80
260					0.88	0.81
280					0.91	0.83
300					0.94	0.86
320					0.97	0.88
340			**Value without reduction = 1**		1.00	0.90
360						0.93
380						0.95
400						0.98
420						1.00

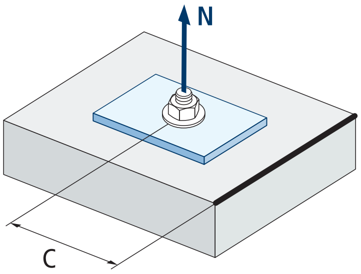
Influence of the distance from the edge of the concrete (cracking) $\Psi_{c,sp}$						
s [mm]	CA-QU					
	M8	M10	M12	M16	M20	M24
40	0.53					
45	0.56	0.64				
50	0.58	0.67			**Value not permitted**	
55	0.61	0.71	0.64			
60	0.64	0.75	0.67			
65	0.66	0.79	0.70	0.65		
70	0.69	0.83	0.73	0.68		
75	0.72	0.87	0.76	0.70		
80	0.75	0.91	0.79	0.73		
85	0.78	0.96	0.83	0.76	0.64	
90	0.81	1.00	0.86	0.79	0.66	
95	0.84		0.89	0.82	0.68	
100	0.87		0.93	0.85	0.70	
105	0.90		0.96	0.88	0.72	0.64
110	0.93		1.00	0.91	0.74	0.65
115	0.97			0.94	0.76	0.67
120	1.00			0.97	0.78	0.68
125				1.00	0.80	0.70
130					0.82	0.72
140					0.86	0.75
150					0.91	0.78
160			**Value without reduction = 1**		0.95	0.82
170					1.00	0.85
190						0.93
210						1.00

CA-QU



$$\Psi_{c,sp} = 0.35 + \frac{0.5 \cdot c}{c_{cr,sp}} + \frac{0.15 \cdot c^2}{c_{cr,sp}^{2}} \leq 1$$

CA-QU

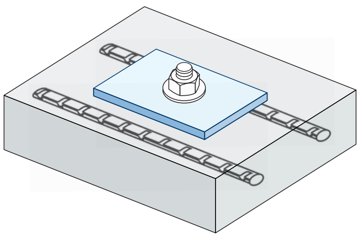


$$\Psi_{c,N} = 0.35 + \frac{0.5 \cdot c}{C_{cr,N}} + \frac{0.15 \cdot c^2}{C_{cr,N}^{\ 2}} \leq 1$$

Influence of the distance from the edge of the concrete (concrete cone) $\Psi_{c,N}$

s [mm]	CA-QU					
	M8	M10	M12	M16	M20	M24
40	0.53					
45	0.56	0.64				
50	0.58	0.67				
55	0.61	0.71	0.64			
60	0.64	0.75	0.67			
65	0.66	0.79	0.70	0.65		
70	0.69	0.83	0.73	0.68		
75	0.72	0.87	0.76	0.70		
80	0.75	0.91	0.79	0.73		
85	0.78	0.96	0.83	0.76	0.64	
90	0.81	1.00	0.86	0.79	0.66	
95	0.84		0.89	0.82	0.68	
100	0.87		0.93	0.85	0.70	
105	0.90		0.96	0.88	0.72	0.64
110	0.93		1.00	0.91	0.74	0.65
115	0.97			0.94	0.76	0.67
120	1.00			0.97	0.78	0.68
125				1.00	0.80	0.70
130					0.82	0.72
140					0.86	0.75
150					0.91	0.78
170					1.00	0.85
190						0.93
210						1.00

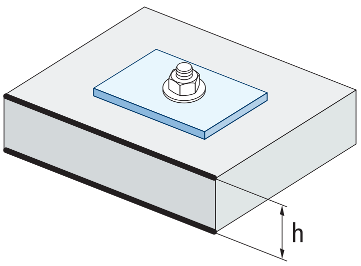
*The critical distance from the edge of the concrete coincides with the minimum distance from the edge of the concrete



$$\Psi_{re,N} = 0.5 + \frac{h_{ef}}{200} \leq 1$$

Influence of rebars $\Psi_{re,N}$

	M8	M10	M12	M16	M20	M24
$\Psi_{re,N}$	0.9	0.95	1.00	1.00	1.00	1.00



• Influence of the base material thickness $\Psi_{h,sp}$

$\Psi_{h,sp}$	h/hef	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.68
	fh	1.00	1.07	1.13	1.19	1.25	1.31	1.37	1.42	1.48	1.50

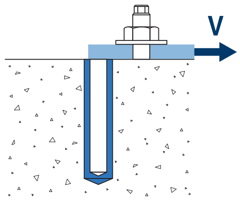
$$\Psi_{h,sp} = \left(\frac{h}{2 \cdot h_{ef}}\right)^{2/3} \leq 1.5$$

SHEARING LOADS

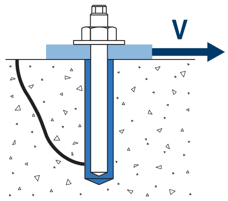
CA-QU

- Calculated steel resistance without lever arm: $V_{Rd,s}$
- Calculated spalling resistance: $V_{Rd,cp} = k \cdot N^{o}_{Rd,c}$
- Calculated concrete edge resistance: $V_{Rd,c} = V^{o}_{Rd,c} \cdot \Psi_{se,V} \cdot \Psi_{c,V} \cdot \Psi_{re,V} \cdot \Psi_{\alpha,V} \cdot \Psi_{h,V}$

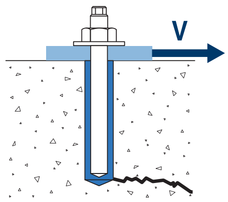
Calculated steel resistance to shearing								
$V_{Rd,s}$								
Metric			M8	M10	M12	M16	M20	M24
$V^{o}_{Rd,s}$	Steel class 5.8	[kN]	7.2	11.2	16.8	31.2	48.8	70.4
	Steel class 8.8		12.0	18.4	26.4	50.4	78.4	112.8
	Stainless steel Class A4-70		8.3	12.8	18.6	35.3	55.1	79.5
	Stainless steel Class A4-80		11.3	17.3	24.8	46.6	73.7	106.0



Calculated spalling resistance						
$V_{Rd,cp} = k \cdot N^{o}_{Rd,c}$						
Metric	M8	M10	M12	M16	M20	M24
K	2	2	2	2	2	2

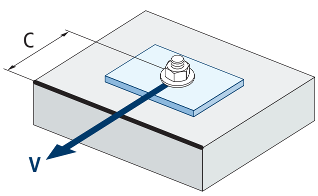


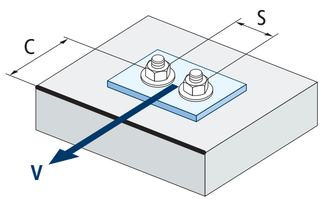
Calculated concrete edge resistance								
$V_{Rd,c} = V^{o}_{Rd,c} \cdot \Psi_{se,V} \cdot \Psi_{c,V} \cdot \Psi_{re,V} \cdot \Psi_{\alpha,V} \cdot \Psi_{h,V}$								
Metric			M8	M10	M12	M16	M20	M24
$V^{o}_{Rd,c}$	Non-cracked concrete	[kN]	5.7	8.6	11.8	19.0	28.3	36.4



Influence coefficients

	Influence of the distance from the edge and spacing between anchors $\Psi_{se,V}$																	
	For one anchor																	
	c/h_{ef}	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.50	5.00
	Insulated	0.35	0.65	1.00	1.40	1.84	2.32	2.83	3.38	3.95	4.56	5.20	5.86	6.55	7.26	8.00	9.55	11.18
	For two anchors																	
	c/h_{ef}	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.50	5.00
s/c	1.0	0.24	0.43	0.67	0.93	1.22	1.54	1.89	2.25	2.64	3.04	3.46	3.91	4.37	4.84	5.33	6.36	7.45
	1.5	0.27	0.49	0.75	1.05	1.38	1.74	2.12	2.53	2.96	3.42	3.90	4.39	4.91	5.45	6.00	7.16	8.39
	2.0	0.29	0.54	0.83	1.16	1.53	1.93	2.36	2.81	3.29	3.80	4.33	4.88	5.46	6.05	6.67	7.95	9.32
	2.5	0.32	0.60	0.92	1.28	1.68	2.12	2.59	3.09	3.62	4.18	4.76	5.37	6.00	6.66	7.33	8.75	10.25
	≥ 3.0	0.35	0.65	1.00	1.40	1.84	2.32	2.83	3.38	3.95	4.56	5.20	5.86	6.55	7.26	8.00	9.55	11.18

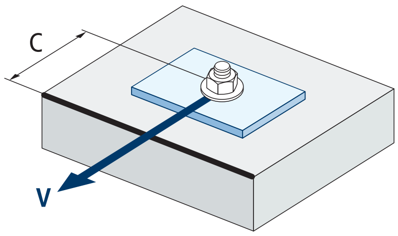




$$\Psi_{se,V} = \left(\frac{c}{h_{ef}}\right)^{1.5}$$

$$\Psi_{se,V} = \left(\frac{c}{h_{ef}}\right)^{1.5} \cdot \left(1 + \frac{s}{3 \cdot c}\right) \cdot 0.5 \leq \left(\frac{c}{h_{ef}}\right)^{1.5}$$

CA-QU

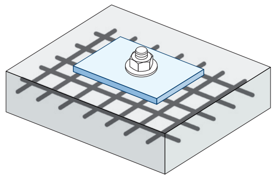


$$\Psi_{c,V} = \left(\frac{d}{c}\right)^{0.20}$$

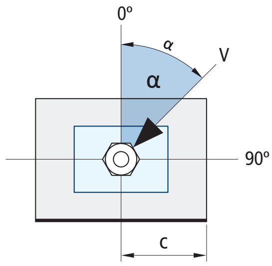
• Influence of the distance from the edge of the concrete $\Psi_{c,V}$

c [mm]	CA-QU					
	M8	M10	M12	M16	M20	M24
40	0.72					
45	0.71	0.74				
50	0.69	0.72			Value not permitted	
55	0.68	0.71	0.74			
60	0.67	0.70	0.72			
65	0.66	0.69	0.71	0.76		
70	0.65	0.68	0.70	0.74		
80	0.63	0.66	0.68	0.72		
85	0.62	0.65	0.68	0.72	0.75	
90	0.62	0.64	0.67	0.71	0.74	
100	0.60	0.63	0.65	0.69	0.72	
105	0.60	0.62	0.65	0.69	0.72	0.74
110	0.59	0.62	0.64	0.68	0.71	0.74
120	0.58	0.61	0.63	0.67	0.70	0.72
125	0.58	0.60	0.63	0.66	0.69	0.72
130	0.57	0.60	0.62	0.66	0.69	0.71
135	0.57	0.59	0.62	0.65	0.68	0.71
140	0.56	0.59	0.61	0.65	0.68	0.70
150	0.56	0.58	0.60	0.64	0.67	0.69
160	0.55	0.57	0.60	0.63	0.66	0.68
170	0.54	0.57	0.59	0.62	0.65	0.68
175	0.54	0.56	0.59	0.62	0.65	0.67
180	0.54	0.56	0.58	0.62	0.64	0.67
190	0.53	0.55	0.58	0.61	0.64	0.66
200	0.53	0.55	0.57	0.60	0.63	0.65
210	0.52	0.54	0.56	0.60	0.62	0.65
220	0.52	0.54	0.56	0.59	0.62	0.64
230	0.51	0.53	0.55	0.59	0.61	0.64
240	0.51	0.53	0.55	0.58	0.61	0.63
250	0.50	0.53	0.54	0.58	0.60	0.63
260	0.50	0.52	0.54	0.57	0.60	0.62
270	0.49	0.52	0.54	0.57	0.59	0.62
280	0.49	0.51	0.53	0.56	0.59	0.61
290	0.49	0.51	0.53	0.56	0.59	0.61
300	0.48	0.51	0.53	0.56	0.58	0.60

CA-QU

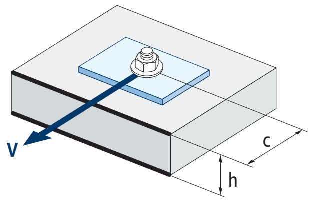


Influence of the rebars $\Psi_{re,v}$				
		Without perimeter rebar	Perimeter rebar ≥Ø12mm	Perimeter rebar with abutments at≤100mm
$\Psi_{re,v}$	Non-cracked concrete	1	1	1



Influence of the load application angle $\Psi_{\alpha,v}$										
Angle, α(º)	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
$\Psi_{\alpha,v}$	1.00	1.01	1.05	1.13	1.24	1.40	1.64	1.97	2.32	2.50

$$\Psi_{\alpha,V} = \sqrt{\frac{1}{(\cos \alpha_v)^2 + \left(\frac{\sin \alpha_v}{2.5}\right)^2}} \geq 1$$



Influence of the base material thickness $\Psi_{h,V}$										
h/c	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	≥ 1.5
$\Psi_{h,V}$	0.32	0.45	0.55	0.63	0.71	0.77	0.84	0.89	0.95	1.00

$$\Psi_{h,V} = \left(\frac{h}{1.5 \cdot c}\right)^{0.5} \geq 1.0$$

CA-QU

RANGE

CHEMICAL ANCHOR CAPSULE

STRUCTURAL FIXINGS IN UNCRACKED CONCRETE ETA 13/0752

ÉMISSIONS DANS L'AIR INTÉRIEUR A+


Concrete


Solid brick

Code	Dimension	Capsule length		
CAQU008	8 x 80 Ø10	80	10	500
CAQU010	10 x 90 Ø12	80	10	500
CAQU012	12 x 110 Ø14	95	10	200
CAQU016	16 x 125 Ø18	95	10	200

Code	Dimension	Capsule length		
CAQU020	20 x 170 Ø25	175	6	60
CAQU024	24 x 210 Ø28	210	6	60
• CAQU030	30 x 280 Ø35	265	6	30

• Dimensions not assessed. The resistance values and installation data are not applicable for these references. Contact the Technical Dept. for further information.

Accessories for chemical anchor cartridges

MO-AC Mixing tubes and miscellaneous


MORCEPKIT

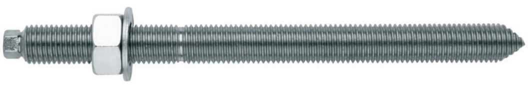

MOBOMBA

CODE	MODEL
MOBOMBA	Blower pump
MORCEPKIT Kit 3 brushes (ø15, ø20, ø30)	Kit 3 brushes

Stud for chemical anchor with nut and washer

EQ-AC Zinc-plated 5.8

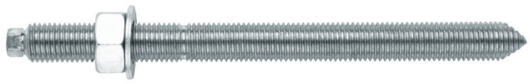
ZINC



CODE	DIMENSION
EQAC08110	M8 x 110
EQAC10130	M10 x 130
EQAC10190	M10 x 190
EQAC12160	M12 x 160
EQAC12220	M12 x 220
EQAC16190	M16 x 190
EQAC16250	M16 x 250
EQAC20260	M20 x 260
EQAC20350	M20 x 350
EQAC24300	M24 x 300
EQAC24380	M24 x 380
EQAC30330	M30 x 330

EQ-A2 Stainless steel A2

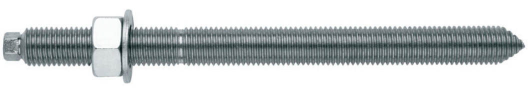
A2 INOX AISI 304



CODE	DIMENSION
EQA208110	M8 x 110
EQA210130	M10 x 130
EQA212160	M12 x 160
EQA216190	M16 x 190
EQA220260	M20 x 260
EQA224300	M24 x 300
EQA230330	M30 x 330

EQ-8.8 Zinc-plated 8.8

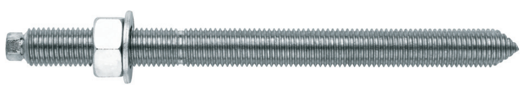
ZINC



CODE	DIMENSION
EQ8808110	M8 x 11040
EQ8810130	M10 x 130
EQ8812160	M12 x 160
EQ8816190	M16 x 190
EQ8820260	M20 x 260
EQ8824300	M24 x 300

EQ-A4 Stainless steel A4

A4 INOX AISI 316



CODE	DIMENSION
EQA408110	M8 x 110
EQA410130	M10 x 130
EQA412160	M12 x 160
EQA416190	M16 x 190
EQA420260	M20 x 260
EQA424300	M24 x 300
EQA430330	M30 x 330