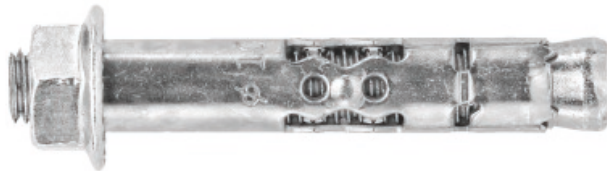


R-RLK-P Rawlok - Bolt Projecting

All purpose expansion anchor for use in medium weight applications



Product information

Features and benefits

- Medium weight applications anchor
- Anchor designed for optimum performance in most base materials
- Integral collapse feature to ensure maximum clamping force is applied to the fixture
- Bolt and drill size marked on sleeve for accurate installation

Applications

- Radiators
- Signs
- Stadium seating
- Satellite dishes
- Wall plates
- Shutter
- Garage doors

Base materials

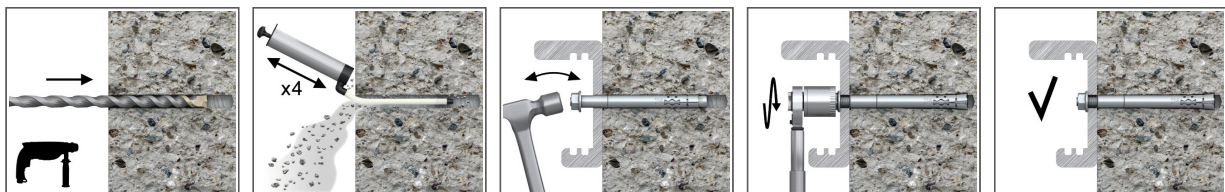
Approved for use in:

- Non-cracked concrete C20/25-C50/60
- Solid Brick
- Reinforced concrete

Also suitable for use in:

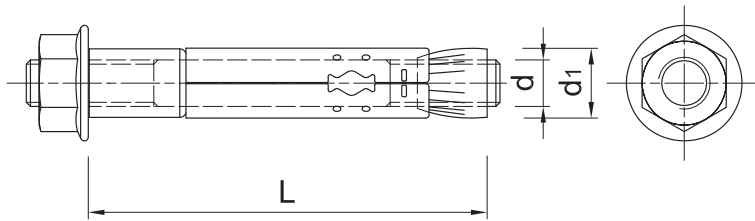
- Natural Stone (after site testing)

Installation guide



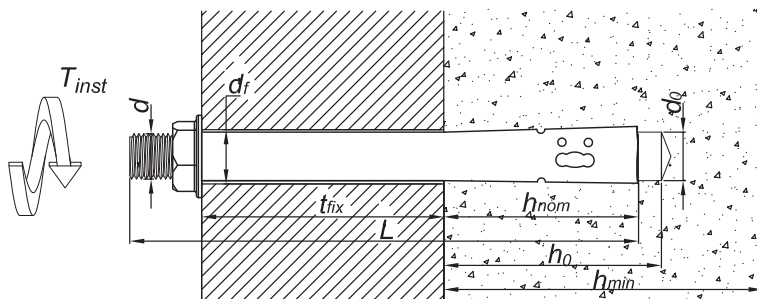
1. Drill a hole of required diameter and depth. Note: When fixing into brickwork, mortar joints should be avoided
2. Remove debris and thoroughly clean hole with brush and pump
3. Insert Rawlok through the fixture into the hole
4. Tighten to the recommended torque

Product information



| Size | Product Code | Anchor | | Fixture | |
|------|---------------|----------|--------|------------------|----------------|
| | | Diameter | Length | Max. thickness | Hole diameter |
| | | d | L | t _{fix} | d _f |
| | | [mm] | [mm] | [mm] | [mm] |
| M5 | R-RLK-P-05056 | 5 | 56 | 25 | 8 |
| M6 | R-RLK-P-06040 | 6 | 40 | 10 | 10 |
| | R-RLK-P-06065 | 6 | 65 | 35 | 10 |
| M8 | R-RLK-P-08075 | 8 | 75 | 36 | 12 |
| | R-RLK-P-08095 | 8 | 95 | 55 | 12 |
| M10 | R-RLK-P-08050 | 8 | 50 | 10 | 12 |
| | R-RLK-P-10100 | 10 | 100 | 50 | 14 |
| | R-RLK-P-10130 | 10 | 130 | 80 | 14 |
| | R-RLK-P-10060 | 10 | 60 | 10 | 14 |
| M12 | R-RLK-P-10070 | 10 | 70 | 27 | 14 |
| | R-RLK-P-12110 | 12 | 110 | 55 | 18 |
| | R-RLK-P-12145 | 12 | 145 | 85 | 18 |

Installation data



| Size | | | M6 | M8 | M10 | M5 | M12 |
|---|-------------------|------|----|----|-----|-----|-----|
| Thread diameter | d | [mm] | 6 | 8 | 10 | 5 | 12 |
| Hole diameter in substrate | d ₀ | [mm] | 8 | 10 | 12 | 6.5 | 16 |
| Installation torque (Concrete) | T _{inst} | [Nm] | 6 | 11 | 22 | 2.5 | 38 |
| Installation torque (Blockwork 14.0MPa) | T _{inst} | [Nm] | 3 | 6 | 11 | 1.5 | 25 |
| Installation torque (Blockwork 7.0MPa) | T _{inst} | [Nm] | 2 | 4 | 8 | 1 | 12 |
| Min. hole depth in substrate | h ₀ | [mm] | 35 | 45 | 55 | 30 | 60 |
| Min. installation depth | h _{nom} | [mm] | 35 | 45 | 55 | 30 | 60 |
| Min. substrate thickness | h _{min} | [mm] | 55 | 65 | 85 | 50 | 90 |
| Min. spacing | s _{min} | [mm] | 50 | 60 | 70 | 40 | 90 |
| Min. edge distance | c _{min} | [mm] | 50 | 60 | 70 | 40 | 90 |

Basic performance data

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

| Size | | M6 | M8 | M10 | M5 | M12 |
|---|------|-------|-------|-------|-------|-------|
| NON-CRACKED CONCRETE | | | | | | |
| Effective embedment depth h_{ef} | [mm] | 26.00 | 36.00 | 43.00 | 26.00 | 50.00 |
| BLOCKWORK 7.0MPA | | | | | | |
| Effective embedment depth h_{ef} | [mm] | 26.00 | 36.00 | 43.00 | 26.00 | 50.00 |
| CHARACTERISTIC LOAD | | | | | | |
| TENSION LOAD N_{Rk} | | | | | | |
| NON-CRACKED CONCRETE | [kN] | 6.90 | 9.30 | 11.40 | 5.00 | 14.50 |
| BLOCKWORK 7.0MPA | [kN] | 2.40 | 3.50 | 4.50 | 1.50 | 5.80 |
| SHEAR LOAD V_{Rk} | | | | | | |
| NON-CRACKED CONCRETE | [kN] | 5.40 | 9.00 | 12.60 | 3.60 | 19.80 |
| BLOCKWORK 7.0MPA | [kN] | 2.50 | 2.70 | 3.10 | 2.30 | 3.40 |
| DESIGN LOAD | | | | | | |
| TENSION LOAD N_{Rd} | | | | | | |
| NON-CRACKED CONCRETE | [kN] | 3.19 | 4.31 | 5.28 | 2.31 | 6.71 |
| BLOCKWORK 7.0MPA | [kN] | 1.11 | 1.62 | 2.08 | 0.69 | 2.69 |
| SHEAR LOAD V_{Rd} | | | | | | |
| NON-CRACKED CONCRETE | [kN] | 3.00 | 5.00 | 7.00 | 2.00 | 11.00 |
| BLOCKWORK 7.0MPA | [kN] | 1.39 | 1.50 | 1.72 | 1.28 | 1.89 |

Design performance data

Data based on AT-15-7555/2011

| Size | | M5 | M6 | M8 | M10 | M12 |
|--|-----------------|-------|-------|-------|-------|-------|
| Effective embedment depth | h_{ef} [mm] | 26.00 | 26.00 | 36.00 | 43.00 | 50.00 |
| TENSION LOAD | | | | | | |
| PULL-OUT FAILURE; NON-CRACKED CONCRETE C20/25 | | | | | | |
| Characteristic resistance | $N_{Rk,p}$ [kN] | 5.00 | 6.90 | 9.30 | 11.40 | 14.50 |
| Design resistance $\gamma_M^* = 2.16$ | $N_{Rd,p}$ [kN] | 2.31 | 3.19 | 4.31 | 5.28 | 6.71 |
| PULL-OUT FAILURE; BLOCKWORK 7.0MPA | | | | | | |
| Characteristic resistance | $N_{Rk,p}$ [kN] | 1.50 | 2.40 | 3.50 | 4.50 | 5.80 |
| Design resistance $\gamma_M^* = 2.16$ | $N_{Rd,p}$ [kN] | 0.69 | 1.11 | 1.62 | 2.08 | 2.69 |
| PULL-OUT FAILURE; BLOCKWORK 14.0MPA | | | | | | |
| Characteristic resistance | $N_{Rk,p}$ [kN] | 1.90 | 3.20 | 4.50 | 5.60 | 6.90 |
| Design resistance $\gamma_M^* = 2.16$ | $N_{Rd,p}$ [kN] | 0.88 | 1.48 | 2.08 | 2.59 | 3.19 |
| PULL-OUT FAILURE; BLOCKWORK 20.5MPA | | | | | | |
| Characteristic resistance | $N_{Rk,p}$ [kN] | 2.40 | 3.70 | 5.00 | 6.00 | 7.30 |
| Design resistance $\gamma_M^* = 2.16$ | $N_{Rd,p}$ [kN] | 1.11 | 1.71 | 2.31 | 2.78 | 3.38 |
| SHEAR LOAD | | | | | | |
| NON-CRACKED CONCRETE C20/25 | | | | | | |
| Characteristic resistance | V_{Rk} [kN] | 3.60 | 5.40 | 9.00 | 12.60 | 19.80 |
| Design resistance $\gamma_{Mc} = 1.8$ | V_{Rd} [kN] | 2.00 | 3.00 | 5.00 | 7.00 | 11.00 |
| BLOCKWORK 7.0MPA | | | | | | |
| Characteristic resistance | V_{Rk} [kN] | 2.30 | 2.50 | 2.70 | 3.10 | 3.40 |
| Design resistance $\gamma_{Mc} = 1.8$ | V_{Rd} [kN] | 1.28 | 1.39 | 1.50 | 1.72 | 1.89 |
| BLOCKWORK 14.0MPA | | | | | | |
| Characteristic resistance | V_{Rk} [kN] | 3.40 | 5.20 | 8.60 | 10.30 | 13.10 |
| Design resistance $\gamma_{Mc} = 1.8$ | V_{Rd} [kN] | 1.89 | 2.89 | 4.78 | 5.72 | 7.28 |
| BLOCKWORK 20.5MPA | | | | | | |
| Characteristic resistance | V_{Rk} [kN] | 3.40 | 5.20 | 8.60 | 10.30 | 13.10 |
| Design resistance $\gamma_{Mc} = 1.8$ | V_{Rd} [kN] | 1.89 | 2.89 | 4.78 | 5.72 | 7.28 |

Product commercial data

| Product Code | Anchor | | Quantity [pcs] | | | Weight [kg] | | | Bar Codes |
|---------------|---------------|-------------|----------------|-------|--------|-------------|-------|--------|---------------|
| | Diameter [mm] | Length [mm] | Box | Outer | Pallet | Box | Outer | Pallet | |
| R-RLK-P-05056 | 5 | 56 | 100 | 100 | 18000 | 1.30 | 1.30 | 264.0 | 5010445695063 |
| R-RLK-P-06040 | 6 | 40 | 100 | 100 | 18000 | 1.80 | 1.80 | 354.0 | 5010445695087 |
| R-RLK-P-06065 | 6 | 65 | 50 | 50 | 9000 | 1.30 | 1.30 | 264.0 | 5010445695100 |
| R-RLK-P-08075 | 8 | 75 | 50 | 50 | 15000 | 2.4 | 2.4 | 750.0 | 5010445695162 |
| R-RLK-P-08095 | 8 | 95 | 25 | 25 | 7500 | 1.53 | 1.53 | 487.5 | 5010445695186 |
| R-RLK-P-08050 | 8 | 50 | 50 | 50 | 9000 | 1.75 | 1.75 | 345.0 | 5010445695148 |
| R-RLK-P-10100 | 10 | 100 | 10 | 10 | 3000 | 0.90 | 0.90 | 298.8 | 5010445695247 |
| R-RLK-P-10130 | 10 | 130 | 10 | 10 | 3000 | 1.14 | 1.14 | 372.0 | 5010445695254 |
| R-RLK-P-10060 | 10 | 60 | 25 | 25 | 7500 | 1.58 | 1.58 | 502.5 | 5010445695209 |
| R-RLK-P-10070 | 10 | 70 | 25 | 25 | 7500 | 1.75 | 1.75 | 555.0 | 5010445695223 |
| R-RLK-P-12110 | 12 | 110 | 10 | 10 | 3000 | 1.63 | 1.63 | 519.0 | 5010445695285 |
| R-RLK-P-12145 | 12 | 145 | 10 | 10 | 1800 | 2.1 | 2.1 | 406.2 | 5010445695308 |