

FM-753 CRACK A4

Doorsteekanker met seismische certificering - rsv A4

Doorsteekanker van roestvrij staal A4 voor middelzware belastingen in de maten M8 - M16 voor verankering in gescheurd en ongescheurd beton C20/25 - C50/60 t, ook voor gebruik in aardbevingsgebied prestatiecategorie C1/C2.

Kenmerken

Materiaal

- Rvs A4

Voordelen

- Weerstand tegen seismische en dynamische belastingen
- Seismische categorie C1 en C2
- Onmiddellijke uitzetting
- Verdikking aan de 3 uitzettingssegmenten
- 9 hechtingstanden voor een betere hechtkracht aan de boorgatwanden
- Brandwerendheid R120

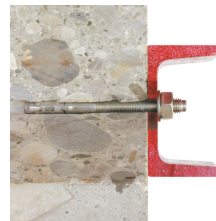
Toepassingen

Applications

- Structural fixings
- Steel constructions
- Seismic applications

Toepassingsgebieden

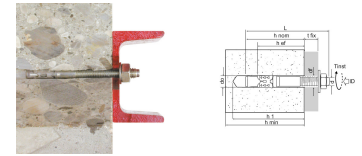
- Gescheurd beton
- Ongescheurd beton
- Steen



FM-753 CRACK A4
Doorsteekanker met seismische certificering - rsv A4

Technische gegevens

Product dimensions



Referentie	Product Reference	Dimensions [mm]	seismic certification	Fixture thickness $[t_{fix,max}]$ with standard setting depth $[h_{ef,STD}]$ [mm]	Fixture thickness $[t_{fix,max}]$ with reduced setting depth $[h_{ef,RED}]$ [mm]	Hole diameter in fixture $[d_f]$ [mm]	Hole diameter $[d_0]$ x depth $[h_1]$ in substrate with standard setting depth $[h_{ef,STD}]$ [mm]	Hole diameter $[d_0]$ x depth $[h_1]$ in substrate with reduced setting depth $[h_{ef,RED}]$ [mm]	Min. setting depth $[h_{ef,STD}]$ [mm]	Reduce setting depth $[h_{ef,RED}]$ [mm]
7535000806800	FM-753 CRACK A4	M8x68	C1	4	18	9	8x70	8x56	48	34
7535000807500	FM-753 CRACK A4	M8x75	C1	10	24	9	8x70	8x56	48	34
7535001009000	FM-753 CRACK A4	M10x90	C1/C2	10	30	12	10x80	10x60	60	40
7535001211000	FM-753 CRACK A4	M12x110	C1/C2	10	30	14	12x100	12x80	72	52
7535001212000	FM-753 CRACK A4	M12x120	C1/C2	20	40	14	12x100	12x80	72	52
7535001214500	FM-753 CRACK A4	M12x145	C1/C2	45	65	14	12x100	12x80	72	52

FM-753 CRACK A4

Doorsteekanker met seismische certificering - rsv A4

Recommended loads / Non-cracked concrete / for single anchors / with no edge distances or spacings

Referentie	Product Reference	Dimensions [mm]	Recommended loads - Non-cracked concrete								Bending moment M_{rec} [Nm]
			Tension - N_{rec}				Shear - V_{rec}				
			C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	
7535000806800	FM-753 CRACK A4	M8x68	4.8	5.9	6.8	7.4	7.8	7.8	7.8	7.8	10.5
7535000807500	FM-753 CRACK A4	M8x75	4.8	5.9	6.8	7.4	7.8	7.8	7.8	7.8	10.5
7535001009000	FM-753 CRACK A4	M10x90	7.6	9.3	10.7	11.8	13.4	13.4	13.4	13.4	21.5
7535001211000	FM-753 CRACK A4	M12x110	10.5	12.8	14.8	16.3	17.3	17.3	17.3	17.3	37.4
7535001212000	FM-753 CRACK A4	M12x120	10.5	12.8	14.8	16.3	17.3	17.3	17.3	17.3	37.4
7535001214500	FM-753 CRACK A4	M12x145	10.5	12.8	14.8	16.3	17.3	17.3	17.3	17.3	37.4

- 1) In case of interaction of tension and shear loads (lever arm) as well as in case of anchor groups and/or edge influence, a design according to EN 1992-4 (seismic actions - Annex C / fire action - Annex D) shall be carried out taking into account the entire European Technical Assessment ETA-10/0293.
- 2) The load data take into account the partial safety factors of the resistances given in the European Technical Assessment (ETA) and a partial safety factor of the actions of $\gamma_F = 1.4$. The values given assume unreinforced or normally reinforced concrete with a spacing of the reinforcing bars $s \geq 15$ cm or $s \geq 10$ cm at a rebar diameter $d_s \leq 10$ mm is assumed.

FM-753 CRACK A4

Doorsteekanker met seismische certificering - rsv A4

Design capacities - single anchor - no edge distances - Uncracked concrete

Referentie	Product Reference	Dimensions [mm]	Design capacity - Non-cracked concrete (3)								Bending moment MRd [Nm]
			Tension - N _{Rd} (1)				Shear - V _{Rd} (1-2)				
			C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	
7535000806800	FM-753 CRACK A4	M8x68	6.7	-	-	-	10.9	-	-	-	-
7535000807500	FM-753 CRACK A4	M8x75	6.7	-	-	-	10.9	-	-	-	-
7535001009000	FM-753 CRACK A4	M10x90	10.7	-	-	-	18.8	-	-	-	-
7535001211000	FM-753 CRACK A4	M12x110	14.7	-	-	-	24.2	-	-	-	-
7535001212000	FM-753 CRACK A4	M12x120	14.7	-	-	-	24.2	-	-	-	-
7535001214500	FM-753 CRACK A4	M12x145	14.7	-	-	-	24.2	-	-	-	-

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing $s \geq 15$ cm (any diameter) or with a rebar spacing $s \geq 10$ cm, if the rebar diameter is 10mm or smaller.
2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ($c \leq \max [10 \text{ hef}; 60d]$) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.
3. Concrete is considered non-cracked when the tensile stress within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification $\sigma_R = 3 \text{ N/mm}^2$ can be assumed (σ_L equals the tensile stress within the concrete induced by external loads, anchors loads included).

FM-753 CRACK A4

Doorsteekanker met seismische certificering - rsv A4

Recommended loads - Cracked concrete - single anchor - no edge distances

Referentie	Product Reference	Dimensions [mm]	Recommended loads - Cracked concrete								Bending moment M_{rec} [Nm]
			Tension - N_{rec}				Shear - V_{rec}				
			C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	
7535000806800	FM-753 CRACK A4	M8x68	3.1	3.8	4.4	4.8	5.4	5.4	5.4	5.4	10.5
7535000807500	FM-753 CRACK A4	M8x75	3.1	3.8	4.4	4.8	5.4	5.4	5.4	5.4	10.5
7535001009000	FM-753 CRACK A4	M10x90	4.8	5.9	6.8	7.4	13.4	13.4	13.4	13.4	21.5
7535001211000	FM-753 CRACK A4	M12x110	6.2	7.6	8.7	9.6	17.3	17.3	17.3	17.3	37.4
7535001212000	FM-753 CRACK A4	M12x120	6.2	7.6	8.7	9.6	17.3	17.3	17.3	17.3	37.4
7535001214500	FM-753 CRACK A4	M12x145	6.2	7.6	8.7	9.6	17.3	17.3	17.3	17.3	37.4

1) In case of interaction of tension and shear loads (lever arm) as well as in case of anchor groups and/or edge influence, a design according to EN 1992-4 (seismic actions - Annex C / fire action - Annex D) shall be carried out taking into account the entire European Technical Assessment ETA-10/0293.

2) The load data take into account the partial safety factors of the resistances given in the European Technical Assessment (ETA) and a partial safety factor of the actions of $\gamma_F = 1.4$. The values given assume unreinforced or normally reinforced concrete with a spacing of the reinforcing bars $s \geq 15$ cm or $s \geq 10$ cm at a rebar diameter $d_s \leq 10$ mm is assumed.

FM-753 CRACK A4

Doorsteekanker met seismische certificering - rsv A4

Design capacities - single anchor - no edge distances - Cracked concrete

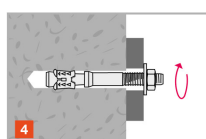
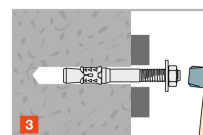
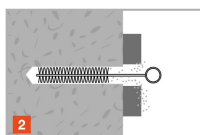
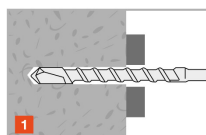
Referentie	Product Reference	Dimensions [mm]	Design capacities - single anchor - no edge distances								
			Design capacity - Cracked concrete (3)								
			Tension - $N_{Rd}^{(1)}$				Shear - $V_{Rd}^{(1-2)}$				Bending moment MRd [Nm]
			C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	
7535000806800	FM-753 CRACK A4	M8x68	4.3	-	-	-	7.6	-	-	-	-
7535000807500	FM-753 CRACK A4	M8x75	4.3	-	-	-	7.6	-	-	-	-
7535001009000	FM-753 CRACK A4	M10x90	6.7	-	-	-	18.8	-	-	-	-
7535001211000	FM-753 CRACK A4	M12x110	8.7	-	-	-	24.2	-	-	-	-
7535001212000	FM-753 CRACK A4	M12x120	8.7	-	-	-	24.2	-	-	-	-
7535001214500	FM-753 CRACK A4	M12x145	8.7	-	-	-	24.2	-	-	-	-

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing $s \geq 15$ cm (any diameter) or with a rebar spacing $s \geq 10$ cm, if the rebar diameter is 10mm or smaller.
2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ($c \leq \max [10 \text{ hef}; 60d]$) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.
3. Concrete is considered non-cracked when the tensile stress within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification $\sigma_R = 3 \text{ N/mm}^2$ can be assumed (σ_L equals the tensile stress within the concrete induced by external loads, anchors loads included).

FM-753 CRACK A4

Doorsteekanker met seismische certificering - rsv A4

Plaatsing



Installation data

Referentie	Product Reference	Dimensions [mm]	Ø drilling hole [d0] [mm]	Min. drill depth [h1] [mm]	Ø drilling fixture [df] [mm]	Wrench size [SW] [mm]	Installation torque [Tinst] [Nm]	Embedment depth [hef] [mm]	Min. support thickness [hmin] [mm]
7535000806800	FM-753 CRACK A4	M8x68	8	70	9	13	20	48	100
7535000807500	FM-753 CRACK A4	M8x75	8	70	9	13	20	48	100
7535001009000	FM-753 CRACK A4	M10x90	10	80	12	17	40	60	120
7535001211000	FM-753 CRACK A4	M12x110	12	100	14	19	60	72	150
7535001212000	FM-753 CRACK A4	M12x120	12	100	14	19	60	72	150
7535001214500	FM-753 CRACK A4	M12x145	12	100	14	19	60	72	150

FM-753 CRACK A4

Doorsteekanker met seismische certificering - rsv A4



Spacings and edge distances

Referentie	Product Reference	Dimensions [mm]	Min. edge distance [cmin] [mm]	Min. spacing [smin] [mm]	Characteristic edge distance [ccr,N] [mm]	Characteristic spacing(5) - Scr,N [scr,N] [mm]
7535000806800	FM-753 CRACK A4	M8x68	50	50	72	144
7535000807500	FM-753 CRACK A4	M8x75	50	50	72	144
7535001009000	FM-753 CRACK A4	M10x90	50	55	90	180
7535001211000	FM-753 CRACK A4	M12x110	60	60	108	216
7535001212000	FM-753 CRACK A4	M12x120	60	60	108	216
7535001214500	FM-753 CRACK A4	M12x145	60	60	108	216

ZAC des Quatre Chemins - 85400 Sainte Gemme la Plaine - France
 tél : +33 2 51 28 44 00
 fax : +33 2 51 28 44 01

Copyright by Simpson Strong-Tie®

Informatie weergegeven op deze website zijn eigendom van Simpson Strong-Tie®

Deze zijn enkel geldig in associatie met de gecommmercialiseerde Simpson Strong-Tie® producten

FM-753 CRACK A4

Doorsteekanker met seismische certificering - rsv A4



www.strongtie.nl



2024-04-27