Declaration of Performance
DoP CAQU-en

1. Product type: Index chemical capsule CAQU

2 Identification

Product code	Threaded rod metric [mm]	Threaded rod length L ≥ [mm]	Fixture thickness [mm]
CAQU06	M6	95	L-93
CAQU08	M8	100	L-105
CAQU10	M10	120	L-128
CAQU12	M12	140	L-146
CAQU16	M16	190	L-194
CAQU20	M20	235	L-238

3. Intended use:

Generic type:	Bonded anchor for anchorage of threaded rods
Base material:	Non cracked concrete C20/25 to C50/60 according to EN 206. Dry or wet holes. No flooded holes. No overhead installation allowed.
Material / durability:	a) Carbon galvanized steel class 5.8 and 8.8 according to EN ISO 898-1 for dry internal conditions. b) Stainless steel A4-70 and A4-80 according to EN ISO 3506 for dry internal conditions, external atmospheric exposure (including industrial and marine environment) or exposure in permanently damp internal conditions if no particular aggressive conditions exist. c) High resistant corrosion stainless steel 1.5429 or 1.4565 class 70 according to EN ISO 3506 for all conditions.
Loading:	Static, quasi static loads
Temperature range:	-40 ºC a +80 ºC (maximum long term temperature +50 °C; maximum short term temperature +80 °C)
Fire resistance:	Non declared performance
Assumed working life:	50 years

4. Manufacturer:
Index Fixing Systems. Técnicas Expansivas S.L.
Segador, 13
26006 Logroño, La Rioja, SPAIN

5. Authorised representative: Not applicable

6. System of assessment of performance: 1

7. Harmonised standard: Not applicable

8. European technical assessment:

Tech. assessment body:	DIBt: Deutsches Institut für Bautechnik. Notified body 1109.
issued:	ETA 08/0350
on the basis of:	ETAG 001, part 1, 5
performed:	Determination of product type, initial inspection of the manufacturing plant and continuous surveillance of FPC
under system:	1
and issued:	CE certificate 1109-BPR-0044

9. Declared performances:

Essential characteristics			Performance						Technical specification
			M8	M10	M12	M16	M20	M24	
Installation parameters									ETAG001 p1/5
d_o	Nominal diameter of drill bit:	[mm]	10	12	14	18	25	28	
h_{ef}	Effective embedment depth:	[mm]	80	90	110	125	170	210	
d_f	Fixture clearance hole diameter:	[mm]	9	12	14	18	22	26	
T_{inst}	Nominal installation torque:	[Nm]	10	20	40	80	120	180	
h_1	Depth of drilled hole:	[mm]	80	90	110	125	170	210	
h_{nom}	Minimum installation depth:	[mm]	80	90	110	125	170	210	
h_{min}	Minimum thickness of concrete member:	[mm]	110	120	140	160	220	260	
s_{min}	Minimum spacing:	[mm]	40	45	55	65	85	105	
c_{min}	Minimum edge distance:	[mm]	40	45	55	65	85	105	
Tension load: steel failure									ETAG001 p1/5
$N_{Rk,s}$	Characteristic resistance for galvanized steel class 5.8:	[kN]	18	29	42	78	123	177	
$N_{Rk,s}$	Characteristic resistance for galvanized steel class 8.8	[kN]	28	46	67	126	196	282	
γ_{Ms}	Partial safety factor for galvanized steel classes 5.8 and 8.8:	[-]	1.5	1.5	1.5	1.5	1.5	1.5	
$N_{Rk,s}$	Characteristic resistance for stainless steels class A4-70, 1.4529 and 1.4565 class 70:	[kN]	26	40	59	110	172	247	
γ_{Ms}	Partial safety factor for stainless steels class A4-70, 1.4529 and 1.4565::	[-]	1.87	1.87	1.87	1.87	1.87	1.87	
$N_{Rk,s}$	Characteristic resistance for stainless steel class A4-80:	[kN]	29	46	67	126	196	282	
γ_{Ms}	Partial safety factor for stainless steel classes A4--80:	[-]	1.60	1.60	1.60	1.60	1.60	1.60	
Tension load: pull-out failure in non cracked concrete C20/25 to C50760									ETAG001 p1/5
$N_{Rk,p}$	Tension characteristic resistance:	[kN]	20	30	40	50	75	90	
γ_{Mp}	Partial safety factor: [1)]	[-]	1.8	1.8	1.8	1.8	1.8	1.8	
Tension load: concrete cone or splitting failure in non cracked concrete C20/25 to C50/60									ETAG001 p1/5
$s_{cr,N}$	Critical spacing:	[mm]	240	180	220	250	340	420	
$s_{cr,sp}$	Critical spacing (splitting):	[mm]	240	180	220	250	340	420	
$c_{cr,N}$	Critical edge distance:	[mm]	120	90	110	125	170	210	
$c_{cr,sp}$	Critical edge distance (splitting):	[mm]	120	90	110	125	170	210	
γ_{Mc}	Partial safety factor: [1)]	[-]	1.8	1.8	1.8	1.8	1.8	1.8	
Displacements under tension loads									ETAG001 p1/5
N	Service tension load:	[kN]	8	12	16	20	30	38	
δ_{N0}	Short term displacement	[mm]	0.1	0.2	0.2	0.2	0.5	0.4	
$\delta_{N\infty}$	Long term displacement	[mm]	0.5	0.5	0.5	0.5	0.5	0.5	
Shear load: steel failure									ETAG001 p1/5
$V_{Rk,s}$	Shear steel characteristic resistance for galvanized steel class 5.8:	[kN]	9	14	21	39	61	88	
$V_{Rk,s}$	Shear steel characteristic resistance for galvanized steel class 8.8:	[kN]	15	23	33	63	98	141	
$M^0_{Rk,s}$	Characteristic bending moment for galvanized steel class 5.8:	[Nm]	19	37	65	166	325	561	
$M^0_{Rk,s}$	Characteristic bending moment for galvanized steel class 8.8:	[Nm]	30	60	105	266	519	898	
γ_{Ms}	Partial safety factor for galvanized steel class 5.8 and 8.8:	[-]	1.25	1.25	1.25	1.25	1.25	1.25	
$V_{Rk,s}$	Shear steel characteristic resistance for stainless steel class A4-70, 1.4529 or 1.4565:	[kN]	13	20	29	55	86	124	
$M^0_{Rk,s}$	Characteristic bending moment for stainless steel class A4-70, 1.4529 or 1.4565:	[Nm]	26	52	92	233	454	785	
γ_{Ms}	Partial safety factor for stainless steel class A4-70, 1.4529 or 1.4565:	[-]	1.56	1.56	1.56	1.56	1.56	1.56	
$V_{Rk,s}$	Shear steel characteristic resistance for stainless steel class A4-80:	[kN]	15	23	33	62	98	141	
$M^0_{Rk,s}$	Characteristic bending moment for stainless steel class A4-80:	[Nm]	30	60	105	266	519	898	
γ_{Ms}	Partial safety factor for stainless steel class A4-80:	[-]	1.33	1.33	1.33	1.33	1.33	1.33	
Shear load: concrete pryout failure									ETAG001 p1/5
K	K factor:	[-]	2.0	2.0	2.0	2.0	2.0	2.0	
γ_{Mpr}	Partial safety factor:	[-]	1.5	1.5	1.5	1.5	1.5	1.5	
Shear load: concrete edge failure									ETAG001 p1/5
l_f	Effective anchorage depth under shear loads:	[mm]	80	90	110	125	170	210	
d_{nom}	Outside anchor diameter:	[mm]	10	12	14	18	25	28	
γ_{Mc}	Partial safety factor:	[-]	1.5	1.5	1.5	1.5	1.5	1.5	
Displacements under shear loads									ETAG001,p1/5
V	Service shear load:	[kN]	5	8	12	22	35	50	
δ_{V0}	Short term displacement	[mm]	2	3	3	4	5	5	
$\delta_{V\infty}$	Long term displacement	[mm]	4	5	5	6	7	7	

1) In absence of other national regulations

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.

11. Reach Directive EC 1907/2006 declaration:
We inform you that Técnicas Expansivas S.L. is classified in the EC 1907/2006 Reach Directive as a downstream-user of substances.
The product supplied does not contain substances classified as SVHC according to the Candidate List in a concentration equal or greater than 0.1% (weight / weight).
Material safety data sheet can be requested to the mail address: info@indexfix.com

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed on behalf of the manufacturer by:

Santiago Reig. Technical manager
Logroño. 30.06.2013