

Shallow Embedment - Countersunk

Performance Data (C20/25 non-cracked Concrete)

Drill Diam	Embedment Depth	Minimum Concrete Thickness	Characteristic Resistance		Design Resistance		Approved Resistance		Spacing	Edge Distance	
			Tensile	Shear	Tensile	Shear	Tensile	Shear		Tensile	Shear*
mm	mm	mm	kN		kN		kN		mm	mm	
6	30	100	3.9	3.8	2.1	2.5	1.5	1.8	55	40	50

Deep Embedment - Countersunk

Performance Data (C20/25 non-cracked Concrete)

Drill Diam	Embedment Depth	Minimum Concrete Thickness	Characteristic Resistance		Design Resistance		Approved Resistance		Spacing	Edge Distance	
			Tensile	Shear	Tensile	Shear	Tensile	Shear		Tensile	Shear*
mm	mm	mm	kN		kN		kN		mm	mm	
6	70	110	3.5	6.1	2.7	4.8	1.9	3.4	45	45	55

Performance Data (C20/25 Cracked Concrete)

Drill Diam	Embedment Depth	Minimum Concrete Thickness	Characteristic Resistance		Design Resistance		Approved Resistance		Spacing	Edge Distance	
			Tensile	Shear	Tensile	Shear	Tensile	Shear		Tensile	Shear*
mm	mm	mm	kN		kN		kN		mm	mm	
6	70	110	3.5	6.1	2.7	4.8	1.9	3.4	45	45	55

* Shear towards a free edge

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

(6mm anchor loads are for multiple use applications)

For variations in structure thickness, reduced spacing and edge calculations download the free **Anchor Calculation Program** from www.jcpfixings.co.uk

Influence of concrete strength

Concrete strength		8, 10 & 12mm		
		C30/37	C40/50	C50/60
Cylinder	N/mm ²	30	40	50
Cube	N/mm ²	37	50	60
Factor		1.22	1.41	1.55