

Throughbolt AWA

Standard Embedment

Performance Data (20/25 Non-Cracked Concrete)

Thread Diam	Minimum Structure Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance		Design Spacing	Design Edge Distance		Tight. Torque
mm	mm	kN		kN		kN		mm	mm		Nm
		Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
6	100	7.7	5.1	5.5	4.0	3.9	2.8	50	50	50	7
8	100	12.0	9.3	7.9	7.4	5.6	5.3	65	65	75	20
10	110	16.0	14.7	8.8	11.7	6.3	8.3	120	80	115	35
12	130	25.0	20.6	13.8	16.4	9.8	11.7	230	120	145	60
16	168	35.0	38.4	19.4	30.7	13.8	21.9	270	150	240	120
20	206	50.0	56.3	27.7	45.0	19.8	32.1	370	195	310	240
24 ⁽¹⁾	265	68.5	70.6	38.0	42.3	27.1	30.1	400	200	390	280

Shear Loads towards a free edge are for single anchors where Spacing $\geq 3 \times$ Edge Distance

(1) M24 anchors are not included in ETA

Reduced Embedment

Performance Data (20/25 Non-Cracked Concrete)

Thread Diam	Minimum Structure Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance		Design Spacing	Design Edge Distance		Tight. Torque
mm	mm	kN		kN		kN		mm	mm		Nm
		Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
8 ⁽²⁾	100	9.0	10.4	5.9	6.9	4.2	4.9	75	65	75	20
10	100	13.7	13.7	7.6	9.1	5.4	6.5	125	85	95	35
12	110	17.8	20.6	9.9	16.4	7.0	7.0	150	95	165	60
16	130	21.6	38.4	11.9	30.7	8.5	21.9	170	110	290	120
20	135	26.4	52.9	14.6	35.2	10.5	25.1	195	135	320	240
24 ⁽¹⁾	175	40.9	58.5	22.7	39.0	16.2	27.8	260	130	360	280

Shear Loads towards a free edge are for single anchors where Spacing $\geq 3 \times$ Edge Distance

(2) use restricted to anchorages of indeterminate structural components

(1) M24 anchors are not included in ETA