



RAWLPLUG

R-HLX

Self-tapping concrete screwbolt

SUITABLE FOR USE IN:

- Non-cracked concrete min. C20/25
- Reinforced and unreinforced concrete
- Brick & blockwork
- High density natural stone

Trust & Innovation. Since 1919.

INSTALLATION DATA

Size		Ø6.3	Ø7.5	Ø10	Ø12.5	Ø17
Thread diameter	d	[mm] 6.3	[mm] 7.5	[mm] 10	[mm] 12.5	[mm] 17
Hole diameter in substrate	d ₀	[mm] 5	[mm] 6	[mm] 8	[mm] 10	[mm] 14
Installation torque (Recommended)*	T _{inst}	[Nm] 15	[Nm] 25	[Nm] 50	[Nm] 100	[Nm] 200
STANDARD EMBEDMENT DEPTH						
Min. hole depth in substrate	h ₀	[mm] 50	[mm] 65	[mm] 80	[mm] 95	[mm] 130
Installation depth	h _{nom}	[mm] 40	[mm] 55	[mm] 70	[mm] 85	[mm] 120
Min. substrate thickness	h _{min}	[mm] 100	[mm] 100	[mm] 110	[mm] 130	[mm] 190
Min. spacing	s _{min}	[mm] 30	[mm] 35	[mm] 40	[mm] 55	[mm] 80
Min. edge distance	c _{min}	[mm] 30	[mm] 35	[mm] 40	[mm] 55	[mm] 80
REDUCED EMBEDMENT DEPTH						
Min. hole depth in substrate	h ₀	[mm] 35	[mm] 50	[mm] 60	[mm] 65	[mm] 85
Installation depth	h _{nom}	[mm] 25	[mm] 40	[mm] 50	[mm] 55	[mm] 75
Min. substrate thickness	h _{min}	[mm] 100	[mm] 100	[mm] 100	[mm] 100	[mm] 120
Min. spacing	s _{min}	[mm] 30	[mm] 35	[mm] 50	[mm] 70	[mm] 120
Min. edge distance	c _{min}	[mm] 30	[mm] 35	[mm] 50	[mm] 70	[mm] 110

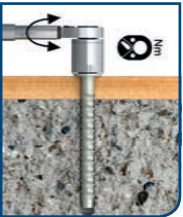
*Valid for concrete min. C20/25



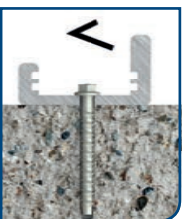
Drill a hole of required diameter and depth.

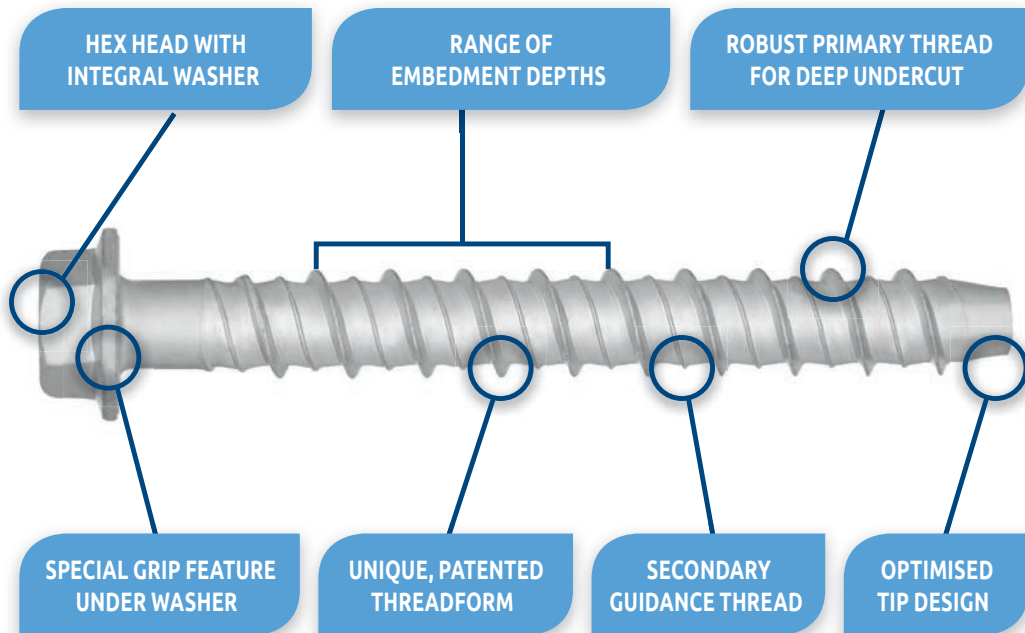


Remove debris and thoroughly clean hole with brush and pump.



Insert anchor through fixture and screw in to hole, until installation depth is reached and fixture is secure. Recommended installation torque may be used as a guideline (for use in concrete).





BENEFITS:

TIME-EFFICIENT INSTALLATION

- Streamlined procedure – Simply drill and drive
- Compatible with impact wrench power tools
- Instant clamping with minimal effort

UNDERCUT ANCHOR TECHNOLOGY

- High performance for relatively small hole diameter
- Non-expansion functioning – Low risk of damage to base material
- Ideal for installation near edges and adjacent anchors

ATTRACTIVE ANCHORAGES

- Integral washer ensures a neat overall appearance
- Special zinc flake corrosion-resistant coating

VERSATILE SOLUTIONS

- Performance data at two embedment depths
- Completely removable
- Extended range of head types under development

APPLICATIONS:

- Through-fixing
- Temporary anchorages
- Formwork supports
- Balustrading & handrails
- Fencing & gates
- Racking systems
- Public seating
- Scaffolding

AVAILABLE SIZES

Product Code	Hole diameter in substrate	Anchor			Fixture		Hole diameter
		Thread diameter	Length	Thread length	Max. thickness		
					Standard embedment	Reduced embedment	
		d_0	d	L	L_c	$t_{fix,s}$	
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
R-HLX-6x50	5	6.3	50	40	10	25	7
R-HLX-7x60	6	7.5	60	55	5	20	9
R-HLX-10x75	8	10	75	70	5	25	12
R-HLX-12x65	10	12.5	65	55	-	10	14
R-HLX-12x85		12.5	85	75	-	30	14
R-HLX-12x100		12.5	100	90	15	45	14
R-HLX-17x135	14	17	135	120	15	60	18

BASIC PERFORMANCE DATA

Performance data for single anchor in tension without influence of edge distance and spacing

Substrate	NON-CRACKED CONCRETE C20/25					
	Size	Ø 6.3	Ø 7.5	Ø 10	Ø 12.5	Ø 17
MEAN ULTIMATE LOAD $N_{R,u,m}$						
Standard embedment depth	[kN]	11.3	18.9	21.5	27.0	42.8
Reduced embedment depth	[kN]	4.7	8.5	12.3	15.0	21.3
CHARACTERISTIC LOAD $N_{R,k}$						
Standard embedment depth	[kN]	3.8	9.0	13.4	20.0	31.7
Reduced embedment depth	[kN]	2.1	5.0	8.8	12.0	17.1
DESIGN LOAD $N_{R,d}$						
Standard embedment depth	[kN]	2.1	5.0	9.0	13.3	21.1
Reduced embedment depth	[kN]	1.0	2.4	4.2	5.7	8.1
RECOMMENDED LOAD N_{rec}^*						
Standard embedment depth	[kN]	1.5	3.6	6.4	9.5	15.1
Reduced embedment depth	[kN]	0.7	1.7	3.0	4.1	5.8

* Partial safety factor 1.4