

# MASONMATE® Technical Data Sheet

## Through Bolt

### Through Bolt

Zinc & Clear CR3+

Tfix = Fixing thickness  
do = Drill hole diameter  
h1 = Drill hole depth  
hmin = Concrete thickness  
hnom = Minimum embedment depth  
df = Hole diameter on the fixing element  
Tinst = Installation torque

#### Suitable Applications:

- Concrete
- Solid stone

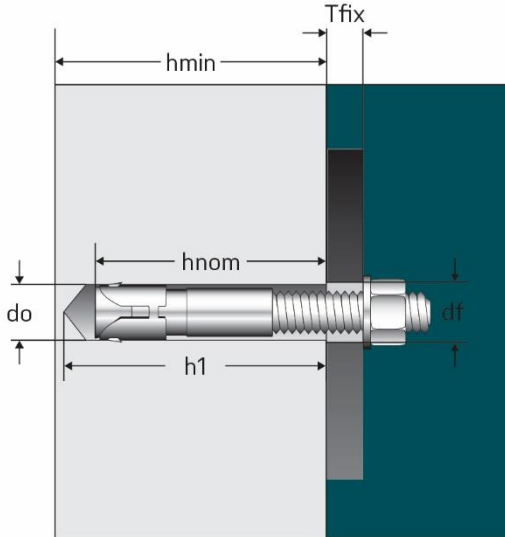
Size ØxL	Tfix (mm)	do (mm)	h1 (mm)	hnom (mm)	df (mm)	hmin (mm)	Tinst (Nm)	Wrench size	Zinc & Clear CR3+ Code
6x45	3	6	40	35	7	70	8	10	0841M490045
6x55	10		45	40					0841M490055
6x70	35		50	45					0841M490070
6x85	40								0841M490085
6x95	45								0841M490095
8X50	2	8	55	43	9	80	15	13	0841M540050
8x65	10		60	50					0841M540065
8x80	25								0841M540080
8x100	45								0841M540100
8x120	65								0841M540120
10x65	2	10	60	50	12	100	29	17	0841M560065
10x75	10		70	60					0841M560075
10x90	20								0841M560090
10x95	25								0841M560095
10x120	50								0841M560120
10x130	60								0841M560130
12x80	5	12	80	65	14	120	49	19	0841M580080
12x100	10		90	75					0841M580100
12x120	30								0841M580120
12x140	50								0841M580140
12x150	60								0841M580150
12x180	90								0841M580180
16x90	2	16	95	80	18	160	98	24	0841M620090
16x105	5		100	85					0841M620105
16x125	10		115	100					0841M620125
16x140	25								0841M620140
16x150	35								0841M620150
16x180	65								0841M620180
16x220	105								0841M620220
20x125	5	20	120	100	22	200	196	30	0841M640125
20x160	25		140	120					0841M640160
20x200	65								0841M640200
20x220	85								0841M640220
20x300	165								0841M640300
24x180	20	24	160	140	26	240	294	36	0841M660180
24x260	100								0841M660260

# MASONMATE® Technical Data Sheet

## Through bolt

### Through bolt - Performance data (C20/25 uncracked concrete)

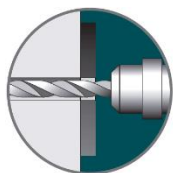
Zinc & Clear CR3+



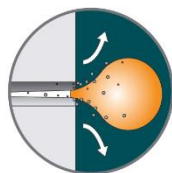
hef	=	anchorage depth
Ccr,N	=	Critical edge distance
Scr,N	=	Critical spacing
Nrec	=	Recommended Tensile Load
Vrec	=	Recommended Shear Load
L	=	anchor length
D	=	anchor diameter

Anchor size	M6	M8	M10	M12	M16	M20	M24
hef (mm)	35	40	50	60	80	100	120
Ccr,N (mm)	53	60	75	90	120	150	180
Scr,N (mm)	105	120	150	180	240	300	360
Nrec (kN)	2.08	2.8	3.7	5.6	8.3	13.2	17.6
Vrec (kN)	2.1	3.9	5.4	8.4	14.3	21	30.1

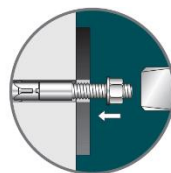
### Installation:



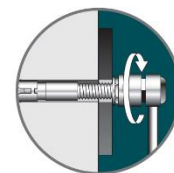
Drill your hole to the correct diameter...



...clear any debris...



...insert Through Bolt through fixture into hole...



...tighten to recommended tightening torque.

The recommended loads derive from the mean ultimate loads and are inclusive of the safety factor  $\gamma=4$

Due to the variable nature of the substrates this data is provided for guidance only and performance is subject to the correct installation of the product.

The information provided is based on the principles, formulae and safety factors set out in the installation instructions and data sheets that are believed to be correct at the time of writing.

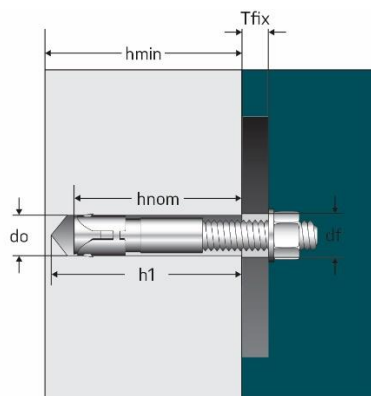
The data and values are based on the respective average values obtained from tests under laboratory or other controlled conditions. It is the user's responsibility to use the data given in the light of conditions on site and taking into account the intended use of the products concerned. The user should check that the listed prerequisites and criteria conform with the conditions actually existing on the site. Whilst we can give general guidance and advice, the nature of the products means that the ultimate responsibility for selecting the right product for a particular application must lie with the customer.

# MASONMATE® Technical Data Sheet

## Through Bolt

### Through bolt

Dry Galvanised



$T_{fix}$  = Fixing thickness  
 $do$  = Drill hole diameter  
 $h_1$  = Drill hole depth  
 $h_{min}$  = Concrete thickness  
 $h_{nom}$  = Minimum embedment depth  
 $df$  = Hole diameter on the fixing element  
 $T_{inst}$  = Installation torque

#### Suitable Applications:

- Concrete
- Solid stone

Size ØxL	Tfix (mm)	do (mm)	h1 (mm)	hnom (mm)	df (mm)	hmin (mm)	Tinst (Nm)	Wrench size	Dry Galvanised code
8x50	2	8	55	43	9	80	15	13	0841M540050G
8x75	20		60	50					0841M540075G
8x95	40								0841M540095G
8x120	65		0841M540120G						
10x60	2	10	50	60	12	100	30	17	0841M560060G
10x85	15		70	60					0841M560085G
10x105	35								0841M560105G
10x125	55		0841M560125G						
12x85	5	12	90	75	14	120	50	19	0841M580085G
12x100	10								0841M580100G
12x115	25								0841M580115G
12x145	55								0841M580145G
12x180	90								0841M580180G
16x110	5	16	100	85	18	160	100	24	0841M620110G
16x125	10		115	100					0841M620125G
16x150	35								0841M620150G
16x200	85		0841M620200G						
20x170	30	20	140	120	22	200	200	30	0841M640170G
20x220	85								0841M640220G
20x280	145								0841M640280G

# MASONMATE® Technical Data Sheet

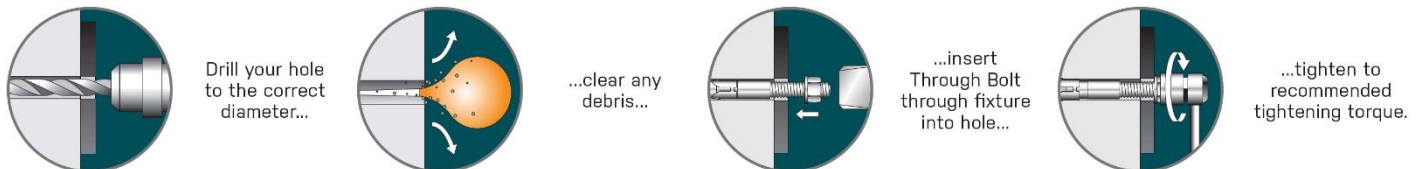
## Through Bolt

### Through bolt- Performance data (C20/25 uncracked concrete)

Dry Galvanised

do	=	hole diameter
hmin	=	minimum hole depth
df	=	hole diameter of fixing element
Tinst	=	installation torque
L	=	anchor length
D	=	anchor diameter

Size		M8	M10	M12	M16	M20
Anchorage depth	hef (mm)	40	50	60	80	100
Edge Distance	Ccr,N (mm)	60	75	90	120	150
Spacing	Scr,N (mm)	120	150	180	240	300
Recommended Tensile Load	Nrec (kN)	2.8	3.7	5.6	8.3	13.2
Recommended Shear Load	Vrec (kN)	3.9	5.4	8.4	14.3	20.9



The recommended loads derive from the mean ultimate loads and are inclusive of the safety factor  $\gamma=4$

Due to the variable nature of the substrates this data is provided for guidance only and performance is subject to the correct installation of the product.

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