

Bolt anchor ICI

Affordable express anchor bolt for a secure hold. Approved for concrete (uncracked).

Long Description

The Upat express anchor bolt ICI is a high-performance solution and a cost-efficient option within the range of bolt anchors. This steel anchor is especially designed for fixing medium to heavy loads in uncracked concrete and dense natural stone. Typical applications of the express anchor bolt ICI include the fastening of barriers, benches and pumps, among others.

Characteristics

Certification/Approval: ETA Option 7
Concrete uncracked
Load Range: Tension load 4,5-10,3 kN,
shear load 4,1-17,9 kN
Material: Zinc plated (zp) hot dip galvanized (HDG)
Feature: Thread M8-M16, usable length 5-145mm
Accessories: Blow-out pump UPM AB

Applications

- Bike racks
- Benches
- Barrier
- Support feet
- Stadium seats
- Pumps

Materials

Approved for:

- Concrete C20/25 to C50/60, uncracked

Also suitable for:

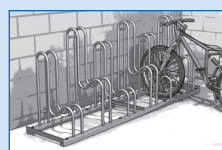
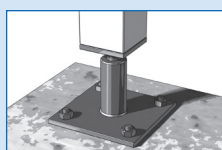
- Concrete C12/15
- Natural stone with dense structure

Advantages

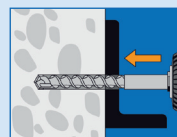
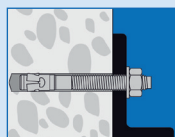
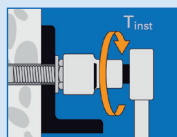
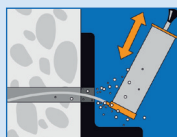
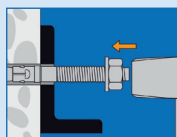
- Secure anchoring: ETA concrete approval Option 7. Flexible application for reliable anchoring in uncracked concrete.
- Fastening close to edges: The combination of cone and expansion clip allows for very small edge and centre distances.
- Easy to install: Shaft with optimised diameter for low impact energy during installation.
- Protected thread: Distinctive impact pin protects the thread from damage during the setting process.
- Reliable follow-up check: Head embossing enables post-installation checks.
- Secure hammering: The clip remains correctly positioned during hammering, even in case of contact with reinforcement or unfavourable drill holes.



Application examples



Assembly



Straight to the product



upat.com/en-ici

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Product variants

Product	Art.No.	Anchor length	Drill diameter	Thread	Installation torque	Max. usable length $h_{ef,stand}/h_{ef,min.}$	Min. drill hole depth for through fixings	Width across nut	Anchoring depth $h_{ef,stand}/h_{ef,min.}$	Sales unit
ICI 8/10/65 K	581059	65	8	M8	15	5 / 15	61	13	40 / 30	100
ICI 8/10/70	581623	70	8	M8	15	10 / 20	66	13	40 / 30	100
ICI 8/15/80	581060	80	8	M8	15	20 / 30	76	13	40 / 30	100
ICI 8/30/90	581061	90	8	M8	15	30 / 40	86	13	40 / 30	100
ICI 8/50/115	581062	110	8	M8	15	50 / 60	106	13	40 / 30	100
ICI 10/10/90	581063	85	10	M10	30	10 / 20	78	17	40 / 30	50
ICI 10/20/95	581624	95	10	M10	30	20 / 30	88	17	40 / 30	50
ICI 10/30/105	581064	105	10	M10	30	30 / 40	98	17	50 / 40	50
ICI 10/45/120	581065	125	10	M10	30	50 / 60	118	17	50 / 40	50
ICI 12/10/105	581066	104	12	M12	50	10 / 25	95	19	65 / 50	20
ICI 12/20/114	581625	114	12	M12	50	20 / 35	105	19	65 / 50	20
ICI 12/30/120	581067	124	12	M12	50	30 / 45	115	19	65 / 50	20
ICI 12/40/140	581068	144	12	M12	50	50 / 65	135	19	65 / 50	20
ICI 12/100/200	581069	194	12	M12	50	100 / 115	185	19	65 / 50	20
ICI 12/120/220	581070	214	12	M12	50	120 / 135	205	19	65 / 50	20
ICI 16/25/150	581071	143	16	M16	100	25 / 40	129	24	70 / 50	20
ICI 16/50/175	581072	168	16	M16	100	50 / 65	154	24	70 / 50	20
ICI 16/95/220	581073	218	16	M16	100	100 / 115	204	24	80 / 65	10
ICI 20/75/220	581078	217	20	M20	200	60 / 85	195	30	85 / 65	10
ICI 8/5/60 K HDG	581079	55	8	M8	15	- / 5	51	13	- / 30	100
ICI 8/15/80 HDG	581080	70	8	M8	15	10 / 20	66	13	40 / 30	100
ICI 8/25/90 HDG	581081	90	8	M8	15	30 / 40	86	13	40 / 30	100
ICI 8/50/115 HDG	581082	110	8	M8	15	50 / 60	106	13	40 / 30	100
ICI 10/5/65 K HDG	581083	70	10	M10	30	- / 5	63	17	40	100
ICI 10/20/90 HDG	581084	85	10	M10	30	10 / 20	78	17	40 / 30	50
ICI 10/35/105 HDG	581085	—	—	—	—	—	—	—	—	50
ICI 10/50/120 HDG	581086	125	10	M10	30	50 / 60	118	17	50 / 40	50
ICI 12/5/80 K HDG	581087	84	12	M12	35	- / 5	—	19	50 / -	20
ICI 12/10/100 HDG	581088	104	12	M12	50	10 / 25	95	19	65 / 50	20
ICI 12/25/120 HDG	581089	124	12	M12	50	30 / 45	115	19	65 / 50	20
ICI 12/45/140 HDG	581090	144	12	M12	50	50 / 65	135	19	65 / 50	20
ICI 16/5/125 HDG	581091	118	16	M16	100	- / 15	104	24	65 / -	10
ICI 16/30/150 HDG	581092	143	16	M16	100	25 / 40	129	24	70 / 50	10

Load table

Permissible loads of a single anchor 1) in normal concrete of strength class C20/25

For the design the complete current assessment ETA has to be considered.

Type	Material / surface2)	Effective anchor- agedepth	Minimummember thickness	Installationtorque	Permissible Tension (Nperm), Shear loads (Vperm), minimum spacing (smin) and edge distances (cmin)			
		h_{ef} [mm]	h_{min} [mm]		N_{rec3} [kN]	V_{rec3} [kN]	s_{min3} [mm]	c_{min3} [mm]
ICI 8	zp	35	100	25	4,5	4,1	35	35
	zp	45	100	25	4,5	4,1	35	35
ICI 10	zp	40	100	35	4,5	5,9	40	40
	zp	50	100	35	5,2	6,6	40	40
ICI 12	zp	50	140	60	5,7	9,6	50	50
	zp	70	140	60	9,5	9,6	50	50
ICI 16	zp	65	170	120	9,5	17,9	65	65
	zp	85	170	120	10,3	17,9	65	65
ICI 20	zp	80	200	200	13,4	28	80	80
	zp	100	200	200	19	28	80	80

1) Design according to EN 1992-4:2018 (for static resp. quasi-static loads). The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of $\gamma_L = 1.4$ are considered. As a single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1.5 \times h_{ef}$. Accurate data see ETA.

2) Further steel grades, versions and technical data see ETA, e.g. for dry internal conditions, galvanised steel zp; for damp interior stainless steel R and exterior conditions, e.g. material 1.4362, 1.4401.

3) In the case of combinations of tensile and shear loads, bending moments and reduced edge and axial spacings (anchor groups), the design must be carried out in accordance with the provisions of the complete ETA and the provisions of the EN 1992-4:2018. We recommend to use our anchor design software DesignFix.