

R-RBL2 Rawlbolt2 with loose bolt

World's most popular all-purpose expanding shield anchor - loose bolt version



Product information

Features and benefits

- For use in cracked and non-cracked concrete, hollow-core slabs, flooring blocks and ceramics
- Three-pieces expanding sleeve of maximum expansion provides optimal load and safety of use in any substrate

Applications

- Roller shutter doors
- Fire doors
- Structural steelwork
- Security grills
- Heavy machinery
- Pipework/ductwork supports

Base materials

Suitable for use in

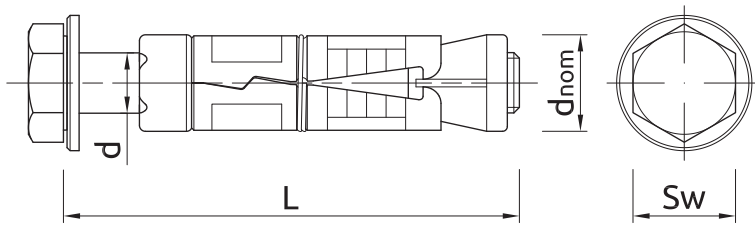
- Cracked concrete C20/25-C50/60
- Non-cracked concrete C20/25-C50/60
- Unreinforced concrete
- Reinforced concrete
- Solid clay brick $\geq 20\text{MPa}$
- Hollow Lightweight Concrete Block LAC 5 $\geq 5\text{MPa}$
- Hollow Sand-lime Brick $\geq 15\text{MPa}$
- Concrete hollow floor block (eg. Teriva)
- Hollow-core Slab C20/25
- Hollow-core Slab C30/37-C50/60
- Natural Stone (after site testing)

Installation guide



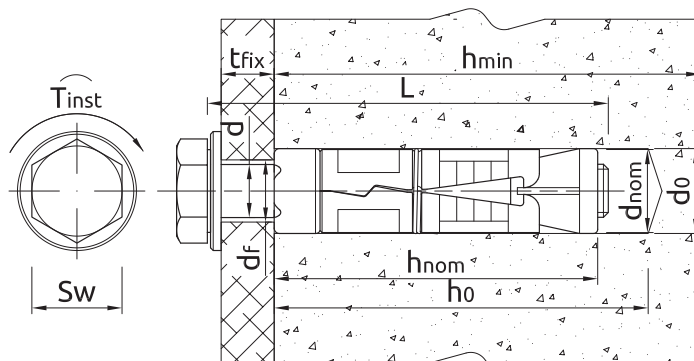
1. Drill a hole of required diameter and depth. Note: When fixing into brickwork, mortar joints should be avoided
2. Clear the hole of drilling dust and debris (using blowpump or equivalent method)
3. Remove pre-assembled bolt and washer. Insert shield into hole and tap home with hammer until flush with surface
4. Insert bolt with washer through fixture into the shield
5. Tighten to the recommended torque

Product information



Size	Product Code	Anchor			Fixture	
		Diameter	External diameter	Length	Max. thickness	Hole diameter
		d [mm]	d_{nom} [mm]	L [mm]	t_{fix} [mm]	d_f [mm]
M6	RBL2-M06/10W	6	12	55	10	6.5
	RBL2-M06/25W	6	12	70	25	6.5
	RBL2-M06/40W	6	12	85	40	6.5
M8	RBL2-M08/10W	8	14	65	10	9
	RBL2-M08/25W	8	14	80	25	9
	RBL2-M08/40W	8	14	95	40	9
M10	RBL2-M10/10W	10	16	75	10	11
	RBL2-M10/25W	10	16	90	25	11
	RBL2-M10/50W	10	16	115	50	11
	RBL2-M10/75W	10	16	140	75	11
M12	RBL2-M12/10W	12	20	90	10	13
	RBL2-M12/60W	12	20	140	60	13

Installation data



Installation in solid substrate

Size			M6	M8	M10	M12
Thread diameter	d	[mm]	6	8	10	12
Hole diameter in substrate	d_0	[mm]	12	14	16	20
Installation torque	T_{inst}	[Nm]	6.5	15	27	50
Wrench size	Sw	[mm]	10	13	17	19
Min. hole depth in substrate	h_0	[mm]	50	55	65	85
Min. installation depth	h_{nom}	[mm]	45	50	60	80

Basic performance data

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

Size		M6	M8	M10	M12
MEAN ULTIMATE LOAD					
TENSION LOAD $N_{R_{u,m}}$	[kN]	11.16	13.95	15.72	16.82
SHEAR LOAD $V_{R_{u,m}}$	[kN]	6.87	11.80	17.38	26.99
CHARACTERISTIC LOAD					
TENSION LOAD N_{R_k}	[kN]	4.85	5.96	6.87	7.79
SHEAR LOAD V_{R_k}	[kN]	4.66	10.68	12.01	23.20
DESIGN LOAD					
TENSION LOAD N_{R_d}	[kN]	2.31	2.84	3.27	3.71
SHEAR LOAD V_{R_d}	[kN]	3.72	8.54	9.60	17.84

**values according to internal tests*

Product commercial data

Product Code	Anchor		Quantity [pcs]			Weight [kg]			Bar Codes
	Diameter [mm]	Length [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
RBL2-M06/10W	6	55	25	400	22400	0.70	11.2	657.2	5010445006500
RBL2-M06/25W	6	70	25	400	22400	1.05	16.8	970.8	5010445006517
RBL2-M06/40W	6	85	25	400	22400	1.15	18.4	1060.4	5010445006524
RBL2-M08/10W	8	65	25	400	22400	1.25	20.0	1150.0	5010445006531
RBL2-M08/25W	8	80	25	200	11200	1.35	10.8	634.8	5010445006548
RBL2-M08/40W	8	95	25	200	11200	1.73	13.8	802.8	5010445006555
RBL2-M10/10W	10	75	25	200	11200	2.2	17.2	993.2	5010445006562
RBL2-M10/25W	10	90	25	200	11200	2.3	18.4	1060.4	5010445006579
RBL2-M10/50W	10	115	25	200	4800	2.6	21.0	534.0	5010445006586
RBL2-M10/75W	10	140	25	25	10400	3.0	3.0	1278.0	5010445006593
RBL2-M12/10W	12	90	25	25	10400	3.6	3.6	1517.2	5010445006609
RBL2-M12/60W	12	140	25	25	10400	4.5	4.5	1881.2	5010445006630