

# Hollow Core Anchor Easy

Steel, zinc plated



Easy



## Description

The Hollow-Core Anchor Easy is a one -piece unit, specially designed for anchoring in pre-stressed hollow concrete slabs. Tightening the screw/nut pulls the expansion cone inside the anchor sleeve which keys into in the cavity or provides strong expansion in solid concrete. The approval allows for the anchor to be installed even if the drill hole does not hit the cavity.

## Applications

Suspension of ventilation, sprinkler system, false ceilings, brackets with threaded studs or screws, ducts, anchoring prefabricated panels on hollow concrete floors/ceilings.

**Range of loading:**

**0,7 kN - 4,3 kN**

**Concrete quality:**

**≥ C45/55 respectively B55; pre-stressed hollow concrete slabs**



M 8 - M 12

## Hollow Core Anchor Easy

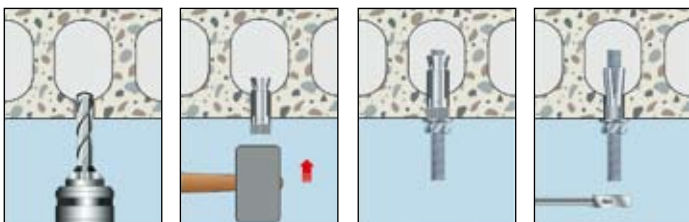


→ Steel, zinc plated

→ For pre-stressed hollow concrete slabs

Description	Ref. No.	Drill hole Ø mm	Thread Ø mm	Package content pieces	Weight per package kg
Easy M 6	51005101	10	M 6	50	0,51
Easy M 8	51100101	12	M 8	50	0,72
Easy M 10	51200101	16	M 10	50	1,55
Easy M 12	51300101	18	M 12	25	1,03

## Installation





### Extract from Permissible Service Conditions of Z-21.1-1785

Approved loads for single anchor without influence of spacing and edge distance.

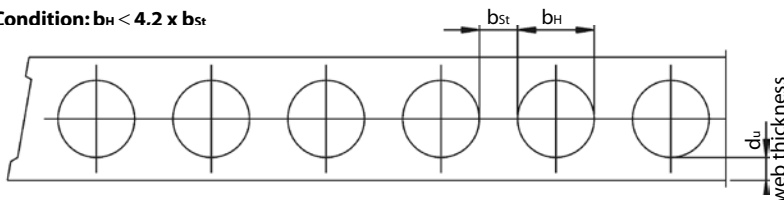
Total safety factor as per ETAG 001 included ( $\gamma_M$  and  $\gamma_F$ ).

Loads and performance data			Easy	M 6				M 8				M 10				M 12			
Pre-stressed hollow concrete slabs $\geq$ C45/55																			
Web thickness	$d_u$	[mm]	$\geq$	25	30	40	50	25	30	40	50	25	30	40	50	25	30	40	50
			$<$	30	40	50		30	40	50		30	40	50		30	40	50	
Loads and performance data (single anchor)																			
Approved loads <sup>1)</sup> (for $c \geq c_{cr}$ )	$F^{1)}$	[kN]		0,7	0,9	2,0	2,9	0,7	0,9	2,0	3,6	0,9	1,2	3,0	3,6	1,0	1,2	3,0	4,3
Edge distance	$c_{cr}$	[mm]				150					150				150				150
Approved loads <sup>1)</sup> (for $c_{min}$ )	$F^{1)}$	[kN]		0,35	0,8	1,8	2,4	0,35	0,8	1,8	3,0	0,8	1,0	2,7	3,0	0,8	1,0	2,7	3,6
Minimum edge distance	$c_{min}$	[mm]				100					100				100				100
Spacing	$s_{cr}$	[mm]				300					300				300				300
Loads and performance data (pair of anchors) <sup>2)</sup>																			
Approved loads <sup>1)</sup> (for $c \geq c_{cr}$ )	$F^{1)}$	[kN]		0,7	1,4	2,6	3,9	0,7	1,4	2,6	4,8	1,1	2,0	4,8	4,8	1,2	2,0	4,8	5,7
Minimum spacing	$s_{min}$	[mm]		70	80	100	100	70	80	100	100	70	80	100	100	70	80	100	100
Edge distance	$c_{cr}$	[mm]				150					150				150				150
Approved loads <sup>1)</sup> (for $c_{min}$ )	$F^{1)}$	[kN]		0,35	1,25	2,35	3,2	0,35	1,25	2,35	4,0	0,9	1,8	4,3	4,3	1,0	1,8	4,3	4,8
Minimum spacing	$s_{min}$	[mm]		70	80	100	100	70	80	100	100	70	80	100	100	70	80	100	100
Minimum edge distance	$c_{min}$	[mm]				100					100				100				100
Recommended bending moments																			
Stud / Screw, steel 5.8		[Nm]				-					10,7				21,4				37,4
Stud / Screw, steel 8.8		[Nm]				4,4					17,1				34,2				59,8
Installation parameters																			
Length of sleeve (without cone)	L	[mm]				30					35				40				45
Minimum length of screw	$\min l_s$	[mm]				$42 + t_{fix}$					$47 + t_{fix}$				$55 + t_{fix}$				$61 + t_{fix}$
Minimum length of stud	$\min l_b$	[mm]				$47 + t_{fix}$					$53 + t_{fix}$				$63 + t_{fix}$				$71 + t_{fix}$
Minimum strength of stud / screw						8.8					5.8				5.8				5.8
Drill hole diameter	$d_o$	[mm]				10					12				16				18
Clearance hole in the fixture	$d_f$	[mm]				7					9				12				14
Depth of drill hole	$h_o$	[mm]				50					55				60				70
Installation torque	$T_{inst}$	[Nm]				10					20				30				40

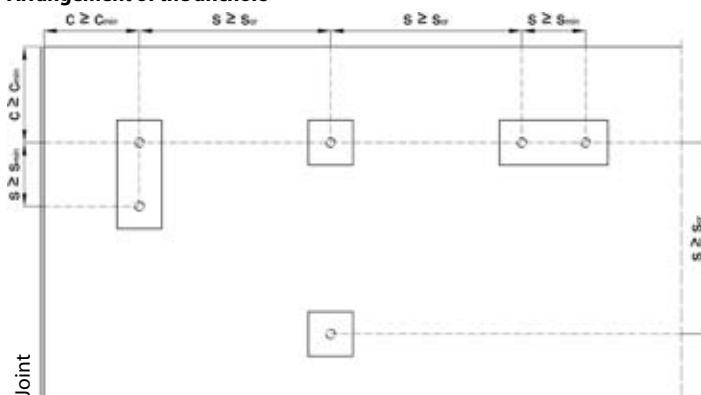
<sup>1)</sup> For edge distance  $c_{min} < c \leq c_{cr}$  can be determined by linear interpolation.

<sup>2)</sup> Approved loads valid for double anchorage. Recommended load of the most stressed anchor may not exceed the recommended load of a single anchor. On double anchorages with spacing  $s_{min1,2} < s_{1,2} < s_{cr1,2}$  the recommended load may be determined by linear interpolation, assuming the limiting value  $s_{1,2} = s_{cr1,2}$  for the double anchorage exposed to tension is twice the recommended load of a single anchor.

Condition:  $b_H < 4.2 \times b_{St}$

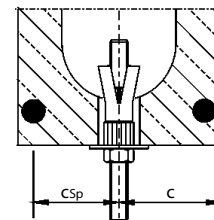


Arrangement of the anchors

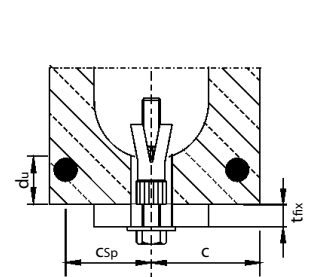


Installation with a threaded stud

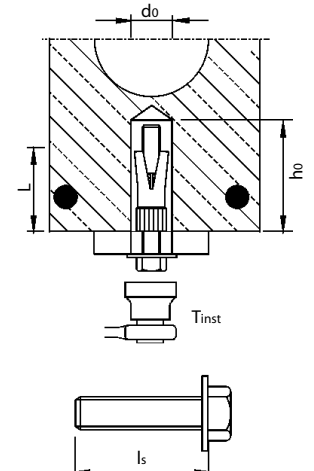
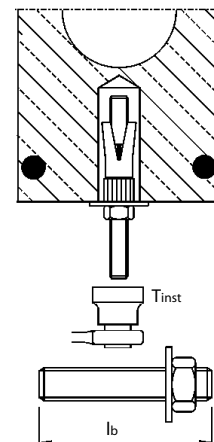
Hollow



Installation with a screw



Solid



$t_{fix}$  = Fixture thickness

$d_u$  = Web thickness

$b_H$  = Width of hollow

$b_{St}$  = Width of web

$c_{Sp}$  = Spacing to tension wire

$c$  = Edge distance