



PERFORMANCE VALUES (CONCRETE C30/35)

Excalibur Screwsbolts		M8		M10		M12		M16		M20	
Embedment Depth (mm)		30	40	50	75	60	90	120		170	
Ultimate Load kN	Tension	8	14.6	18.8	33.4	26.5	43	90		102	
Safe Working Load kN 3:1		2.66	4.87	6.27	11.13	8.83	14.33	30		34	
Ultimate Load kN	Shear	10	14	28	46	59.8	59.8	89.5		139	
Safe Working Load kN 3:1		3.33	5.78	9.33	15.33	19.93	19.93	29.83		46.3	
Minimum Edge Distance (mm)	Tension	40		50		60		80		100	
	Shear	80		100		120		140		160	
Minimum Spacing (mm)	Tension	80		120		150		180		210	

Minimum Edge Distance equals 5 x Anchor Diameter i.e M8 = 40mm
 For Distances between 5 x Anchor Diameter and 10 x Anchor Diameter
 Apply Reduction Factors as follows

EDGE REDUCTION DATA (CONCRETE C30/35)

Excalibur	Edge (mm)	20	30	40	50	60	70	80	90	100	110	120	130	140	160	180	200
M8	Tension			0.56	0.59	0.65	0.70	1.00									
M10					0.58	0.66	0.75	0.83	0.92	1.00							
M12						0.60	0.66	0.73	0.79	0.86	0.93	1.00					
M16								0.70	0.74	0.78	0.83	0.87	0.92	0.96	1.00		
M20										0.75	0.78	0.82	0.85	0.89	0.92	0.96	1.00
M8	Shear			0.32	0.49	0.66	0.83	1.00									
M10					0.32	0.46	0.60	0.74	0.87	1.00							
M12						0.33	0.39	0.51	0.63	0.76	0.88	1.00					
M16								0.32	0.42	0.52	0.61	0.71	0.80	0.90	1.00		
M20										0.32	0.42	0.52	0.61	0.71	0.80	0.90	1.00

Minimum Hole Spacing equals 5 x Anchor Diameter i.e M8 = 40mm
 For Distances between 5 x Anchor Diameter and 10 x Anchor Diameter
 Apply Reduction Factors as follows

SPACE REDUCTION DATA (CONCRETE C30/35)

Excalibur	space (mm)	20	30	40	50	60	70	80	90	100	120	140	170	200	220
M8	Tension			0.57	0.67	0.70	0.78	0.86	0.95	1.00					
M10					0.82	0.84	0.87	0.89	0.92	0.95	1.00				
M12						0.70	0.75	0.80	0.85	0.90	0.95	1.00			
M16								0.75	0.79	0.83	0.87	0.92	0.96	1.00	
M20										0.70	0.76	0.82	0.88	0.94	1.00

The published performance values are compiled from independent tests in accordance with the methods described in the European Organisation of Technical Approval (EOTA) Guideline (ETAG), ETAG No.001 1997