

Declaration of Performance 0756-CPD-0395

valid from LOT no: see final page of this document

MIT-SE Plus bonded anchor

(Bonded anchor for post-installed rebar \varnothing 8-25 for use in non-cracked concrete)

Intended use or uses of the construction product according to ETAG 001 part 5	
Generic type	Bonded anchor for anchorage of rebar.
Base material	Un-cracked concrete C12/15 to C50/60 acc. to EN 206:2000-12;
Material	Bst 500
Durability	Internal dry conditions and atmospheric conditions
Loading	Static only
Service temperature range	Temperature range I: : -40°C to +80°C (max. short term temperature +80°C and max. long term +50°C)
Use category	Dry and wet concrete: all diameters. Flooded holes: not allowed. Overhead installation is allowed. Perforation with hammer drilling or compressed air drilling.
Fire Resistance	-
Fire Reaction	-
ETA – 11/0168 issued by	Deutsches Institut für Bautechnik DIBt, Berlin
On the basis of	ETAG 001-05
Certificate of Conformity 0756-CPD-0395 issued by	Institut für Massivbau, Darmstadt
Under AVCP System	1

Declared performances for rebar (BSt 500 according to DIN 488-2:2006) \varnothing 8-25

Declared performances according to ETAG 001 part 5											
Essential characteristics			Performance								
			8	10	12	14	16	20	22	24	25
Installation parameters											
d_s	Diameter of bar	[mm]	8	10	12	14	16	20	22	24	25
d_o	Nominal diameter of drill bit	[mm]	12	14	16	18	20	25	28	32	32
h_{eff}	Minimum effective anchorage depth of anchoring	[mm]	170	213	255	298	340	425	468	510	532
	Minimum effective anchorage depth of overlap joints	[mm]	300	300	300	315	360	450	495	540	563
	Maximum effective anchorage depth	[mm]	1000	1000	1200	1400	1600	2000	2000	2000	2000
h_1	Depth of the drilling hole	[mm]	= h_{eff}								
s_{min}	Minimum spacing	[mm]	$\geq 5 d_s \geq 50$								
c_{min}	Minimum edge distance	[mm]	ETA -001 Annex 5								
f_{bd}	Ultimate bond resistance	[N/mm ²]	1,6	2,0	2,3	2,7	3,0	3,4	3,7	4,0	4,3
	The design value is valid for "good bond conditions" according to EN 1992-1-1. All other conditions: multiply value by 0.7.										

Values for pre-calculation of anchoring (example: C20/25; Bst 500 N/mm²)

Bar $\varnothing d_s$	$\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = 1,0$			$\alpha_2 = \alpha_5 = 0,7$ $\alpha_1 = \alpha_3 = \alpha_4 = 1,0$		
	Anchorage length l_{bd}	Design value N_{Rd}	Mortar volume	Anchorage length l_{bd}	Design value N_{Rd}	Mortar volume
[mm]	[mm]	[kN]	[ml]	[mm]	[kN]	[ml]
8	170	9.83	13	170	14.04	13
	220	12.72	17	190	15.69	14
	270	15.61	20	220	18.17	17
	378	21.85	29	265	21.85	20
10	213	15.39	19	213	21.99	19
	280	20.23	25	240	24.77	22
	340	24.57	31	270	27.87	24
	410	29.63	37	300	30.97	27
12	473	34.15	43	331	34.15	30
	255	22.11	27	255	31.59	27
	330	28.61	35	290	35.92	31
	410	35.55	43	330	40.88	35
14	490	42.49	52	360	44.59	38
	567	49.17	60	397	49.17	42
	298	30.15	36	298	43.06	36
	390	39.45	47	400	49.13	41
16	480	48.56	58	380	54.92	46
	570	57.66	69	420	60.70	51
	662	66.93	80	463	66.93	56
	340	39.31	46	340	56.15	46
16	440	50.87	60	390	61.41	53
	550	63.59	75	430	71.02	58
	650	75.15	88	480	79.28	65
	756	87.42	103	529	87.42	72
20	425	61.42	90	425	87.84	90
	560	80.93	119	480	99.09	102
	690	99.71	146	540	111.48	115
	820	118.50	174	600	123.87	127
22	945	136.59	200	662	136.59	140
	468	74.40	132	468	106.28	132
	610	96.97	172	530	120.36	150
	750	119.22	212	600	136.26	170
24	900	143.07	254	660	149.88	187
	1040	165.28	294	728	165.28	206
	510	88.44	215	510	126.35	215
	670	116.19	283	580	143.69	245
25	820	142.20	346	650	161.03	274
	980	169.95	414	720	178.37	304
	1134	196.69	479	794	196.69	335
	532	96.10	200	532	137.29	200
25	690	124.64	259	610	157.42	229
	860	155.35	323	680	175.48	256
	1020	184.25	384	750	193.54	282
	1181	213.42	444	827	213.42	311

The design value is valid for "good bond conditions" according to EN 1992-1-1. All other conditions: multiply value by 0.7.

Values for pre-calculation of overlap joints (example: C20/25; Bst 500 N/mm²)

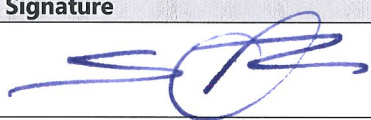
Bar $\varnothing d_s$	$\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = 1,0$			$\alpha_2 = \alpha_5 = 0,7$ $\alpha_1 = \alpha_3 = \alpha_4 = 1,0$		
	Anchorage length l_{bd}	Design value N_{Rd}	Mortar volume	Anchorage length l_{bd}	Design value N_{Rd}	Mortar volume
[mm]	[mm]	[kN]	[ml]	[mm]	[kN]	[ml]
8	300	9.83	23	300	14.04	23
	320	12.72	24	290	15.69	22
	340	15.61	26	280	18.17	21
	378	21.85	29	265	21.85	20
10	300	15.39	27	300	21.99	27
	340	20.23	31	310	24.77	28
	390	24.57	35	320	27.87	29
	430	29.63	39	320	30.97	29
	473	34.15	43	331	34.15	30
12	300	22.11	32	300	31.59	32
	370	28.61	39	320	35.92	34
	430	35.55	45	350	40.88	37
	500	42.49	53	370	44.59	39
	567	49.17	60	397	49.17	42
14	315	30.15	38	315	43.06	38
	400	39.45	48	350	49.13	42
	490	48.56	59	390	54.92	47
	570	57.66	69	430	60.70	52
	662	66.93	80	463	66.93	56
16	360	39.31	49	360	56.15	49
	460	50.87	62	400	61.41	54
	560	63.59	76	440	71.02	60
	660	75.15	90	490	79.28	67
	756	87.42	103	528	87.42	72
20	450	61.42	95	450	87.84	95
	570	80.93	121	500	99.09	106
	700	99.71	148	560	111.48	119
	820	118.50	174	610	123.87	129
	945	136.59	200	662	136.59	140
22	495	74.40	140	495	106.28	140
	630	96.97	178	550	120.36	156
	770	119.22	218	610	136.26	172
	900	143.07	254	670	149.88	189
	1040	165.28	294	728	165.28	206
24	540	88.44	228	540	126.35	228
	690	116.19	291	600	143.69	253
	840	142.20	355	670	161.03	283
	990	169.95	418	730	178.37	308
	1134	196.69	479	794	196.69	335
25	563	96.10	212	563	137.29	212
	720	124.64	271	630	157.42	237
	870	155.35	327	700	175.48	263
	1030	184.25	387	760	193.54	285
	1181	213.42	444	827	213.42	311

The below performances apply for the following article numbers:

Content	Art Nr	LOT nr
165ml	1710024	029_2/2014
	17100246	046_2/2014
300ml	1710017	148_6/2014; 170_7/2014
	17100170	115_5/2014
	17100171	148_6/2014
	17100175	056_3/2014
	17100176	-
	1710102	-
350ml	1710025	147_12/2014; 119_11/2014; 147_12/2014
	17100251	
	17100256	
	1710118	
400ml	1710013	
	1710026	043_8/2014
	17100260	043_8/2014; 168_1/2015
	17100261	161_2/2014
	171002601	263_4/2014
825ml	1710022	144_12/2014; 165_12/2013

This declaration of performance is issued under the sole responsibility of Mungo AG.

Signed for and on behalf of the manufacturer by:

Name and functions	Place and date of issue	Signature
Arnold Schefer Owner and CEO	Olten, 4.6.2013	

Further information:

Liability for printing errors is excluded. The full content of the corresponding ETA has to be observed.