

# HEAVY DUTY EPOXY INJECTION SYSTEM



Note: Discard the first three full trigger pulls of the chemical before step No. 4. For detailed installation instructions, please get in touch with a Hobson Engineering representative.

The MKT VME is an epoxy based chemical anchor that has been tested and approved internationally for heavy duty chemical anchoring applications with threaded rods internally threaded rods and rebars.

- ✓ Suitable for heavy loads
- ✓ Suitable for diamond cored holes
- ✓ Suitable for cracked concrete
- ✓ Suitable for wet or water filled holes
- ✓ Suitable for deep embeddings (rebar applications)
- ✓ Fire rated

The MKT VME approvals attest to its reliability and performance.



Compatible with the new Australian Standard for Anchor Design (SA TS 101)



European Technical Approval (ETA-09/0350)



American ICC-ES Evaluation Report (ESR-2845)



Fire Rated load bearing performance data.



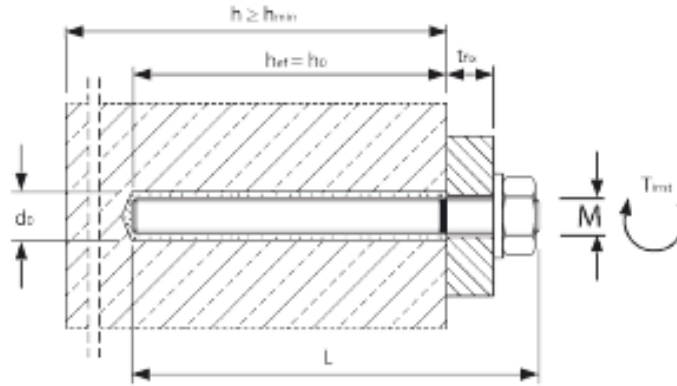
*For further technical information please contact Southeast Fasteners direct*

*Other accessories that will make your chemical anchoring so much easier*



Southeast Fastener	ABN 30117890114	
Larapinta Branch:	71 Axis Place, LARAPINTA QLD 4110	TEL: 07 3273 4400   FAX: 07 3272 4999
Eagle Farm Branch:	109A Links Avenue South, EAGLE FARM QLD 4009	TEL: 07 3268 77 88   FAX: 07 3268 5689

# HEAVY DUTY EPOXY INJECTION SYSTEM



\*  $c_o$  and  $h_o$  are used in the calculation of the basic shear strength of concrete edge.  $h_o$  alone is used in the calculation of concrete relevant tensile strengths, thus, assuming that the anchor is free from the influence of any edge.

† The design tensile strength is comparatively calculated from steel strength, concrete cone strength and pullout strength.  $h_o$  is the embedment depth, while the strength reduction factors of  $\phi = 0.60$  for concrete and  $\phi = 0.80$  for zinc plated threaded rods are used.

‡ The design shear strength is comparatively calculated from steel strength and concrete edge strength.  $c_o$  is the edge distance used while the strength reduction factors of  $\phi = 0.60$  for concrete,  $\phi = 0.80$  for zinc plated steel are used.

§ For Working Load Limit (WLL) the factor of safety are FOS = 2.5 for steel and FOS = 3.0 for concrete.



For further technical information please contact Southeast Fasteners direct

		Setting Details							
	Threaded rod size	M8	M10	M12	M16	M20	M24	M27	M30
Nominal hole diameter	$d_o$ (mm)	10	12	14	18	24	28	32	35
Minimum embedment depth	$h_{et(oth)}$ (mm)	60	60	70	80	90	96	108	120
Max. diameter of hole on fixture	$d_f$ (mm)	9	12	14	18	22	26	30	33
Maximum tightening torque	$T_{tor}$ (N-m)	10	20	40	80	120	160	180	200
Socket wrench size (across flats)	AF (mm)	13	17	19	24	30	36	41	46
Minimum thickness of concrete	$h_{min}$ (mm)	$h_{et} + 30\text{mm} \geq 100\text{mm}$				$h_{et} + 2d_o$			
Minimum anchor spacing	$S_{min}$ (mm)	40	50	60	80	100	120	135	150
Minimum edge distance	$c_{min}$ (mm)	40	50	60	80	100	120	135	150

Southeast Fastener	ABN 30117890114	
Larapinta Branch:	71 Axis Place, LARAPINTA QLD 4110	TEL: 07 3273 4400   FAX: 07 3272 4999
Eagle Farm Branch:	109A Links Avenue South, EAGLE FARM QLD 4009	TEL: 07 3268 77 88   FAX: 07 3268 5689

# HEAVY DUTY EPOXY INJECTION SYSTEM



For further technical information please contact Southeast Fasteners direct

		Working time									
Concrete Temperature		≥ 5°C	≥ +10°C	≥ +20°C	≥ +30°C	≥ +40°C					
Maximum working Time		60 min	45 min	30 min	20 min	12 min	*The curing times must be doubled when the chemical is used in wet concrete.				
Minimum curing time in dry concrete <sup>a</sup>		72 hours	36 hours	10 hours	6 hours	4 hours					
Basic Load Bearing Performance in 32 MPa Non-Cracked Concrete											
Threaded rod size		M8	M10	M12	M16	M20	M24	M27	M30		
Basic edge distance <sup>a</sup>		$c_e$ (mm)	50	70	100	100	150	150	200	200	
Basic embedment <sup>a</sup>		$h_e$ (mm)	80	90	110	125	170	210	240	270	
Limit State Design	Tensile Strength <sup>b</sup>	$\phi N$ (kN)	Class 5.8	14.4	23.2	33.6	53.5	84.9	116.6	142.5	170.0
			A4 Stainless	13.8	21.7	31.3	53.5	84.9	116.6	-	-
	Shear Strength <sup>b</sup>	$\phi V$ (kN)	Class 5.8	5.6	9.4	16.0	17.3	32.4	35.3	52.2	56.0
			A4 Stainless	5.6	9.4	16.0	17.3	32.4	35.3	-	-
Working Load Limit (WLL)	WLL <sup>b</sup> for Tension	$N_{wll}$ (kN)	Class 5.8	7.2	11.6	16.8	29.7	47.2	64.8	79.2	94.4
			A4 Stainless	10.4	14.8	21.8	29.7	47.2	64.8	-	-
	WLL <sup>b</sup> for Shear	$V_{wll}$ (kN)	Class 5.8	3.1	5.2	8.4	9.6	18.0	19.6	29.0	31.1
			A4 Stainless	3.1	5.2	8.9	9.6	18.0	19.6	-	-

Southeast Fastener	ABN 30117890114	
Larapinta Branch:	71 Axis Place, LARAPINTA QLD 4110	TEL: 07 3273 4400   FAX: 07 3272 4999
Eagle Farm Branch:	109A Links Avenue South, EAGLE FARM QLD 4009	TEL: 07 3268 77 88   FAX: 07 3268 5689