Anchorfast UNIVERSAL

Version: 05/2021

Features and Benefits

- *Good bond strength with High load resistance*
- *Used with all grades of threaded rod*
- *Used in concrete and masonry*
- *Fast gelling and curing*
- *Used in dry and wet conditions*
- *Also suitable as a filler for gap and crack filling*
- *Economical fixing resin*
- *Extremely versatile*
- *Close edge distance and small spacing*
- *Manual cleaning up to 20mm diameter and embedment depths of 240mm*

Contents

Shelf Life and Storage

This product should be stored between +5˚C & +25˚C.
The Shelf life of the product is 18 months from the manufacture date.

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Anchorfast UNIVERSAL

Product Description

Anchorfast Universal is a 2 component high strength 10:1 ratio chemical anchoring resin system. It is designed as a fast curing high strength resin fixing anchor for medium loads and is particularly suitable for lower strength substrates and lower load fixings due to its excellent value.

Specific Benefits

- High loads possible
- Studs and other fixings
- Crack and gap filling
- Economical fixing resin

Approvals

- ETA 16/0907 - ETAG 029 Hollow Wall / Masonry Installations
- Tested according to LEED 2009 EQ c4.1, SCAQMD rule 1168 (2005).
- A+ Rating VOC content

Loads, Edge and Spacings based on Characteristic bond strengths - Showing steel failure

	Characteristic Resistance (kN)		Design Resistance (kN)		Recommended Load (kN)		Characteristic distances (mm)			Min Edge and Spacing (mm)				
Size (mm)	Tension N_{rk}	Shear V_{rk}	Tension N_{rd}	Shear V_{rd}	Tension N_{rec}	Shear V_{rec}	Edge $C_{cr,N}$	Spacing $S_{cr,N}$	Edge $C_{cr,V}$	C_{min}, S_{min}	Nominal Embedment (mm)	Hole Diameter concrete (mm)	Hole Diameter fixture (mm)	Max Torque (Nm)
8	15,12		8,40		6,00						60	10	9	10
	19,00	9,00	11,20	7,20	8,00	5,14	80	160	80	40	80			
	19,00		12,70		9,07						160			
10	18,90		10,50		7,50						60	12	12	20
	28,26	15,00	15,70	12,00	11,21	8,57	100	200	90	50	90			
	30,20		20,10		14,36						200			
12	26,50		14,72		10,52						70	14	14	40
	41,40	21,00	23,00	16,80	16,43	12,00	120	240	110	60	110			
	43,80		29,20		20,86						240			
16	38,52		21,40		15,29						80	18	18	80
	60,30	39,00	33,50	31,20	23,93	22,29	160	320	125	80	125			
	81,60		54,40		38,86						320			
20	45,20		25,11		17,94						90	22	22	120
	85,50	61,00	47,50	48,80	33,93	34,86	200	400	180	100	170			
	127,40		84,90		60,64						400			
24	56,50		31,39		22,42						100	28	26	160
	118,80	88,00	66,00	70,40	47,14	50,29	225	450	220	120	210			
	183,60		122,40		87,43						480			
30	67,85		37,69		26,92						120	35	32	200
	158,40	142,50	88,00	114,00	62,86	81,43	260	520	280	150	280			
	292,00		194,50		138,93						600			

= steel failure Partial safety factor = 1.5

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Anchorfast UNIVERSAL

Design Resistance used with various stud strengths, material and rebar.

5.8 Grade Steel Studding

Stud Diameter	Hole Diameter	Embedment Depth hef																				h_{ef} failure	$F_{d,s}$ design load
															steel failure								
(mm)	(mm)	60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720	(mm)	(kN)
8	10	8,4	9,8	11,2	12,6	12,7																91	12,7
10	12	10,5	12,2	14,0	15,7	17,5	19,2	20,1														115	20,1
12	14		14,7	16,8	18,9	21	23	25	27	29												140	29,2
16	18			21,4	24,1	27	29	32	35	38	43	54	54									203	54,4
20	22			22,3	25,1	28	31	34	36	39	45	56	67	78	85							304	84,9
24	28					31	35	38	41	44	50	63	75	88	101	122						389	122,4
27	30						36	40	43	46	53	66	79	92	106	132	158	159				482	159,1
30	35							38	41	44	50	63	75	88	101	126	151	170	189			619	194,5
Depth (mm)		60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720		

8.8 Grade Steel Studding

Stud Diameter	Hole Diameter	Embedment Depth hef																				h_{ef} failure	$F_{d,s}$ design load
(mm)	(mm)	60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720	(mm)	(kN)
8	10	8,4	9,8	11,2	12,6	14,0	15,4	16,8	18,2	19,5												140	19,5
10	12	10	12	14	16	17	19	21	23	24	28	31										177	30,9
12	14		15	17	19	21	23	25	27	29	34	42	45									215	45,0
16	18			21	24	27	29	32	35	38	43	54	64	75	84							312	83,7
20	22			22	25	28	31	34	36	39	45	56	67	78	89	112						468	130,7
24	28					31	35	38	41	44	50	63	75	88	101	126	151					599	188,3
27	30						36	40	43	46	53	66	79	92	106	132	158	178				742	245
30	35							38	41	44	50	63	75	88	101	126	151	170	189			952	299
Depth (mm)		60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720		

cont.

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

10.9 Grade Steel Studding

Stud Diameter	Hole Diameter	10.9 grade studding — Embedment Depth hef																				h_{ef} failure	$F_{d,s}$ design load
(mm)	(mm)	60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720	(mm)	(kN)
8	10	8,4	9,8	11	13	14	15	17	18	20	22											195	27,2
10	12	10,5	12,2	14	16	17	19	21	23	24	28	35										247	43,1
12	14		14,7	17	19	21	23	25	27	29	34	42	50									299	62,6
16	18			21	24	27	29	32	35	38	43	54	64	75	86							435	116,6
20	22			22	25	28	31	34	36	39	45	56	67	78	89	112						652	182,0
24	28					31	35	38	41	44	50	63	75	88	101	126	151					835	262
27	30						36	40	43	46	53	66	79	92	106	132	158	178				1034	341,0
30	35							38	41	44	50	63	75	88	101	126	151	170	189			1326	416,7
Depth (mm)		60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720		

A4-70 Stainless Steel Studding

Stud Diameter	Hole Diameter	steel failure — Embedment Depth hef																				h_{ef} failure	$F_{d,s}$ design load
(mm)	(mm)	60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720	(mm)	(kN)
8	10	8,4	9,8	11,2	12,6	13,7																98	13,7
10	12	10,5	12,2	14	16	17	19	21	22													124	21,7
12	14		14,7	17	19	21	23	25	27	29	32											151	31,6
16	18			21	24	27	29	32	35	38	43	54	59									219	58,8
20	22			22	25	28	31	34	36	39	45	56	67	78	89	92						328	91,7
24	28					31	35	38	41	44	50	63	75	88	101	126	132					421	132,1
27	30						36	40	43	46	53	66	79	80							1	243	80,2
30	35							38	41	44	50	63	75	88	98						1	312	98,1
Depth (mm)		60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720		

*1 = Tensile strength 500N/mm2

cont.

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

A4-80 Stainless Steel Studding

Stud Diameter	Hole Diameter	Embedment Depth hef																				h_{ef} failure	$F_{d,s}$ design load
(mm)	(mm)	60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720	(mm)	(kN)
8	10	8,4	9,8	11,2	12,6	14,0	15,4	15,7														112	15,7
10	12		12,2	14	16	17	19	21	23	24	25											142	24,8
12	14		14,7	17	19	21	23	25	27	29	34	36										172	36,1
16	18			21	24	27	29	32	35	38	43	54	64	67								251	67,2
20	22			22	25	28	31	34	36	39	45	56	67	78	89	105						375	104,8
24	28					31	35	38	41	44	50	63	75	88	101	126	132					421	132,1
27	30						36	40	43	46	53	66	79	80							2	243	80,2
30	35							38	41	44	50	63	75	88	98						2	312	98,1
Depth (mm)		60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	480	540	600	660	720		

High bond reinforcing bars Fyk=500N/mm2

Rebar Diameter	Hole Diameter	Embedment Depth hef																				h_{ef} failure	$F_{d,s}$ yield load
(mm)	(mm)	60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	500	560	640	720	800	(mm)	(kN)
8	10	7,5	8,8	10,1	11,3	12,6	13,8	15,1	16,3	17,6	20,1											216	21,9
10	12	9,4	11,0	12,6	14	16	17	19	20	22	25	31										281	34
12	14		11,9	13,6	15	17	19	20	22	24	27	34	41									379	49
16	20			16,1	18	20	22	24	26	28	32	40	48	56	64							549	87
20	25			17,6	20	22	24	26	29	31	35	44	53	62	70	88						805	137
25	30					24	26	28	31	33	38	47	57	66	75	94	118					1107	197
28	35						24	26	29	31	35	44	53	62	70	88	110	123				1429	268
32	40								30	32	37	46	56	65	74	93	116	130	148			1783	350
Depth (mm)		60	70	80	90	100	110	120	130	140	160	200	240	280	320	400	500	560	640	720	800		

*1 = Tensile strength500N/mm2

*2 = Tensile strength700N/mm2

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Bond Strength Factors

Influence of concrete strength on combined pull out and concrete cone resistance

Concrete Strength N/mm2	C15/20	C20/25	C25/30	C30/37	C35/45	C40/50	C45/55	C50/60
Non-Cracked fc =	0,97	1,00	1,02	1,04	1,07	1,10	1,12	1,15

Influence of environmental conditions in non cracked concrete

		M8	M10	M12	M16	M20	M24	M30
Temp I 40°C / 24°C	Dry and Wet	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Temp II 80°C / 50°C	Dry and Wet	0,90	0,88	0,87	0,86	0,85	0,84	0,82

Select concrete strength and environmental condition and apply to bond strength table on page 4

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Characteristic and Design Load resistances for REBAR based on characteristic bond strengths for hef 4d (min embedment) to 20d

	Non Cracked Concrete						Cracked Concrete						
	Characteristic Resistance (kN)		Design Resistance (kN)		Recommended Load (kN)		Characteristic Resistance (kN)		Design Resistance (kN)		Recommended Load (kN)		Nominal Embed-ment
Rebar ø	Tension N_{rk}	Shear V_{rk}	Tension N_{rd}	Shear V_{rd}	Tension N_{rec}	Shear V_{rec}	Tension N_{rk}	Shear V_{rk}	Tension N_{rd}	Shear V_{rd}	Tension N_{rec}	Shear V_{rec}	(mm)
8	13,50	13,95	7,50	9,30	5,36	6,64	Not Applicable		Not Applicable		Not Applicable		60
	18,18		10,10		7,21								**80**
	36,18		20,10		14,36								160
10	16,92	21,45	9,40	14,30	6,71	10,21							60
	25,38		14,10		10,07								**90**
	56,52		31,40		22,43								200
12	21,42	31,05	11,90	20,70	8,50	14,79							70
	33,66		18,70		13,36								**110**
	73,26		40,70		29,07								240
16	28,98	55,50	16,10	37,00	11,50	26,43							80
	45,18		25,10		17,93								**125**
	115,74		64,30		45,93								320
20	35,64	86,55	19,80	57,70	14,14	41,21							90
	67,32		37,40		26,71								**170**
	158,40		88,00		62,86								400
25	42,48	135,00	23,60	90,00	16,86	64,29							100
	89,10		49,50		35,36								**210**
	212,04		117,80		84,14								500
28	43,56	168,75	24,20	112,50	17,29	80,36							110
	110,88		61,60		44,00								**280**
	221,76		123,20		88,00								560
32	54,18	220,95	30,10	147,30	21,50	105,22							130
	133,20		74,00		52,86								**320**
	266,40		148,00		105,71								640

Table notes : see back page

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Bond Strength Factors - REBAR

Influence of concrete strength on combined pull out and concrete cone resistance

Concrete Strength N/mm2 (MPa)	C15/20	C20/25	C25/30	C30/37	C35/45	C40/50	C45/55	C50/60
non cracked fc =	0,97	1,00	1,02	1,04	1,07	1,10	1,12	1,15

Influence of environmental conditions in non cracked concrete

		Ø 8	Ø 10	Ø 12	Ø 16	Ø 20	Ø 25	Ø 28	Ø 32
Temp I 40°C / 24°C	Dry and Wet	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Temp II 80°C / 50°C	Dry and Wet	0,90	0,90	0,88	0,88	0,86	0,86	0,84	0,84

Table notes : see back page

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Material Properties for grades of threaded rod

	Stud Grade 8.8		Stud Grade 10.9		Stud Grade A4-70		Stud Grade A4-80	
Stud Diameter	$N_{rk,\,s}$	$N_{rd,\,s}$	$N_{rk,\,s}$	$N_{rd,\,s}$	$N_{rk,\,s}$	$N_{rd,\,s}$	$N_{rk,\,s}$	$N_{rd,\,s}$
(mm)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)
M8	29,2	19,5	38,1	27,2	25,6	13,7	29,2	15,6
M10	46,4	30,9	60,3	43,1	40,6	21,7	46,4	24,8
M12	67,4	44,9	87,7	62,6	59,0	31,6	67,4	36,0
M16	125,6	83,7	163,0	116,4	109,9	58,8	125,7	67,2
M20	196,1	130,7	255,0	182,1	171,5	91,7	196,0	104,8
M24	282,5	188,3	367,0	262,1	247,1	132,1	293,0	132,1
M30	448,8	299,2	583,0	416,4	280,5	150,0	392,7	210,0

	Stud Grade 8.8		Stud Grade 10.9		Stud Grade A4-70		Stud Grade A4-80	
Stud Diameter	$V_{rk,\,s}$	$V_{rd,\,s}$	$V_{rk,\,s}$	$V_{rd,\,s}$	$V_{rk,\,s}$	$V_{rd,\,s}$	$V_{rk,\,s}$	$V_{rd,\,s}$
(mm)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)
M8	14,6	11,7	19,0	15,2	12,8	8,2	14,6	9,4
M10	23,2	18,6	30,2	24,1	20,3	13,0	23,2	14,9
M12	33,7	27,0	43,8	35,1	29,5	18,9	33,7	21,6
M16	62,8	50,2	81,6	65,3	55,0	35,2	62,8	40,3
M20	98,0	78,4	127,4	101,9	85,8	55,0	98,0	62,8
M24	141,2	113,0	183,6	146,8	123,6	79,2	141,2	90,5
M30	224,4	179,5	291,5	215,9	140,3	89,9	196,4	125,9

	Rebar BSt 500 to DIN 488		Rebar BSt 500 to DIN 488	
Rebar Diameter	$N_{rk,\,s}$	$N_{rd,\,s}$	$V_{rk,\,s}$	$V_{rd,\,s}$
(mm)	(kN)	(kN)	(kN)	(kN)
8	28,0	20,0	14,0	9,3
10	43,0	30,7	21,5	14,3
12	62,0	44,3	31,0	20,7
14	85,0	60,7	42,5	28,3
16	111,0	79,3	55,5	37,0
20	173,0	123,6	86,5	57,7
25	270,0	192,9	135,0	90,0
32	442	315,7	221	147,3

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Effect of Anchor Spacing - Tension

Anchor Spacing	Stud / Rebar Diameter						
(mm)	8	10	12	16	20	24	30
40	0,64						
50	0,67	0,63					
60	0,70	0,65	0,63				
70	0,73	0,67	0,64				
80	0,76	0,69	0,66	0,63			
90	0,79	0,72	0,68	0,64			
100	0,82	0,74	0,70	0,65	0,63		
120	0,87	0,79	0,74	0,68	0,65	0,63	
150	0,96	0,86	0,80	0,73	0,68	0,65	0,63
160	1,00	0,88	0,82	0,74	0,70	0,66	0,64
175		0,92	0,85	0,76	0,71	0,68	0,65
200		1,00	0,90	0,80	0,74	0,71	0,68
225			0,95	0,84	0,77	0,74	0,70
240			1,00	0,86	0,79	0,76	0,72
250				0,87	0,80	0,77	0,73
275				0,91	0,83	0,80	0,75
280				0,92	0,84	0,80	0,76
300				0,95	0,86	0,82	0,78
320				1,00	0,88	0,85	0,80
350					0,92	0,88	0,83
400					1,00	0,94	0,88
425						0,97	0,90
450						1,00	0,93
480							0,96
520							1,00

Effect of Edge Distance - Tension

Edge Distance	Stud / Rebar Diameter						
(mm)	8	10	12	16	20	24	30
40	0,64						
50	0,73	0,63					
60	0,82	0,70	0,63				
70	0,90	0,77	0,68				
80	1,00	0,84	0,74	0,63			
90		0,91	0,80	0,67			
100		1,00	0,86	0,71	0,63		
110			0,92	0,76	0,66		
120			1,00	0,80	0,70	0,64	
140				0,89	0,77	0,68	0,63
160				1,00	0,84	0,76	0,66
180					0,91	0,84	0,72
200					1,00	0,92	0,78
225						1,00	0,86
250							0,94
260							1,00

Effect of Edge Distance - Shear

Edge Distance	Stud / Rebar Diameter						
(mm)	8	10	12	16	20	24	30
40	0,25						
50	0,44	0,30					
60	0,63	0,48	0,30				
70	0,81	0,65	0,44				
80	1,00	0,83	0,58	0,40			
90		1,00	0,72	0,53			
100			0,86	0,67	0,35		
110			1,00	0,80	0,44		
125				1,00	0,58	0,35	
140					0,72	0,45	0,30
160					0,91	0,58	0,36
180					1,00	0,71	0,47
200						0,84	0,59
225						1,00	0,74
250							0,88
280							1,00

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Anchorfast UNIVERSAL

Minimum Curing Time

Concrete Temperature	Gel - Working Time	Minimum curing time in dry concrete	Minimum curing time in wet concrete
- 10°C *	50 min	240 min	x2
-5°C *	40 min	180 min	x2
5°C	20 min	90 min	x2
15°C	9 min	60 min	x2
25°C	5 min	30 min	x2
35°C	3 min	20 min	x2

* Resin temperature must be at least 20°C

- Full cure 24 hours

- All specifications based on supplied mixer

Temperature Ranges

Temperature Range	Concrete Service Temperature	Maximum Long Term Concrete Temp	Maximum Short Term Concrete Temp
Range I	-40°C to +40°C	+24°C	+40°C
Range II	-40°C to +80°C	+50°C	+80°C

Service temperature range: Range of ambient temperatures after installation and during the lifetime of the anchor.

Short term temperature: Temperatures within the service temperature range which vary over short intervals,

e.g. day/night cycles and freeze/thaw cycles.

Long term temperature: Temperature, within the service temperature range, which will be approximately constant

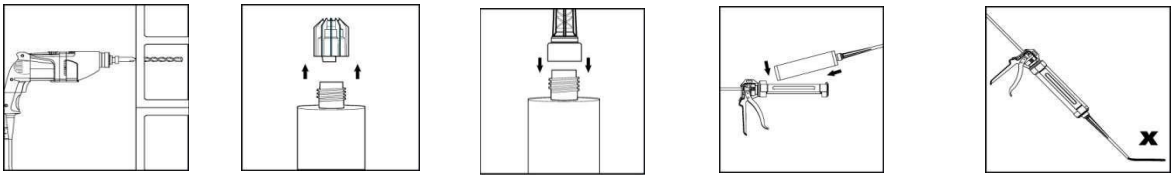
over significant periods of time.

Long term temperatures will include constant or near constant temperatures, such as those experienced in cold stores or next to heating installations.

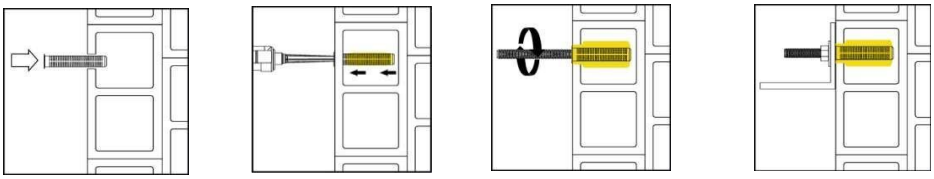
Physical Properties

	N/mm2	Test Method
Compressive Strength	41,8	EN ISO 604 / ASTM 695
Flexural Strength	14,1	EN ISO 178 / ASTM 790
Flexural Modulus	2589,6	EN ISO 178 / ASTM 790
Tensile Strength	7,4	EN ISO 527 / ASTM 638
E Modulus	4365,5	EN ISO 527 / ASTM 638
VOC Content	A+ Rating	-

Installation parameters: drilling hole cleaning and installation HOLLOW WALL



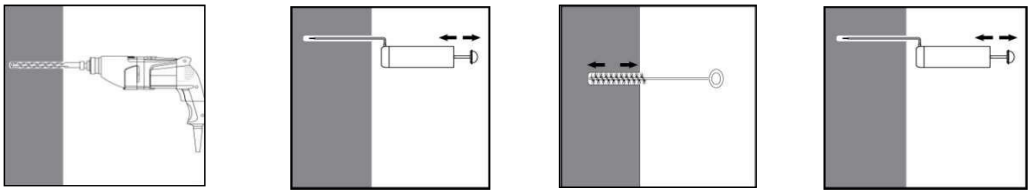
Drill hole in the substrate to the required embedment depth using the appropriately sized carbide drill bit. Bore hole cleaning Just before setting an anchor, the bore hole must be free of dust and debris. Remove the threaded cap from the cartridge. Tightly attach the mixing nozzle. Do not modify the mixer in any way. Made sure the mixing element is inside the mixer. Use only the supplied mixer. Insert the cartridge into the dispenser gun. Discard the initial trigger pulls of adhesive. Discard the first 10ml of resin until an even colour is achieved.



Introduce the sleeve of suitable dimensions. Insert the nozzle to the end of the sleeve and inject the resin so long till the sleeve will fill into 100%. Insert the anchor, slowly with a slight twisting motion into the sleeve. Remove excess resin and leave the fixing until minimum couring (loading) times has elapsed.

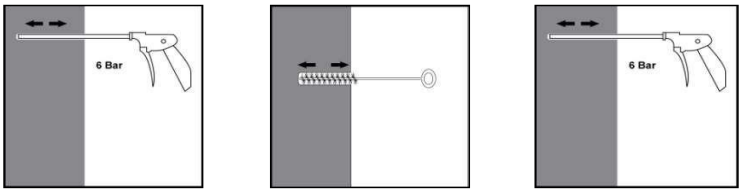
Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Installation parameters: drilling hole cleaning and installation

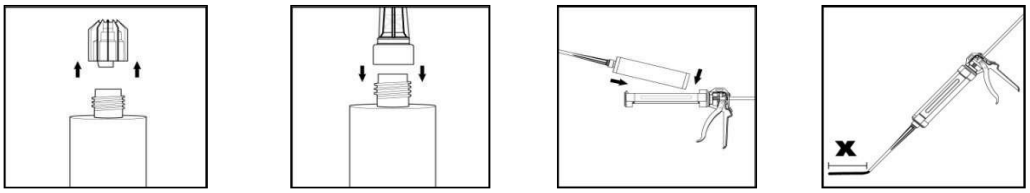


Drill hole in the substrate to the required embedment depth using the appropriately sized carbide drill bit. Bore hole cleaning Just before setting an anchor, the bore hole must be free of dust and debris. The manual pump shall be used for blowing out bore holes up to diameters do ≤ 24mm and embedment depths up to hef ≤ 10d. Blow out at least 4 times from the back of the bore hole, using an extension if needed. Brush 4 times with the specified brush size (see Table 6) by inserting the steel brush to the back of the hole (if needed with an extension) in a twisting motion and removing it. Blow out again with manual pump at least 4 times.

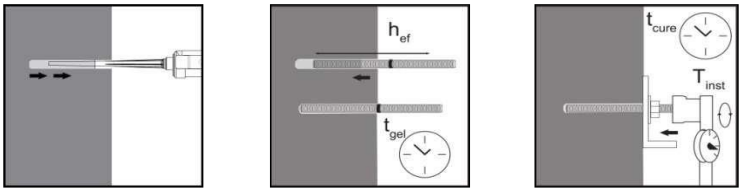
Compressed air cleaning (CAC) for all bore hole diameters do and all bore hole depths



Blow 2 times from the back of the hole (if needed with a nozzle extension) over the whole length with oil-free compressed air (min. 6 bar at 6 m³/h). Brush 2 times with the specified brush size (see Table 6) by inserting the steel brush to the back of the hole (if needed with an extension) in a twisting motion and removing it.
X 2 Blow out again with compressed air at least 2 times.



Remove the threaded cap from the cartridge. Tightly attach the mixing nozzle. Do not modify the mixer in any way. Made sure the mixing element is inside the mixer. Use only the supplied mixer. Insert the cartridge into the dispenser gun. Discard the initial trigger pulls of adhesive. Discard the first 10ml of resin.



Inject the adhesive starting at the back of the hole, slowly withdrawing the mixer with each trigger pull. Fill holes approximately 2/3 full, to ensure that the annular gap between the anchor and the concrete is completely filled with adhesive along the embedment depth. Before use, verify that the threaded rod is dry and free of contaminants. Install the threaded rod to the required embedment depth during the open gel time tgel has elapsed. The working time tgel is given in Table 7. The anchor can be loaded after the required curing time tcure (see Table 7). The applied torque shall not exceed the values Tmax given in Table 1.

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy

Notes

PAGE 2 :

Typical characteristic and design resistance performance with 5.8 grade studding and associated installation data

All data is based on correct installation - see instructions

No influence of edge and spacing

Minimum base material thickness hef +30mm >100mm for M8 to M12 and for M16 to M30 hef +2 d

h_{ef} range minimum or 4d whichever is greatest to 20d

Concrete strength C20/25 - $f_c$cube = 25N/mm^2 (25MPa)

5.8 grade stud

Temperature range i maximum long term / short term temperature +24/40°C

PAGE 3 to 5 :

Design Resistance with various stud strengths, material and rebar.

Note 1 for stainless steel tensile strength is 500N/mm^2 (500MPa)

Note 2 for stainless steel tensile strength is 700N/mm^2 (500MPa)

Data shown below the minimum embedment depth is for reference only. Please refer to manufacturer for advice.

All data is based on correct installation - see instructions

No influence of edge and spacing

Minimum base material thickness hef +30mm >100mm for M8 to M12 and for M16 to M30 hef +2 d

h_{ef} range minimum or 4d whichever is greatest to 20d

Concrete strength C20/25 - $f_c$cube = 25N/mm^2 (25MPa)

Temperature range i maximum long term / short term temperature +24/40°C

PAGE 68& 7 :

Bond Strength Factors

Select concrete strength and environmental condition and apply to bond strength table on page 3 to 5

Partial Safety Factors for pages 2,3,4,5,7 :

1.8 for all sizes studs

1.8 for all sizes rebar

Domochemica Co Ltd • 2, Propylaeon Str., Strovolos Industrial Zone • P.O.Box 28928, 2084 Nicosia, Cyprus
Tel.: 0035722312710, Fax: 22420651 • W: www.domochemica.com.cy • E: info@domochemica.com.cy