



### Product Information

The Sleeve Anchor is an all steel, thin walled, through fixing for general purpose applications. Suitable for fixing into Concrete, Solid Brick, Dense Blockwork and some Natural Stone. Finish available: Zinc Plated and Yellow Passivated min 5µm Countersunk in Stainless Steel Grade A2.

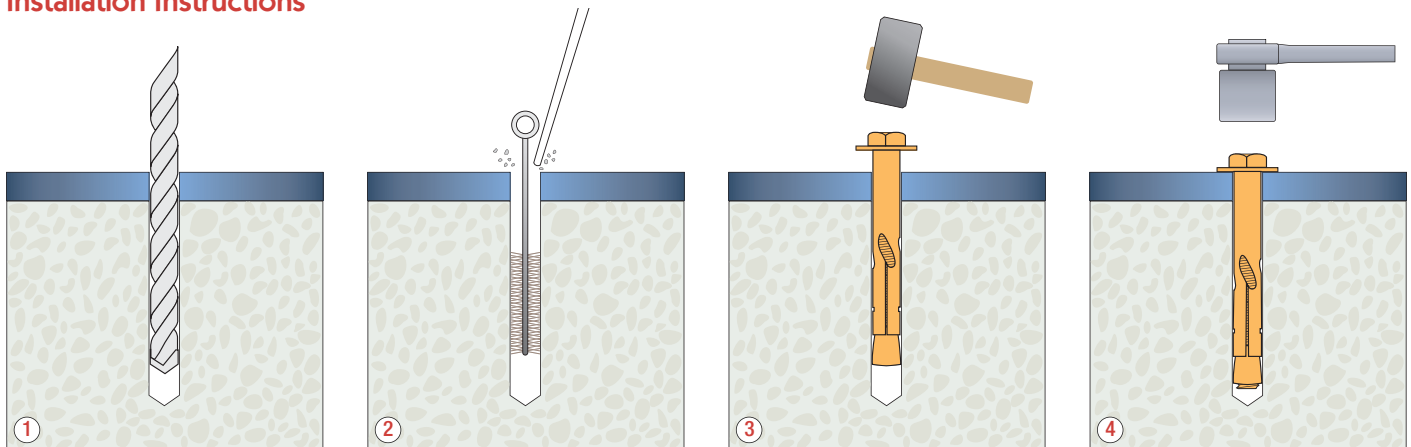
### Features

- 1 All Steel Anchor
- 2 Through fixing
- 3 Optimum collapse feature to ensure maximum clamping force
- 4 Hex Bolt and Countersunk Head for flush finish

### Range Data

Part Number		Thread Diameter mm	Drill Hole Diameter mm	Anchor Length mm	Maximum Fixture Thickness mm	Embedment Depth mm	Maximum Hole Depth mm	Fixture Clearance Hole mm	Minimum Structure Thickness mm	Tightening Torque Nm
Hex Bolt	Countersunk									
SLB08045		6	8	45	8	35	45	9	60	20
	SLC08060			60	25					
SLB08070				70	30					
	SLC08085			85	50					
SLB08090				90	50					
SLB10045		8	10	45	6	35	40	11	70	40
SLB10055				55	14	40	45			
	SLC10075			75	35	45	50			
SLB10080				80	35					
SLB10100	SLC10100			100	57					
SLB12065		10	12	65	12	50	65	13	90	65
SLB12080				80	22					
SLB12100				100	40					
SLB16075		12	16	75	15	60	70	17	100	90
SLB16110				110	50					
	SLC08045SS	6	8	45	5	40	50	9	60	20
	SLC08060SS			60	20					
	SLC10060SS	8	10	60	5	55	60	11	70	40
	SLS10080SS			80	25					
	SLC12070SS	10	12	70	5	65	75	13	80	60
	SLC12100SS			100	35					

### Installation Instructions



1 Position fixture and drill correct diameter hole to correct depth

2 Clean out hole by brushing and blowing to remove drilling debris and dust

3 Insert Sleeve Anchor through fixture into drilled hole

4 Tighten Anchor to Recommended Torque

Performance Data (20/25 Concrete)									
Anchor Diameter mm	Characteristic Resistance kN		Design Resistance kN		Recommended Load kN		Spacing mm	Edge Distance mm	
	Tensile	Shear	Tensile	Shear	Tensile	Shear		Tensile & Shear	Tensile
8	6.6	4.5	3.1	2.5	2.2	1.8	90	45	80
10	10.2	8.3	4.9	4.6	3.4	3.3	100	50	100
12	12.6	13.3	6.0	7.4	4.2	5.3	130	65	120
16	15.0	19.3	7.1	10.7	5.0	7.7	140	70	160
20	17.7	36.0	8.4	20.0	5.9	14.3	150	75	200

Shear Loads towards a free edge are for single anchors where Spacing ≥ 3 x Edge Distance

**Reduced Design Resistance (kN) • Divide Loads by 1.4 for Recommended Loads**

Edge mm	Tensile Resistance					Shear Resistance				
	M8	M10	M12	M16	M20	M8	M10	M12	M16	M20
40	2.9									
45	3.1	4.6								
50		4.9	5.0			1.6				
60			5.7	6.4		1.9				
65			6.0	6.7	7.6	2.0				
70				7.1	8.0	2.2	3.2			
75					8.4	2.3	3.5			
80						2.5	3.7	4.9		
90							4.1	5.6		
100							4.6	6.2	6.7	
120								7.4	8.0	
140									9.4	14.0
160									10.7	16.0
180										18.0
200										20.0

Spacing mm	Tensile Resistance per Pair of Anchors				
	M8	M10	M12	M16	M20
65	5.3				
70	5.5				
75	5.7				
80	5.9	8.8			
85	6.0	9.1			
90	6.2	9.3	10.2		
95		9.6	10.4		
100		9.8	10.6	12.2	
110			11.1	12.7	14.6
120			11.5	13.2	15.1
130			12.0	13.7	15.7
140				14.2	16.2
150					16.8

**Influence of Concrete Strength**

Concrete Strength		C20/25	C25/30	C30/37	C40/50	C45/55	C50/60
Cylinder	N/mm <sup>2</sup>	Increased concrete strength factors cannot be used with this anchor					
Cube	N/mm <sup>2</sup>						
Factor							

When using concrete factors check all other information to ensure Steel Strength and Pull out Resistance is not exceeded

**Steel Design Resistance for single anchor**

		M8	M10	M12	M16	M20
Tension	kN	Not Applicable				
Shear	kN					

**Anchor Mechanical Properties**

		M8	M10	M12	M16	M20
Tensile Strength	N/mm <sup>2</sup>	400	400	400	400	400
Yield Strength	N/mm <sup>2</sup>	240	240	240	240	240
Nut A/F	mm	10.0	13.0	17.0	19.0	24.0
Washer Diameter	mm	12.0	17.0	21.0	24.0	30.0

Loads for solid Brickwork (20.5N/mm <sup>2</sup> )	
Anchor Diameter	Recommended Load kN
M8	1.1
M10	1.5
M12	2.2
M16	2.5

Loads for Concrete Blocks (7N/mm <sup>2</sup> )	
Anchor Diameter	Recommended Load kN
M8	0.8
M10	1.0
M12	1.4
M16	1.9

Loads are for any direction  
 Maintain Spacing as per Concrete Loads but only 1 fixing per brick is recommended  
 Do not fix closer than 1 brick away from a free edge  
 Due to the variable nature of Brickwork and Blockwork these figures are for guidance only  
 For critical applications a site test is recommended