DYMAFIX
CHEMICAL RESIN TECHNOLOGY

DF-150
EPOXY ACRYLATE RESIN STYRENE FREE

TECHNICAL DATA SHEET

DF-150 is an epoxy acrylate resin anchor for high load bearing, and heavy duty structural anchoring applications in non-cracked concrete.

Primarily used for the fixing of starter bars, threaded bars, studs and dowels.

Suitable for applications in:

- Damp or wet holes, underwater applications
- Non-cracked concrete
- Close to edge applications where mechanical anchors could cause cracking
- Medium to high loads with fast curing time
- Confined spaces and indoors as this is free from styrene
- Concrete, brick, wood, and other high strength materials

Approvals list:

- ETA option 7 (non-cracked concrete) - M8 to M16
- VOC (volatile organic content): A+ rating
- ETA option 7 (non-cracked concrete) - 8 to 16mm rebar

Storage and conservation:

- Keep out of direct sunlight
- Store between +5°C and +30°C
- Shelf Life is 12 Months from manufacture date

Working & curing times:

Base Material Temperature	Working Time	Curing Time Dry or Wet Concrete
30°C	3 min	20 min
25°C	4 min	30 min
20°C	6 min	45 min
10°C	12 min	1 hr 30 min
5°C	15 min	2 hr
0°C	25 min	3 hr

Note: Minimum cartridge temperature for application is 5°C

Part Number	Description
CRT/DF150/400	DF-150 Epoxy Acrylate SF Chemical Resin, 400ml Cartridge

PROJECT ACCORDING TO TR029 EOTA TECHNICAL REPORT

Application on the following Materials:

- Concrete
- Stone
- Solid Brick
- Hollow Brick
- Wood

DymaFIX a subsidary of Dymatec Ltd

DYMATEC
SPECIALIST PRODUCTS FOR DIAMOND DRILLING & SAWING

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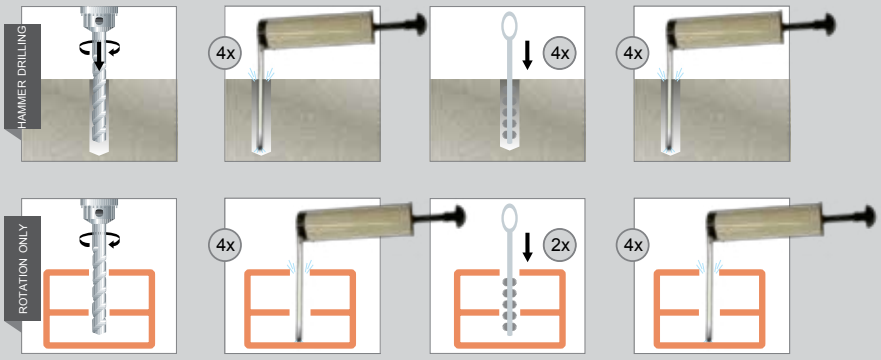
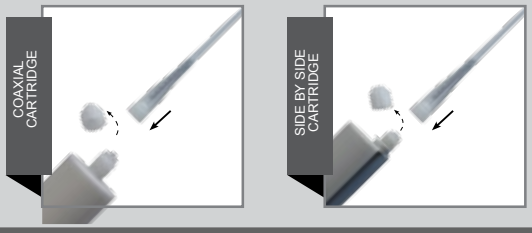
Installation Procedure

01



Drill the hole and check it is perpendicular. Blow the hole with an appropriate pump blower (or compressed air), clean the lateral surface of the hole with an appropriate steel brush, blow again in the hole until there is no dust and/or any residual material inside. We strongly recommend use of the steel brush to clean hole sides.

02



Unscrew the front cup, screw on the mixer and insert the cartridge in the gun. Use protections for hands and face.

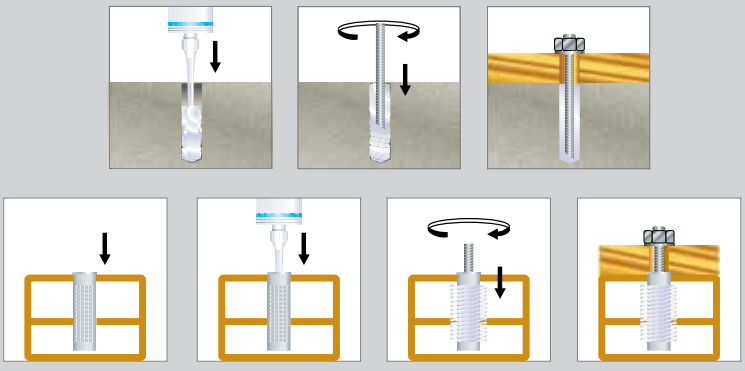
03

Before starting to use the cartridge, eject a small part of the product, being sure that:

- Through the mixer (transparent) you can see that the flow of product includes both the white colour and the black colour.
- The two components are completely mixed

The complete mixing is reached only after the resin extruded has reached a uniform colour.
Now the cartridge is ready to be used.

04



1) Inject resin into the hole to fill it 2/3rds (In hollow bricks use the plastic sleeve and inject the resin inside)
2) Use a threaded stud with 45° cut in the side to the hole. Before inserting the rod, verify that the element is dry and free from oil and other contaminants. Insert threaded stud turning back and forth to avoid the presence of air in the fitted hole.
3) For the installation and the following anchor load phase, respect the open time and curing time detailed in this technical data sheet.
4) Before loading the anchor, check the hardness of the product.
5) The cartridge can be used again by replacing the screw lid, and then and replacing the mixer when ready to use again. (Remember to eject a first part of the product, see step 3)

WARNING: Installation and load technical data can be modified by us. For up to date technical data sheets please visit **www.dymatecuk.com**

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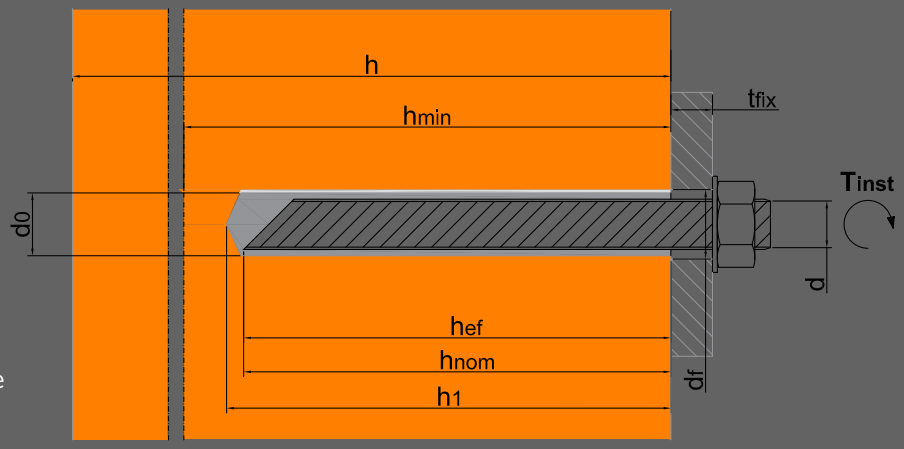
Installation Data

d(mm)	Rod diameter
h_{min}(mm)	Minimum thickness of base material
d_o(mm)	Hole diameter
h_1(mm)	Hole depth
h_{nom}(mm)	Embedment depth
h_{ef}(mm)	Effective anchorage depth
S_{cr}(mm)	Characteristic spacing
C_{cr}(mm)	Characteristic edge distance
S_{min}(mm)	Minimum allowable spacing
C_{min}(mm)	Minimum allowable edge distance
t_{fix}(mm)	Fixture thickness
d_f(mm)	Diameter of clearance hole in the fixture
S_w(mm)	Key
T_{inst}(Nm)	Installation torque



WARNING: We assume no liability for the incorrect installation of the product.

ETAG 001 Part 5 OPTION 7
ETA - 15/0708

Option 7

M8 to M16 Threaded Bar

MATERIAL	ROD DIAMETER	TYPE OF ROD	MINIMUM THICKNESS OF BASE MATERIAL			HOLE DIAMETER	HOLE DEPTH			EMBEDMENT DEPTH			ANCHORAGE DEPTH			CHARACTERISTIC SPACING			CHARACTERISTIC EDGE DISTANCE		
	d(mm)		h_{min}(mm)			d_o(mm)	h_1(mm)			h_{nom}(mm)			h_{ef}(mm)			S_{cr}(mm)			C_{cr}(mm)		
			min	med	max		min	med	max	min	med	max	min	med	max	min	med	max	min	med	max
M8-M16 Non cracked concrete	M8	⩾ 5.8 A4-70	100	110	190	10	65	85	165	60	80	160	60	80	160	180	211	211	90	105	105
	M10	⩾ 5.8 A4-70	100	120	230	12	75	95	205	70	90	200	70	90	200	210	263	263	105	132	132
	M12	⩾ 5.8 A4-70	110	140	270	14	85	115	245	80	110	240	80	110	240	240	291	291	120	145	145
	M16	⩾ 5.8 A4-70	136	161	356	18	105	130	325	100	125	320	100	125	320	300	360	360	150	180	180

MATERIAL	ROD DIAMETER	TYPE OF ROD	MINIMUM ALLOWABLE SPACING	MINIMUM ALLOWABLE EDGE DISTANCE	FIXTURE THICKNESS	DIAMETER OF CLEARANCE HOLE IN THE FIXTURE	KEY	INSTALLATION TORQUE
	d(mm)		S_{min}(mm)	C_{min}(mm)	t_{fix}(mm)	d_f(mm)	S_w(mm)	T_{inst}(Nm)
					min - max			
M8-M16 Non cracked concrete	M8	⩾ 5.8 A4-70	40	40	0 - 1500	9	13	10
	M10	⩾ 5.8 A4-70	40	40	0-1500	12	17	20
	M12	⩾ 5.8 A4-70	40	40	0-1500	14	19	40
	M16	⩾ 5.8 A4-70	50	50	01500	18	24	80

NOTE: To avoid splitting failure, the thickness of the concrete should be $h \geqslant h_{ef}$

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Installation Data

ETAG 001 Part 5 OPTION 7
ETA - 15/0708

Option 7

8mm to 16mm Rebar

MATERIAL	ROD DIAMETER	TYPE OF ROD	MINIMUM THICKNESS OF BASE MATERIAL			HOLE DIAMETER	HOLE DEPTH			EFFECTIVE ANCHORAGE DEPTH			CHARACTERISTIC SPACING			CHARACTERISTIC EDGE DISTANCE			MINIMUM ALLOWABLE SPACING	MINIMUM ALLOWABLE EDGE DIST.
	d(mm)		h_{min}(mm)			d_o(mm)	h_1(mm)			h_{ef}(mm)			S_{cr}(mm)			C_{cr}(mm)			S_{min}(mm)	C_{min}(mm)
			min	med	max		min	med	max	min	med	max	min	med	max	min	med	max		
M8-M16 Non cracked concrete	Ø 8	B450C BST500	100	110	190	12	65	85	165	60	80	160	180	202	202	90	101	101	40	40
	Ø 10	B450C BST500	100	120	230	14	75	95	205	70	90	200	210	242	242	105	121	121	40	40
	Ø 12	B450C BST500	112	142	272	16	85	115	245	80	110	240	240	277	277	120	139	139	40	40
	Ø 14	B450C BST500	116	161	316	18	85	130	285	80	125	280	240	323	323	120	162	162	40	40
	Ø 16	B450C BST500	140	180	360	20	105	145	325	100	125	320	300	351	351	150	175	175	50	50

MATERIAL	ROD DIAMETER	TYPE OF ROD	MINIMUM THICKNESS OF BASE MATERIAL	HOLE DIAMETER	HOLE DEPTH	EMBEDMENT DEPTH	EFFECTIVE ANCHORAGE DEPTH	CHARACTERISTIC SPACING	CHARACTERISTIC EDGE DISTANCE	MINIMUM ALLOWABLE SPACING	MINIMUM ALLOWABLE EDGE DISTANCE	MAX FIXTURE THICKNESS	DIAMETER OF CLEARANCE HOLE IN THE FIXTURE	KEY	INSTALLATION TORQUE
	d(mm)		h_{min} (mm)	d_o (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	S_{cr} (mm)	C_{cr} (mm)	S_{min} (mm)	C_{min} (mm)	t_{fix} (mm)	d_f (mm)	S_w (mm)	T_{inst} (Nm)
M8-M16 Solid Brick	M8	⩾ 4.6 A2-70 A4-70	200	10	85	80	80	160	200	100	100	10	9	13	7
	M10	⩾ 4.6 A2-70 A4-70	250	12	90	85	85	200	200	100	100	20	12	17	15
	M12	⩾ 4.6 A2-70 A4-70	300	14	100	95	95	240	200	100	100	30	14	19	25
	M16	⩾ 4.6 A2-70 A4-70	350	18	130	125	125	320	200	100	100	35	18	24	30

MATERIAL	ROD DIAMETER	TYPE OF ROD	PLASTIC SLEEVE	MINIMUM THICKNESS OF BASE MATERIAL	HOLE DIAMETER	HOLE DEPTH	EMBEDMENT DEPTH	EFFECTIVE ANCHORAGE DEPTH	CHARACTERISTIC SPACING	CHARACTERISTIC EDGE DISTANCE	MINIMUM ALLOWABLE SPACING	MINIMUM ALLOWABLE EDGE DISTANCE	MAX FIXTURE THICKNESS	DIAMETER OF CLEARANCE HOLE IN THE FIXTURE	KEY	INSTALLATION TORQUE
			(*)	h_{min} (mm)	d_o (mm)	h_1 (mm)	h_{nom} (mm)	h_{ef} (mm)	S_{cr} (mm)	C_{cr} (mm)	S_{min} (mm)	C_{min} (mm)	t_{fix} (mm)	d_f (mm)	S_w (mm)	T_{inst} (Nm)
M8-M16 Hollow Brick	M8	⩾ 4.6 A2-70 A4-70	GC 12x80	100	12	85	80	80	$l_{unit,max}$	0,5 x $l_{unit,max}$	100	100	10	9	13	3
	M10	⩾ 4.6 A2-70 A4-70	GC 15x85	100	16	90	85	85	$l_{unit,max}$	0,5 x $l_{unit,max}$	100	100	20	12	17	4
	M12	⩾ 4.6 A2-70 A4-70	GC 20x85	100	20	90	85	85	$l_{unit,max}$	0,5 x $l_{unit,max}$	120	120	30	14	19	6

NOTE: $l_{unit,max}$ = Max length of masonry unit

(*) Other sizes of plastic sleeves available. Refer to catalogue.

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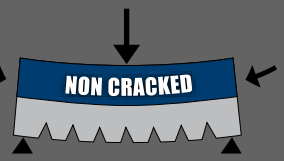
Load Data

Nrum(kN)	Average ultimate tension load
V_{Rum}(kN)	Average ultimate shear load
N_{RK}(kN)	Characteristic tension load
V_{RK}(kN)	Characteristic shear load
N_{rec}(kN)	Admissable tensile load
V_{rec}(kN)	Admissable shear load

Notes

- Loads for single anchor with no influence of spacing and edge distance and with $h \geqslant 2h_{ef}$
- Shear directed away from the edge
- General safety factor included
- Load increasing safety coefficient used is 1.4
- 1kN = 100 Kg

Option 7
+ 24°C
Threaded Rod



MIN
Load data with MINIMUM effective anchorage depth

MATERIAL	ROD	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
		d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete	⩾ 5.8	M 8	60	19,0	11,4	19,0	9,5	9,0	5,4
	⩾ 5.8	M 10	70	30,2	18,1	28,6	15,1	13,6	8,6
C20/25 ⩾ 5.8	⩾ 5.8	M 12	80	39,7	26,3	35,2	21,9	16,7	12,5
	⩾ 5.8	M 16	100	56,4	48,9	48,9	40,8	23,3	23,3

MED
Load data with MEDIUM effective anchorage depth

MATERIAL	ROD	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
		d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete	⩾ 5.8	M 8	80	19,0	11,4	19,0	9,5	9,0	5,4
	⩾ 5.8	M 10	90	30,2	18,1	30,2	15,1	14,3	8,6
C20/25 ⩾ 5.8	⩾ 5.8	M 12	110	43,8	26,3	43,8	21,9	20,8	12,5
	⩾ 5.8	M 16	125	70,5	48,9	61,2	40,8	29,2	23,3

MAX
Load data with MAXIMUM effective anchorage depth

MATERIAL	ROD	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
		d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete	⩾8.8	M 8	160	29,2	17,5	29,2	14,6	13,9	8,3
	⩾8.8	M 10	200	46,4	27,8	46,4	23,2	22,1	13,2
C20/25 8.8	⩾8.8	M 12	240	67,4	40,4	67,4	33,7	32,1	19,2
	⩾8.8	M 16	320	125,0	75,0	125,0	62,5	59,5	35,7

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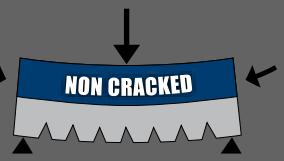
Load Data

Nrum(kN)	Average ultimate tension load
V_{Rum}(kN)	Average ultimate shear load
N_{RK}(kN)	Characteristic tension load
V_{RK}(kN)	Characteristic shear load
N_{rec}(kN)	Admissable tensile load
V_{rec}(kN)	Admissable shear load

Notes

- Loads for single anchor with no influence of spacing and edge distance and with $h \geqslant 2h_{ef}$
- Shear directed away from the edge
- General safety factor included
- Load increasing safety coefficient used is 1.4
- 1kN = 100 Kg

Option 7
+ 40°C
Threaded Rod



MIN
Load data with MINIMUM effective anchorage depth

MATERIAL	ROD	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
		d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete	⩾ 5.8	M 8	60	19,0	11,4	19,0	9,5	9,0	5,4
	⩾ 5.8	M 10	70	30,2	18,1	27,4	15,1	13,0	8,6
C20/25 ⩾ 5.8	⩾ 5.8	M 12	80	39,7	26,3	33,8	21,9	16,1	12,5
	⩾ 5.8	M 16	100	56,4	47,0	48,9	40,8	22,3	23,3

MED
Load data with MEDIUM effective anchorage depth

MATERIAL	ROD	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
		d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete	⩾ 5.8	M 8	80	19,0	11,4	19,0	9,5	9,0	5,4
	⩾ 5.8	M 10	90	30,2	18,1	30,2	15,1	14,3	8,6
C20/25 ⩾ 5.8	⩾ 5.8	M 12	110	43,8	26,3	43,8	21,9	20,8	12,5
	⩾ 5.8	M 16	125	70,5	48,9	58,7	40,8	27,9	23,3

MAX
Load data with MAXIMUM effective anchorage depth

MATERIAL	ROD	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
		d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete	⩾8.8	M 8	160	29,2	17,5	29,2	14,6	13,9	8,3
	⩾8.8	M 10	200	46,4	27,8	46,4	23,2	22,1	13,2
C20/25 8.8	⩾8.8	M 12	240	67,4	40,4	67,4	33,7	32,1	19,2
	⩾8.8	M 16	320	125,0	75,0	125,0	62,5	59,5	35,7

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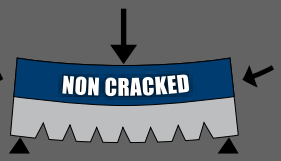
Nrum(kN)	Average ultimate tension load
V_{Rum}(kN)	Average ultimate shear load
N_{RK}(kN)	Characteristic tension load
V_{RK}(kN)	Characteristic shear load
N_{rec}(kN)	Admissable tensile load
V_{rec}(kN)	Admissable shear load

Notes

- Loads for single anchor with no influence of spacing and edge distance and with $h \geqslant 2h_{ef}$
- Shear directed away from the edge
- General safety factor included
- Load increasing safety coefficient used is 1.4
- 1kN = 100 Kg

Option 7
+ 24ºC
Rebar



MIN
Load data with MINIMUM effective anchorage depth

MATERIAL	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
	d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete C20/25 Rebar B450C BST500	Ø 8	60	21,6	16,2	19,2	13,5	7,6	7,7
	Ø 10	70	27,9	25,4	24,8	21,2	9,8	12,1
	Ø 12	80	37,6	36,6	31,5	30,5	12,5	17,4
	Ø 14	80	39,9	49,8	34,8	41,5	13,8	23,7
	Ø 16	100	53,6	65,1	45,7	54,2	18,1	31,0

MED
Load data with MEDIUM effective anchorage depth

MATERIAL	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
	d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete C20/25 Rebar B450C BST500	Ø 8	80	27,1	16,2	25,5	13,5	10,1	7,7
	Ø 10	90	35,9	25,4	31,9	21,2	12,6	12,1
	Ø 12	110	51,7	36,6	43,3	30,5	17,2	17,4
	Ø 14	125	62,4	49,8	54,4	41,5	21,6	23,7
	Ø 16	140	75,0	65,1	64,0	54,2	25,4	31,0

MAX
Load data with MAXIMUM effective anchorage depth

MATERIAL	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
	d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete C20/25 Rebar B450C BST500	Ø 8	160	27,1	16,2	27,1	13,5	13,4	7,7
	Ø 10	200	42,4	25,4	42,4	21,2	21,0	12,1
	Ø 12	240	61,0	36,6	61,0	30,5	30,2	17,4
	Ø 14	280	83,1	49,8	83,1	41,5	41,2	23,7
	Ø 16	320	108,5	65,1	108,5	54,2	53,8	31,0

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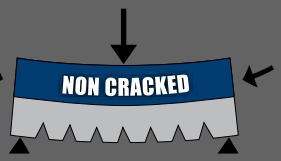
Load Data

Nrum(kN)	Average ultimate tension load
V_{Rum}(kN)	Average ultimate shear load
N_{RK}(kN)	Characteristic tension load
V_{RK}(kN)	Characteristic shear load
N_{rec}(kN)	Admissable tensile load
V_{rec}(kN)	Admissable shear load

Notes

- Loads for single anchor with no influence of spacing and edge distance and with $h \geqslant 2h_{ef}$
- Shear directed away from the edge
- General safety factor included
- Load increasing safety coefficient used is 1.4
- 1kN = 100 Kg

Option 7
+ 40ºC
Rebar



MIN
Load data with MINIMUM effective anchorage depth

MATERIAL	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
	d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete Rebar B450C BST500	Ø 8	60	21,6	16,2	18,4	13,5	7,3	7,7
	Ø 10	70	27,9	25,4	23,8	21,2	9,4	12,1
	Ø 12	80	37,6	36,6	30,2	30,5	12,0	17,4
	Ø 14	80	39,9	49,8	33,4	41,5	13,2	23,7
	Ø 16	100	53,6	65,1	43,8	54,2	17,4	31,0

MED
Load data with MEDIUM effective anchorage depth

MATERIAL	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
	d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete Rebar B450C BST500	Ø 8	80	27,1	16,2	24,5	13,5	9,7	7,7
	Ø 10	90	35,9	25,4	30,6	21,2	12,1	12,1
	Ø 12	110	51,7	36,6	41,5	30,5	16,5	17,4
	Ø 14	125	62,4	49,8	52,2	41,5	20,7	23,7
	Ø 16	140	75,0	65,1	61,4	54,2	24,3	31,0

MAX
Load data with MAXIMUM effective anchorage depth

MATERIAL	ROD DIAMETER	EFFECTIVE ANCHORAGE DEPTH	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	CHARACTERISTIC TENSILE LOAD	CHARACTERISTIC SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
	d(mm)	$h_{ef\ MIN}$(mm)	N_{Rum}(kN)	V_{Rum}(kN)	N_{RK}(kN)	Vrk (kN)	N_{rec} (kN)	V_{rec} (kN)
C20/25 Non cracked Concrete Rebar B450C BST500	Ø 8	160	27,1	16,2	27,1	13,5	13,4	7,7
	Ø 10	200	42,4	25,4	42,4	21,2	21,0	12,1
	Ø 12	240	61,0	36,6	61,0	30,5	30,2	17,4
	Ø 14	280	83,1	49,8	83,1	41,5	41,2	23,7
	Ø 16	320	108,5	65,1	108,5	54,2	53,8	31,0

DYMAFIX
CHEMICAL RESIN TECHNOLOGY

DF-150
EPOXY ACRYLATE RESIN STYRENE FREE

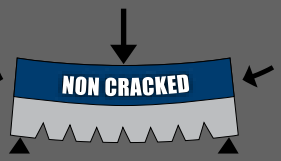
Load Data

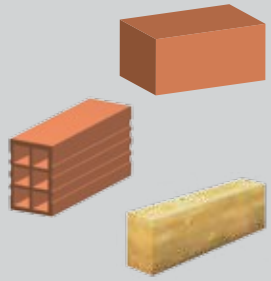
d(mm)	Rod diameter
Nrum(kN)	Average ultimate tension load
V_{Rum}(kN)	Average ultimate shear load
N_{rec}(kN)	Admissable tensile load
V_{rec}(kN)	Admissable shear load

Notes

- Loads for single anchor with no influence of spacing and edge distance and with $h \geqslant 2h_{ef}$
- Shear directed away from the edge
- General safety factor included
- Load increasing safety coefficient used is 1.4
- 1kN = 100 Kg

Option 7
+ 40ºC
Masonry & Wood



MATERIAL	TYPE OF ROD	ROD DIAMETER	ULTIMATE TENSION LOAD	ULTIMATE SHEAR LOAD	ADMISSIBLE TENSILE LOAD	ADMISSIBLE SHEAR LOAD
		d(mm)	Nrum (kN)	Vrum (kN)	N_{rec} (kN)	V_{rec} (kN)
Solid Brick ≥ 4.6 / A2-70 / A4-70	⩾ 4.6 A2-70 A4 -70	M8	 Recommended loads for applications on base materials with medium strength characteristics. For different masonry and/or wood base materials, load values must be obtained with in situation tests.		2,0	3,0
	⩾ 4.6 A2-70 A4 -70	M10			2,6	3,4
	⩾ 4.6 A2-70 A4 -70	M12			2,8	3,9
	⩾ 4.6 A2-70 A4 -70	M16			4,0	4,2
Hollow Material ≥ 4.6 / A2-70 / A4-70	⩾ 4.6 A2-70 A4 -70	M8			0,9	2,0
	⩾ 4.6 A2-70 A4 -70	M10			0,9	2,0
	⩾ 4.6 A2-70 A4 -70	M12			0,9	2,5
Laminated Timber ≥ 4.6 / A2-70 / A4-70	⩾ 4.6 A2-70 A4 -70	M8			3,2	For shear loads refer to: CNR-DT 206/2007 (7.10.2.3)
	⩾ 4.6 A2-70 A4 -70	M10			4,2	
	⩾ 4.6 A2-70 A4 -70	M12			6,1	
	⩾ 4.6 A2-70 A4 -70	M16			10,7	

WARNING: Installation and load technical data can be modified by us. For up to date technical data sheets please visit **www.dymatecuk.com**

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