PROHLÁŠENÍ O VLASTNOSTECH

DoP-23/0733

1. Jedinečný identifikační kód typu produktu: DEKFIX Polyesterová chemická kotva
2. Předpokládané použití: Lepená kotva pro beton bez trhlin
3. Výrobce: RAWLPLUG S.A., ul. Kwidzyńska 6, 51-416 Wrocław, Polska
4. Systém(y) posuzování a ověřování: Systém 1
5. Evropský dokument pro posuzování: EAD 330499-01-0601
6. European Technical Assessment: ETA-23/0733
   Subjekt pro technické posuzování: 1488 INSTYTUT TECHNIKI BUDOWLANEJ (ITB)
   Číslo certifikátu: 1488-CPR-0947/W
7. Deklarované vlastnosti:

Mechanická odolnost a stabilita (BWR 1)

Základní požadavky	Technická specifikace
Charakteristická odolnost	viz. příloha tabulky C1-C4

Hygiena, zdraví a životní prostředí (BWR 3)

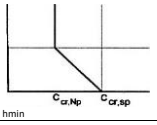
Základní požadavky	Specifikace
Bez stanovení	

Table Cl: Characteristic resistance under tension load in uncracked concrete — static and quasi-static loads

Size			M8	MIO	M12	M16	M20	M24	M30
Steel failure									
Steel failure with standard threaded rod grade 5.8									
Characteristic resistance	NRks		18	29	42	78	122	176	280
Partial safety factor	l) YMs		1,50						
Steel failure with standard threaded rod grade 8.8									
Characteristic resistance	NRk,s		29	46	67	126	196	282	449
Partial safety factor	1) YMs		1,50						
Steel failure with standard threaded rod grade 10.9									
Characteristic resistance			37	58	84	157	245	353	561
Partial safety factor	1) YMs		1,40						
Steel failure with standard threaded rod grade 12.9									
Characteristic resistance	NRks		44	70	101	188	294	424	673
Partial safety factor	1) YMs		1 , 40						
Steel failure with standard stainless steel threaded rod A4-70									
Characteristic resistance			26	41	59	110	171	247	393
Partial safety factor	1) YMs		1,87						
Steel failure with standard stainless steel threaded rod A4-80									
Characteristic resistance			29	46	67	126	196	282	449
Partial safety factor	1) YMs		1,60						
Steel failure with standard high corrosion threaded rod grade 70									
Characteristic resistance	NRks		26	41	59	110	171	247	393
Partial safety factor	l) YMs		1,87						
Combined ull-out and concrete cone failure workin life 50 and/or 100 ears									
Characteristic bond resistance in uncracked concrete C20/25, workin life 50 ears									
Temperature range l: $40^0C/24^0C$		[N/mm2]	9,5	9,5	9,0	8,0	8,0	6,5	5,5
Temperature range II: $80^0C/50^0C$		[N/mm2]	8,0	8,0	7,5	7,0	6,5	5,0	4,5
Sustained load factor for in uncracked concrete	NJ sus,50	400C/240C	0,81						
		800C/500C	0,76						
Characteristic bond resistance in uncracked concrete C20/25, working life 100 years									
Temperature range l: $40^0C/24^0C$	tRk,ucr,	[N/mm2]	9,5	9,5	9,0	8,0	8,0	6,5	5,5
Temperature range II: $80^0C/50^0C$	^{T}Rk,ucr, 100	[N/mm2]	7,0	7,0	7,0	6,5	6,0	5,0	4,0
Increasing factors		C30/37	1,04				1,0		
		C40/50	1,07				1,0		
		C50/60	1,09				1,0		

1) In the absence of national regulations
2) h — concreto member thickness

Table Cl: (continuation)

Concrete cone failure					
Factor for uncracked concrete	kucr,N		1 1 ,0		
Ed e distance	Ccr,N	mm	1,5 • hef		
S acin	Scr,N	mm	3,0• hef		
Splitting failure					
Edge distance	C cr,spfor hmln	[mm]	2,5 • hef	2,0• hef	1,5 • hef
	ccr sp for $h_{min} < h^{2)} < 2 \cdot h_{ef}$ (ccr,sp from linear interpolation)	[mm]			
	ccr,sp for $h^{2)} \geq 2 \cdot h_{ef}$	[mm]	Ccr,Np		
Spacing	scr,sp	[mm]	2,0• Ccr,sp		
Installation safety factors for combined pull-out, concrete cone and splitting failure					
Installation safety factors for category 11 + 12	Yinst		1,4	1,2	

1) In the absence of national regulations

2) h — concrete member thickness

Table C2: Characteristic resistance under shear load in uncracked concrete — steel failure without lever arm

Size			M8	MIO	M12	M16	M20	M24	M30
Steel failure with standard threaded rod grade 5.8									
Characteristic resistance	Rk,s		9	14	21	39		88	140
Partial safety factor	YMs		1,25						
Ductility factor			0,8						
Steel failure with standard threaded rod grade 8.8									
Characteristic resistance	Rk,s		15	23	34	63	98	141	224
Partial safety factor	YMs		1,25						
Ductility factor	k7		0,8						
Steel failure with standard threaded rod grade 10.9									
Characteristic resistance			18	29	42	78	122	176	280
Partial safety factor	YMs		1,5						
Ductility factor		[-1	0,8						
Steel failure with standard threaded rod grade 12.9									
Characteristic resistance	Rk,s		22	35	51	94	147	212	337
Partial safety factor	7Ms		1,50						
Ductility factor			0,8						
Steel failure with standard stainless steel threaded rod A4-70									
Characteristic resistance	Rk,s		13	20	29	55	86	124	196
Partial safety factor	YMs		1,56						
Ductility factor			0,8						
Steel failure with standard stainless steel threaded rod A4-80									
Characteristic resistance	Rk,s	[kN]	15	23	34	63	98	141	224
Partial safety factor	YMs		1,33						
Ductility factor			0,8						
Steel failure with high corrosion stainless steel threaded rod grade 70									
Characteristic resistance	VORk s		13	20	29	55	86	124	196
Partial safety factor	YMs		1,56						
Ductility factor			0,8						

Table C3: Characteristic values for shear load in uncracked concrete — steel failure with lever arm

Size			M8	MIO	M12	M16	M20	M24	M30
Steel failure with standard threaded rod grade 5.8									
Characteristic resistance	$R_{k,s}$		19	37	65	166	324	561	1124
Partial safety factor	γ_{Ms}		1,25						
Steel failure with standard threaded rod grade 8.8									
Characteristic resistance	$R_{k,s}$		30	60	105	266	519	898	1799
Partial safety factor	γ_{Ms}		1,25						
Steel failure with standard threaded rod grade 10.9									
Characteristic resistance	$R_{k,s}$		37	75	131	333	649	1123	2249
Partial safety factor			1,5						
Steel failure with standard threaded rod grade 12.9									
Characteristic resistance	$R_{k,s}$		45	90	157	400	779	1347	2699
Partial safety factor	γ_{Ms}		1,5						
Steel failure with standard stainless steel threaded rod A4-70									
Characteristic resistance	$R_{k.s}$		26	52	92	233	454	786	1574
Partial safety factor	γ_{Ms}		1,56						
Steel failure with standard stainless steel threaded rod A4-80									
Characteristic resistance			30	60	105	266	519	898	1799
Partial safety factor	γ_{Ms}		1,33						
Steel failure with high corrosion stainless steel threaded rod grade 70									
Characteristic resistance		[Nm]	26	52	92	233	454	786	1574
Partial safety factor	γ_{Ms}		1,56						

Table C4: Concrete pry out failure and concrete edge failure

Size			M8	MIO	M12	M16	M20	M24	M30
Pry out failure									
Pry-out factor	k8		2						
Concrete edge failure									
Outside diameter of anchor	dnom	[mm]	8	10	12	16	20	24	30
Effective length of anchor shear loading		[mm]	min (hef; 12dnom)						min (hef; 300)

Table C5: Displacement under tension load

Size			M8	MIO	M12	M16	M20	M24	M30
Characteristic displacement in uncracked C20/25 to C50/60 concrete									
Displacement [1])		[mm]	0,20	0,25	0,30	0,35	0,40	0,40	0,45
		[mm]	0,85	0,85	0,85	0,85	0,85	0,85	0,85

[1]) These values are suitable for each temperature range and categories specified in Annex Bl
Calculation of the displacement: öN0 = btw-factor • N; öN = ö NT-factor • N; (N — applied tension load)

Table C6: Displacement under shear load

Size			M8	MIO	M12	M16	M20	M24	M30
Characteristic displacement in uncracked C20/25 to C50/60 concrete									
Displacement [1])	övo	[mm]	2	2	2	2	2	2	2
		[mm]	3	3	3	3	3	3	3

[1]) These values are suitable for each temperature range and categories specified in Annex Bl
Calculation of the displacement: öN0 = öNo-factor • V; öN = öNæ-factor • V; (V — applied shear load)

Vlastnosti výše uvedeného výrobku jsou ve shodě se souborem deklarovaných vlastností. Toto prohlášení o vlastnostech se vydává v souladu s nařízením (EU) č. 305/2011 na výhradní odpovědnost výrobce uvedeného výše.

Tomasz Walczak
Wrocław, 2023

DYREKTOR ADMINISTRACYJNY
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