

# IKA DROP-IN WEDGE ANCHOR FOR CONCRETE & STONE



## Product Information



### DESCRIPTION

Provides permanently fixed threaded sockets in concrete. Allows bolts or studs to be installed and removed without damaging the anchor.

Available in: zinc plated steel and stainless steel grade A2 and A4 (1.4401).

Install with manual setting tool or mechanical setting tool for use with hammer action drilling machines.

### SUITABLE FOR USE IN:

Concrete  
Stone.

### FEATURES

1. Internally threaded to take stud or bolt.
2. Easy to install by hammer action.
3. Slotted sleeve and captive internal tapered wedge to facilitate easy setting and expansion.

## DROP-IN WEDGE ANCHOR - ZINC PLATED

THREAD SIZE	ANCHOR LENGTH (mm)	THREAD LENGTH (mm)	HOLE DIAMETER (mm)	HOLE DEPTH (mm)	MAXIMUM RECOMMENDED TORQUE (Nm)
M6	25	11	8	27	4.5
M8	30	13	10	32	11
M10	40	15	12	42	22
M12	50	20	16	52	38
M16	65	25	20	67	95
M20	80	35	25	82	185

## DROP-IN WEDGE ANCHOR - STAINLESS STEEL (A2)304 AND (A4)316

THREAD SIZE	ANCHOR LENGTH (mm)	THREAD LENGTH (mm)	HOLE DIAMETER (mm)	HOLE DEPTH (mm)	MAXIMUM RECOMMENDED TORQUE (Nm)
M6	25	11	8	27	4.5
M8	30	13	10	32	11
M10	40	15	12	42	22
M12	50	20	16	52	38
M16	65	25	20	67	95

## Manual Setting Tool



THREAD SIZE (d)
M6
M8
M10
M12
M16
M20

## Specification Data

### DROP-IN WEDGE ANCHOR Performance Data

SIZE	CONCRETE, $f_{ck,cube} = 30\text{N/mm}^2$ (C20/25)				
	RECOMMENDED LOAD (Unfactored) (kN)		CHARACTERISTIC EDGE DISTANCE (mm) *		CHARACTERISTIC SPACING (mm)
	TENSION ( $N_{rec}$ )	SHEAR ( $V_{rec}$ )	TENSION ( $C_{cr,N}$ )	SHEAR ( $C_{cr,V}$ )	TENSION & SHEAR ( $S_{cr,N}$ ) ( $S_{cr,V}$ )
M6	1.8	1.3	80	80	90
M8	3.2	2.4	90	90	110
M10	5.5	4.1	120	120	140
M12	7.8	5.8	160	160	170
M16	12.2	9.1	220	220	250
M20	16.7	14.4	250	250	300

For further explanations on calculations please see pages 4 and 5

#### Reduction Factors - Edge and Spacing Distances for Wedge Anchor

The full characteristic edge and spacing distances shown in the table above are the minimum allowable for the quoted DESIGN RESISTANCE or RECOMMENDED LOAD, depending on your design method.

Where these dimensions are not achievable,

the appropriate reduction factor/s from the tables below must be applied to the DESIGN RESISTANCE or RECOMMENDED LOAD.

Choose the required bolt diameter across the top of the appropriate table and read down the left hand column until actual edge or spacing distance is found.

Read off the reduction factor where the two

lines intersect (interpolate as required). Multiply this factor by the DESIGN RESISTANCE or RECOMMENDED LOAD quoted in the table.

On the occasion that multiple close edge and/or spacing distances occur, the appropriate reduction factors must be applied.

#### Minimum Edge Distance (Concrete Only)

EDGE (mm)	TENSILE: EDGE REDUCTION FACTORS						EDGE (mm)	SHEAR: EDGE REDUCTION FACTORS					
	M6	M8	M10	M12	M16	M20		M6	M8	M10	M12	M16	M20
70							70						
80	1.00						80	1.00					
90		1.00					90		1.00				
100							100						
120			1.00				120			1.00			
140							140						
160				1.00			160				1.00		
190							190						
220					1.00		220					1.00	
250						1.00	250						1.00

\* It is recommended that Wedge anchors are not installed below the "characteristic" edge distances quoted in the table above.

#### Spacing (Concrete Only)

SPACING (mm)	TENSILE & SHEAR REDUCTION FACTORS					
	M6	M8	M10	M12	M16	M20
50	0.80					
60	0.85	0.80				
70	0.90	0.84	0.80			
90	1.00	0.92	0.86	0.80		
110		1.00	0.91	0.85	0.80	
140			1.00	0.93	0.84	0.80
170				1.00	0.88	0.84
210					0.94	0.89
250					1.00	0.94
300						1.00