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FM 753

Torzní kontrolovaná kotva klínového typu z pozinkované oceli

friulsider

via Trieste, 1 San Giovanni al Natissone
(UD) Italy - ph. +39 0432 747911
www.friulsider.com - info@friulsider.com

Zamýšlené použití stavebního výrobku podle ETAG 001 p.1 a 2

Typ	torzní kontrolovaná kotva klínového typu
Pro materiál	nepopraskaný beton C20/25 až C50/60 podle EN 206-1:2003
Materiál výrobku	ocel zinkovaná podle EN ISO 4042 (tř. 5.8 min. podle EN ISO 898-1)
Skladování	suché vnitřní prostředí
Nakládání	statické a kvazi-statické
Požární odolnost	nehořlavé
Požární reakce	A1 podle EN 13501-1
ETA-01/0014 vydané	CSTB zkouška číslo 0679
Zkoušeno podle	ETAG001 p.1-2
Osvědčení o shodě 0679-CPD-0016 vydané	CSTB zkouška číslo 0679
Podle systému	1

Prohlášení o vlastnostech podle ETAG 001 p.1 a 2 - Metoda ETAG001 Annex C

Hlavní charakteristika		Hodnoty					
Parametry pro instalaci		M6 ²⁾	M8	M10	M12	M14	M16
d₀	Nominal diameter of drill bit [mm]	6	8	10	12	14	16
h_{nom}	Minimum installation depth [mm]	41	48	59	71	80	96
h_{ef}	Effective anchorage depth [mm]	35 ²⁾	40	50	60	70	85
h_{min}	Minimum thickness of the concrete member [mm]	100	100	100	120	140	170
T_{inst}	Nominal torque moment [Nm]	6	15	25	50	70	100
s_{min}	Minimum spacing [mm]	50	60	75	90	105	130
c_{min}	Minimum edge distance [mm]	50	60	75	90	105	130
Tension Steel failure mode							
N_{Rk,s}	Tension Steel characteristic failure [kN]	10,9	17,2	28,0	31,6	51,2	72,3
γ_{m,sN}¹⁾	Partial safety factor for tension steel failure [-]	1,5	1,4	1,4	1,4	1,5	1,5
Pull-out failure mode							
N_{Rk,p,ucr}	Tension characteristic load in un-cracked concrete C20/25 [kN]	6 ²⁾	9	12	20	25	35
γ₂	Partial safety factor [-]	1,2			1,0		
γ_{m,c}¹⁾	Partial safety factor [-]	1,8			1,5		
s_{cr,N}	Critical spacing [mm]	105	120	150	180	210	255
c_{cr,N}	Critical edge distance [mm]	53	60	75	90	105	130
ψ_{c C30/37}	Increasing factor for concrete C30/37 [-]	1,17			1,22		
ψ_{c C40/50}	Increasing factor for concrete C40/50 [-]	1,32			1,41		
ψ_{c C50/60}	Increasing factor for concrete C50/60 [-]	1,42			1,55		
Splitting failure mode							
s_{cr,sp}	Critical spacing (splitting) [mm]	210	240	300	360	420	510
c_{cr,sp}	Critical edge distance(splitting) [mm]	105	120	150	180	210	255
γ_{m,c}¹⁾	Partial safety factor [-]	1,8			1,5		
Displacement on Tension Load							
N_{ucr}	Service tension load in un-cracked concrete [kN]	2,4	3,6	4,8	9,5	11,9	16,7
δ_{N0,ucr}	Short term displacement under tension load [mm]	0,1	0,1	0,1	0,1	0,1	0,1
δ_{N∞,ucr}	Long term displacement under tension load [mm]	0,6	0,6	0,6	0,6	0,6	0,6
Shear Steel failure mode							
V_{Rk,s}	Shear Steel characteristic failure [kN]	6,0	9,1	14,8	18,4	32,1	42,3
M⁰_{Rk,s}	Bending Moment characteristic failure [Nm]	12	24	49	68	121	193
γ_{m,sV}¹⁾	Partial safety factor for shear steel failure [-]	1,5					
Shear Concrete Pry-out or Edge failure mode							
k	Factor equation (5.6) of ETAG, Annex C, § 5.2.3.3 [-]	1,0			2,0		
l_{ef}	Effective anchorage length [mm]	35	40	50	60	70	85
d_{nom}	Nominal diameter of anchor [mm]	6	8	10	12	14	16
γ_m¹⁾	Partial safety factor (γ _{m,c} =γ _{m,pr}) [-]	1,5					
Displacement on Shear Load							
V	Service shear load in concrete [kN]	2,9	4,3	7,0	8,8	15,3	20,1
δ_{V0}	Short term displacement under shear load [mm]	1,5	1,5	2,1	2,2	2,4	2,4
δ_{V∞}	Long term displacement under shear load [mm]	1,9	2,0	2,6	2,7	3,0	3,0

¹⁾ In absence of other national regulations; ²⁾ Use restricted to anchoring of structural components statically indetermined.

We inform you that Friulsider 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). Article 31 is not applicable to the present product.

The below performances apply for the following article numbers:

d	L ³⁾ [mm]	t _{fix} ⁴⁾ [mm]	Marking	ID	Cod.
M6	65	15	FM-L 6/15	B	75320b06065
	85	35	FM-L 6/35	C	75320b06085
	100	50	FM-L 6/50	D	75320b06100
M8	65	7	FM-L 8/7	B	75320b08065
	75	15	FM-L 8/15	C	75320b08075
	90	30	FM-L 8/30	D	75320b08090
	115	55	FM-L 8/55	E	75320b08115
	135	75	FM-L 8/75	F	75320b08135
	165	105	FM-L 8/105	G	75320b08165
M10	75	5	FM-L 10/5	B	75320b10075
	90	20	FM-L 10/20	C	75320b10090
	100	30	FM-L 10/30	I	75320b10100
	120	50	FM-L 10/50	D	75320b10120
	145	75	FM-L 10/75	E	75320b10145
	170	100	FM-L 10/100	F	75320b10170
M12	100	10	FM-L 12/10	B	75320b12100
	110	20	FM-L 12/20	C	75320b12110
	135	45	FM-L 12/45	D	75320b12135
	160	70	FM-L 12/70	E	75320b12160
	185	100	FM-L 12/100	F	75320b12185
M14	100	3	FM-L 14/3	A	75320b14100
	110	10	FM-L 14/10	B	75320b14110
	130	30	FM-L 14/30	C	75320b14130
	150	50	FM-L 14/50	D	75320b14150
	170	70	FM-L 14/70	E	75320b14170
	200	100	FM-L 14/100	F	75320b14200
M16	125	10	FM-S 16/10	A	75320b16125
	145	30	FM-S 16/30	B	75320b16145
	175	60	FM-S 16/60	C	75320b16175
	215	100	FM-S 16/100	D	75320b16215

³⁾ Length of anchor; ⁴⁾ Thickness fixture max.

The performances of the product identified by the above identification code are in conformity with the declared performance.
This declaration of performance is issued under the sole responsibility of Friulsider SpA.

Signed for and behalf of the manufacturer by:

Name and functions	Place and date of issue	Signature
Eng. Vittorio Pilla General Director	San Giovanni al Natisone, 01-07-2013	