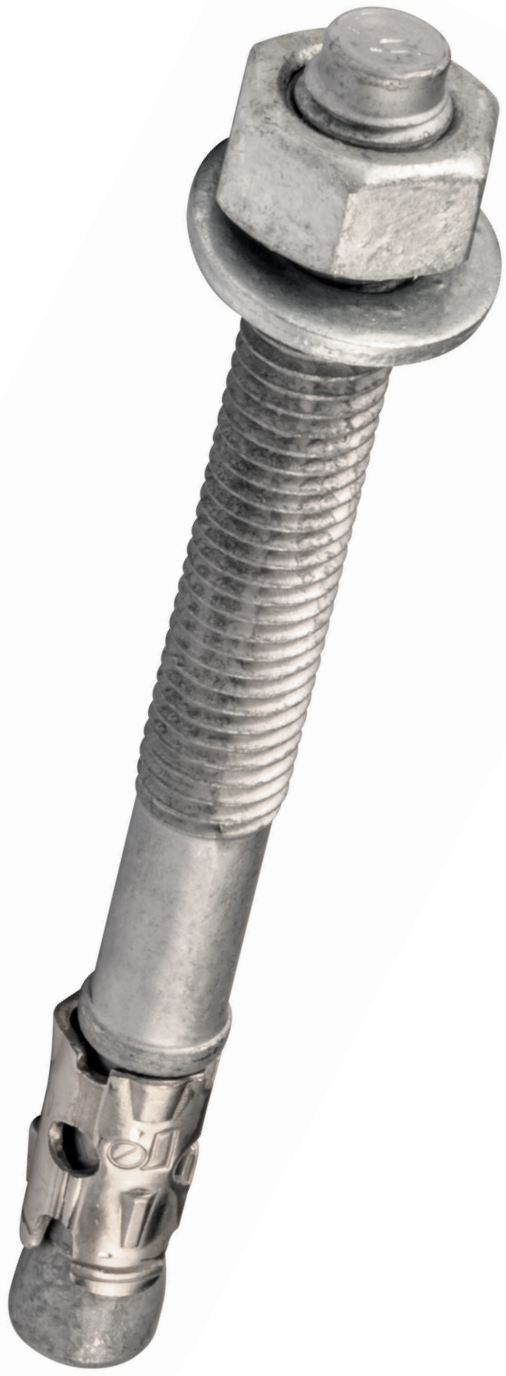
R-XTPIIIHD

CARBON STEEL THROUGHBOLT ANCHOR WITH HOT DIP GALVANIZED COATING FOR UNCRACKED CONCRETE

A new generation of R-XPTIII band anchors - with reduced embedment depth.



FEATURES AND BENEFITS

- Two anchoring depths - standard and reduced
- Possibility of using the anchor outdoors
- Corrosion class of the anchor, number of years of anti-corrosion protection in a given hazard in accordance with ETA-23/0887
- High performance in cracked concrete and uncracked C20/25-C50/60
- Anchor length identification mark to identify embedment length/depth. Facilitates post-installation inspection
- The size of the anchor is indicated on the shank
- Can be used to fasten steel/aluminium and wood elements
- Quick and comfortable assembley with the application SDS Punch Tool
- Reliable and simple installation thanks to the use of pass-through mounting
- The new shape of the expansion clip with an additional forged shoulder ensures perfect engagement of the clip in concrete
- Guarantee of maximum safety and best performance, confirmed by international approvals and tests by certified laboratories
- Application specification in accordance with EAD 330232-01-0601-v01 included in ETA-23/0887

SUBSTRATES

- Uncracked concrete C20/25-C50/60
- Unreinforced concrete, reinforced concrete
- Natural stone (after site testing)

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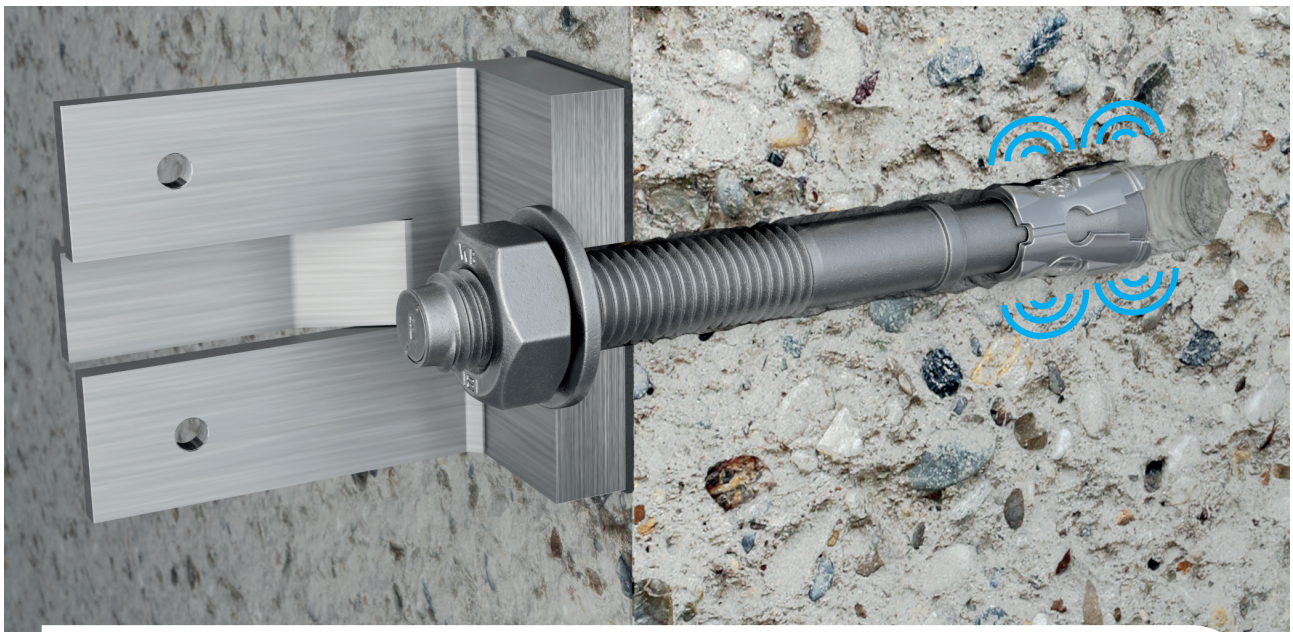
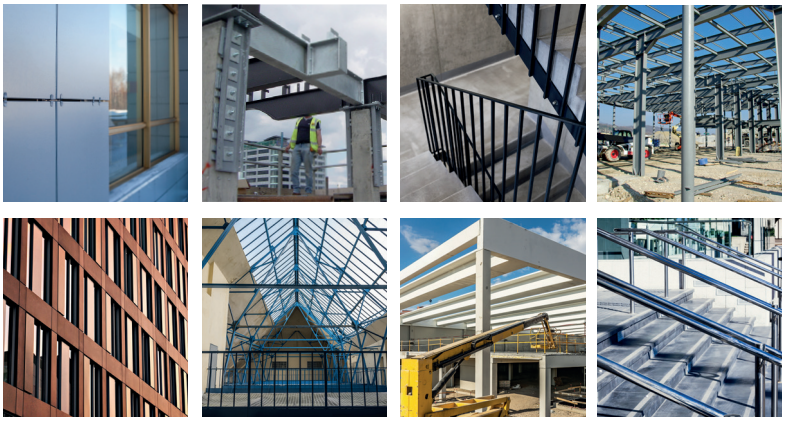


The new R-XPTIIIHD anchor is characterised by standard and reduced embedment depth. High load capacities allow for shallower anchoring and fastening of thicker fastener elements.

APPLICATIONS

- Ventilated facades
- Barriers and railings
- Steel structure
- Curtain walling
- Heavy equipment
- Stadium seating



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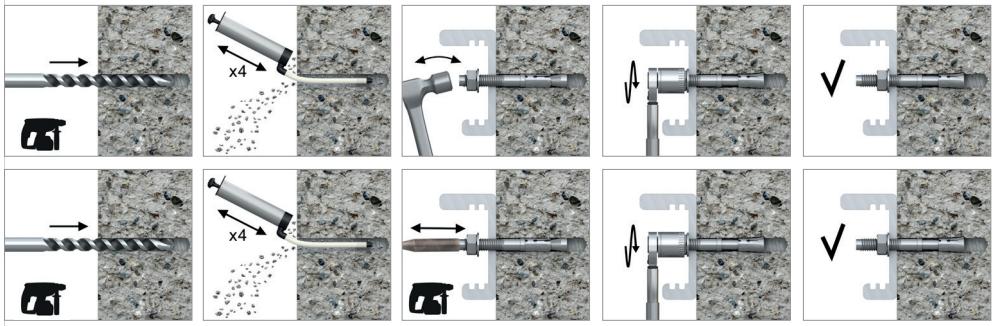
CARBON STEEL THROUGHBOLT ANCHOR WITH HOT DIP GALVANIZED COATING FOR UNCRACKED CONCRETE

INSTALLATION GUIDE



1. Drill the hole with rotary hammer drilling machine. Drill to a required depth.
2. Remove the drill cuttings and thoroughly clean the hole using the pump 4 times.
3. Insert the anchor into the hole through the fastened element and tap it with a hammer or punch tool to the appropriate depth.
4. Using a torque wrench, tighten the nut to the required torque.

PRODUCT INFORMATION

Size	Code	Diameter	Length	Fastened element hole diameter	Maximim thickness fastened element	
		d	L	d_f	$t_{fix,red}$	$t_{fix,std}$
		[mm]	[mm]	[mm]	[mm]	[mm]
M8	R-XPTIIIHD08060/10	8	60	9	10	-
	R-XPTIIIHD08065/1		65		15	0
	R-XPTIIIHD08075/10		75		25	10
	R-XPTIIIHD08080/15		80		30	15
	R-XPTIIIHD08095/30		95		45	30
	R-XPTIIIHD08115/50		115		65	50
	R-XPTIIIHD08140/75		140		90	75
M10	R-XPTIIIHD10065/5	10	65	12	5	-
	R-XPTIIIHD10080/10		80		20	10
	R-XPTIIIHD10095/25		95		35	25
	R-XPTIIIHD10115/45		115		55	45
	R-XPTIIIHD10130/60		130		70	60
	R-XPTIIIHD10140/70		140		80	70
M12	R-XPTIIIHD12080/5	12	80	14	5	-
	R-XPTIIIHD12100/5		100		25	5
	R-XPTIIIHD12120/25		120		45	25
	R-XPTIIIHD12125/30		125		50	30
	R-XPTIIIHD12135/40		135		60	40
	R-XPTIIIHD12150/55		15		75	55
	R-XPTIIIHD12180/85		180		105	85
	R-XPTIIIHD12220125		220		145	125
M16	R-XPTIIIHD16100/5	16	100	18	-	-
	R-XPTIIIHD16105/10		105		5	-
	R-XPTIIIHD16105/5		105		5	-
	R-XPTIIIHD16125/5		125		25	5
	R-XPTIIIHD16140/20		140		40	20
	R-XPTIIIHD16150/30		150		50	30
	R-XPTIIIHD16180/60		180		80	60
	R-XPTIIIHD16220100		220		100	80

R-XTPIIIHD

CARBON STEEL THROUGHBOLT ANCHOR WITH HOT DIP GALVANIZED COATING FOR UNCRACKED CONCRETE

INSTALLATION DATA

R-HPTIIIHD			M8		M10		M12		M16	
Efective adchorage depth			Standard	Reduced	Standard	Reduced	Standard	Reduced	Standard	Reduced
Drill hole diameter	d_0	[mm]	Ø8		Ø10		Ø12		Ø16	
Hole diameter in fixture	d_f	[mm]	9,0		12,0		14,0		18,0	
Nominal embedment depth	$h_{nom}\geq$	[mm]	55,0	40,0	60,0	50,0	80,0	60,0	100,0	80,0
Hole depth in substrate	$h_0\geq$	[mm]	60,0	45,0	65,0	55,0	90,0	70,0	110,0	90,0
Installation torque moment	T_{inst}	[Nm]	15,0		30,0		50,0		100,0	
Minimum thickness of concrete member	$h_{min}\geq$	[mm]	100,0	100,0	100,0	100,0	136,0	100,0	170,0	130,0
Minimum spacing	s_{min}	[mm]	60,0	35,0	65,0	50,0	100,0	70,0	120,0	90,0
Minimum edge distance	c_{min}	[mm]	60,0	40,0	65,0	50,0	100,0	70,0	120,0	90,0
Effective embedment depth	h_{ef}	[mm]	47,0	32,0	50,0	40,0	68,0	48,0	85,0	65,0
Characteristic resistance under tension load (steel failure)	$N_{RK,s}$	[kN]	17,5		27,6		40,0		71,1	
Characteristic resistance under tension load (pull-out failure uncracked concrete)	$N_{RK,p}$	[kN]	14,0	8,9	17,4	12,4	27,6	16,4	38,6	25,8
Characteristic resistance under shear load (steel failure)	$V^0_{0RK,p}$	[kN]	10,9		17,4		20,4		42,0	

R-XPTIIIHD CAN BE USED OUTDOORS IN ACCORDANCE WITH EN ISO 10684

Corrosivity category	Corrosion	Durability
		Thickness in accordance with chapter 8.3 > 50um with average durability in years
C1	Very low	500*
C2	Short	75
C3	Mean	25
C4	High	12,5
C5	Very high	5
CX	Extreme	2

* Working life of anchor not exceeding 50 years

PRODUCT COMMERCIAL DATA

Size	Code	Diameter	Length	Box weight unitary	Quantity	
		d	L		Box	Pallet
		[mm]	[mm]	[kg]	[szt]	[szt]
M8	R-XPTIIIHD08060/10	8	60	2,60	100	39200
	R-XPTIIIHD08065/1		65	2,8	100	39200
	R-XPTIIIHD08075/10		75	3,1	100	39200
	R-XPTIIIHD08080/15		80	3,2	100	39200
	R-XPTIIIHD08095/30		95	3,7	100	39200
	R-XPTIIIHD08115/50		115	4,3	100	39200
	R-XPTIIIHD08140/75		140	5,1	100	39200
M10	R-XPTIIIHD10065/5	10	65	2,3	50	19600
	R-XPTIIIHD10080/10		80	2,7	50	19600
	R-XPTIIIHD10095/25		95	3,1	50	19600
	R-XPTIIIHD10115/45		115	3,4	50	19600
	R-XPTIIIHD10130/60		130	3,8	50	19600
	R-XPTIIIHD10140/70		140	4,5	50	19600
M12	R-XPTIIIHD12080/5	12	80	4,5	50	19600
	R-XPTIIIHD12100/5		100	4,9	50	19600
	R-XPTIIIHD12120/25		120	5,4	50	19600
	R-XPTIIIHD12125/30		125	5,6	50	19600
	R-XPTIIIHD12135/40		135	5,9	50	19600
	R-XPTIIIHD12150/55		150	6,5	50	19600
	R-XPTIIIHD12180/85		180	7,4	50	19600
	R-XPTIIIHD12220125		220	8,9	50	19600
M16	R-XPTIIIHD16100/5	16	100	4,3	25	9800
	R-XPTIIIHD16105/10		105	4,47	25	9800
	R-XPTIIIHD16105/5		105	4,2	25	9800
	R-XPTIIIHD16125/5		125	5,1	25	9800
	R-XPTIIIHD16140/20		140	5,6	25	3200
	R-XPTIIIHD16150/30		150	5,9	25	9800
	R-XPTIIIHD16180/60		180	6,9	25	9800
	R-XPTIIIHD16220100		220	8,2	25	9800

RELATED PRODUCT

DRILLING

POWER TOOLS

Hammer drill
SDS plus, 850 W
R-PRH26850

Hammer drill 18V
SDS plus 2,0J
R-PRH18

ACCESSORIES FOR POWER TOOLS

Drill
Aggressor SDS Plus
RT-SDSA

Drill
Rebardrill SDS Plus
RT-SDSR

Impact sockets 1/2”
RT-IS

Torque wrench
20-100 Nm 1/2”
R-HTW-20-100

Punch tool
SDS plus
RT-SDSI-MA150

Hammer
RT-HAM