# Chemset™ Reo502™ Xtrem™

## FIRE RATED CHEMICAL ANCHOR

**AVAILABLE IN AUSTRALIA ONLY**

**(New Zealand refer to EPCON™ G5 Xtrem™ range)**



## GENERAL INFORMATION

**Performance Related**

**Installation Related**

### Product

**ChemSet™ Reo 502™ Xtrem™ is a heavy duty pure Epoxy for anchoring threaded studs and reinforcing bar into cracked and uncracked concrete.**

### Compliance

**European Technical Assessment ETA-25/0647 and ETA-25/1142**

**Design according to:**

- AS 5216 (formerly TS101)
- EN 1992-4 (formerly ETAG001 Annex C, E & TR045)
- Fire Design according to EN 1992-1-1 and EN 1992-1-2.
- Use enclosed data for simplified calculation method

**Use Ramset™ iExpert Anchor Software for optimised calculation or where a greater range of anchor layout detail is needed**

### Benefits, Advantages and Features

- 120 year working Life
- Fire tested to European Assessment Document

**Greater productivity:**

- Anchors in dry, damp, wet or flooded holes

**Greater security:**

- Strong bond
- Rated for sustained loading

**Versatile:**

- Anchors in carbide drilled and diamond drilled holes
- Cold and temperate climates

**Greater safety:**

- Low odour
- VOC Compliant
- Suitable for contact with drinking water


### Principal Applications

- Threaded Studs
- Starter Bars
- Threaded Inserts
- Over-head installation
- Steel Columns
- Hand Rails
- Road Stitching

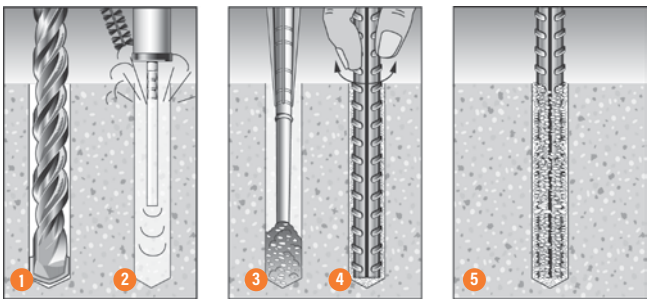
### Installation & Substrate Temperature Range

| Minimum | Maximum |
|---|---|
| 5°C | 40°C |

### Service Temperature Limits

-40°C to +75°C

### Installation




1. Drill recommended diameter and depth hole.
2. **Important:** For hammer drilling technique clean dust and debris from hole with stiff wire brush and blower in the following sequence: blow x 2, brush x 2, blow x 2, brush x 2, blow x 2.
3. Screw mixing nozzle onto cartridge and dispense adhesive to waste until colour is orange. Insert mixing nozzle to bottom of hole.
   Fill hole to 2/3 the hole depth slowly, ensuring no air pockets form.
4. Insert **Ramset™** ChemSet™ Anchor Stud/rebar to bottom of hole while turning.
5. Allow ChemSet™ Reo 502™ Xtrem™ to cure as per setting times.

### Setting Times

| Temperature of base material | Gel Time | Curing time in dry concrete | Curing time in wet and flooded concrete |
|---|---|---|---|
| 5°C | 75 min | 30h | 60 h |
| 10°C | 45 min | 22h | 44 h |
| 15°C | 35 min | 14h | 28 h |
| 20°C | 22 min | 7h | 14 h |
| 25°C | 14 min | 5h | 10 h |
| 30°C | 8 min | 4h | 8 h |
| 35°C | 6 min | 3h | 6h |
| 40°C | 4 min | 2h 45min | 5h 30min |

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## Installation Details

### ChemSet™ Reo 502™ Xtrem™ with Reinforcing Bar

| Anchor size, $d_b$ (mm) | Drilled hole diameter, $d_h$ (mm) |
|---|---|
| 10 | 12 |
| 12 | 15 |
| 16 | 20 |
| 20 | 25 |
| 24 | 30 |
| 25 | 30 |
| 28 | 35 |
| 32 | 40 |
| 36 | 45 |
| 40 | 50 |

### DESCRIPTION AND PART NUMBERS

| Description | Cartridge Size | Part No. |
|---|---|---|
| ChemSet™ Reo 502™ Xtrem™ | 600 ml | CREO502X |

### Typical Engineering Properties of Grade 500 Reinforcing Bar

| Rebar size | 10 | 12 | 16 | 20 | 24 | 25 | 28 | 32 | 36 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|
| Drilled hole dia, $d_h$ (mm) | 12 | 15 | 20 | 25 | 30 | 30 | 35 | 40 | 45 | 50 |
| Stress area, $A_s$ ($mm^2$) | 78.5 | 113 | 201 | 314 | 452 | 491 | 616 | 804 | 1020 | 1260 |
| Yield stress, $f_{sy}$ (MPa) | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| Tensile steel yield capacity, $N_{us} = N_{sy}$, (kN) | 39.3 | 56.5 | 100.5 | 157.0 | 226.0 | 245.5 | 308.0 | 402.0 | 509.0 | 628.0 |
| Design tensile steel resistance $\phi N_{us}$ (kN) | 31.4 | 45.2 | 80.4 | 125.6 | 180.8 | 196.4 | 246.4 | 321.6 | 407.2 | 502.4 |

For further information refer to reinforcing bar manufacturer's published information and current revision of **AS/NZS 4671**

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## FIRE RATED CHEMICAL ANCHOR

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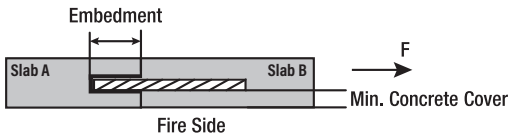
**Reinforcing Bar Anchored with ChemSet™ Reo502™ Xtrem™**




**Design Case 1**

## Fire resistance duration = 30 minutes

**For Reinforcing Bar Steel Grade - 500 MPa and Concrete cylinder compressive strength $f'_c$ = 20 MPa**

| Rebar Size | Hole Diameter (mm) | *Min. Concrete Cover(mm) | **Design reistance in accordance with Eurocode 2 for fire duration 30 minutes - $R_{d,fi}$ (kN) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 12 | 50 | 3.32 | 4.98 | 6.64 | 8.30 | 9.96 | 11.62 | 13.28 | 14.94 | 16.59 | 18.25 | 19.91 | 23.23 | 26.55 | 29.87 |
| | | 70 | 7.63 | 11.45 | 15.26 | 19.08 | 22.89 | 26.71 | 30.52 | **31.42** | **31.42** | **31.42** | **31.42** | **31.42** | **31.42** | **31.42** |
| 12 | 15 | 50 | 3.98 | 5.97 | 7.97 | 9.96 | 11.95 | 13.94 | 15.93 | 17.92 | 19.91 | 21.91 | 23.90 | 27.88 | 31.86 | 35.84 |
| | | 70 | 9.16 | 13.73 | 18.31 | 22.89 | 27.47 | 32.05 | 36.63 | 41.20 | **45.24** | **45.24** | **45.24** | **45.24** | **45.24** | **45.24** |
| 16 | 20 | 50 | | 7.97 | 10.62 | 13.28 | 15.93 | 18.59 | 21.24 | 23.90 | 26.55 | 29.21 | 31.86 | 37.17 | 42.48 | 47.79 |
| | | 70 | | 18.31 | 24.42 | 30.52 | 36.63 | 42.73 | 48.83 | 54.94 | 61.04 | 67.15 | 73.25 | **80.42** | **80.42** | **80.42** |
| 20 | 25 | 50 | | | 13.28 | 16.59 | 19.91 | 23.23 | 26.55 | 29.87 | 33.19 | 36.51 | 39.83 | 46.47 | 53.10 | 59.74 |
| | | 70 | | | 30.52 | 38.15 | 45.78 | 53.41 | 61.04 | 68.67 | 76.30 | 83.93 | 91.56 | 106.83 | 122.09 | **125.66** |
| 24 | 30 | 50 | | | | 19.91 | 23.90 | 27.88 | 31.86 | 35.84 | 39.83 | 43.81 | 47.79 | 55.76 | 63.72 | 71.69 |
| | | 70 | | | | 45.78 | 54.94 | 64.10 | 73.25 | 82.41 | 91.56 | 100.72 | 109.88 | 128.19 | 146.50 | 164.82 |
| 25 | 30 | 50 | | | | 20.74 | 24.89 | 29.04 | 33.19 | 37.34 | 41.49 | 45.64 | 49.78 | 58.08 | 66.38 | 74.68 |
| | | 70 | | | | 47.69 | 57.23 | 66.77 | 76.30 | 85.84 | 95.38 | 104.92 | 114.46 | 133.53 | 152.61 | 171.68 |
| 28 | 35 | 50 | | | | | 27.88 | 32.53 | 37.17 | 41.82 | 46.47 | 51.11 | 55.76 | 65.05 | 74.34 | 83.64 |
| | | 70 | | | | | 64.10 | 74.78 | 85.46 | 96.14 | 106.83 | 117.51 | 128.19 | 149.56 | 170.92 | 192.29 |
| 32 | 40 | 50 | | | | | | 37.17 | 42.48 | 47.79 | 53.10 | 58.41 | 63.72 | 74.34 | 84.97 | 95.59 |
| | | 70 | | | | | | 85.46 | 97.67 | 109.88 | 122.09 | 134.30 | 146.50 | 170.92 | 195.34 | 219.76 |
| 36 | 45 | 50 | | | | | | 41.82 | 47.79 | 53.77 | 59.74 | 65.72 | 71.69 | 83.64 | 95.59 | 107.53 |
| | | 70 | | | | | | 96.14 | 109.88 | 123.61 | 137.35 | 151.08 | 164.82 | 192.29 | 219.76 | 247.23 |
| 40 | 50 | 50 | | | | | | 46.47 | 53.10 | 59.74 | 66.38 | 73.02 | 79.66 | 92.93 | 106.21 | 119.48 |
| | | 70 | | | | | | 106.83 | 122.09 | 137.35 | 152.61 | 167.87 | 183.13 | 213.65 | 244.17 | 274.69 |
| Embedment (mm) | | | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 700 | 800 | 900 |

*Note: Minimum concrete cover based on minimum slab thickness of 200mm according to Eurocode 2 Part 1.2 (EN 1992-1-2)

**Note: Performance data based on hammer drilling technique. For data using core drilling technique, please refer to Ramset Engineer.

Bold values depicts design tensile steel resistance governs

**Design Case 2**

## Fire resistance duration = 60 minutes

**For Reinforcing Bar Steel Grade - 500 MPa and Concrete cylinder compressive strength $f'_c$ = 20 MPa**

| Rebar Size | Hole Diameter (mm) | *Min. Concrete Cover(mm) | **Design reistance in accordance with Eurocode 2 for fire duration 60 minutes - $R_{d,fi}$ (kN) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 12 | 80 | 3.64 | 5.47 | 7.29 | 9.11 | 10.93 | 12.76 | 14.58 | 16.40 | 18.22 | 20.04 | 21.87 | 25.51 | 29.15 | **31.42** |
| | | 100 | 6.60 | 9.91 | 13.21 | 16.51 | 19.81 | 23.12 | 26.42 | 29.72 | **31.42** | **31.42** | **31.42** | **31.42** | **31.42** | **31.42** |
| 12 | 15 | 80 | 4.37 | 6.56 | 8.75 | 10.93 | 13.12 | 15.31 | 17.49 | 19.68 | 21.87 | 24.05 | 26.24 | 30.61 | 34.99 | 39.36 |
| | | 100 | 7.93 | 11.89 | 15.85 | 19.81 | 23.78 | 27.74 | 31.70 | 35.67 | 39.63 | **43.59** | **45.24** | **45.24** | **45.24** | **45.24** |
| 16 | 20 | 80 | | 8.75 | 11.66 | 14.58 | 17.49 | 20.41 | 23.32 | 26.24 | 29.15 | 32.07 | 34.99 | 40.82 | 46.65 | 52.48 |
| | | 100 | | 15.85 | 21.13 | 26.42 | 31.70 | 36.99 | 42.27 | 47.55 | 52.84 | 58.12 | 63.40 | 73.97 | **80.42** | **80.42** |
| 20 | 25 | 80 | | | 14.58 | 18.22 | 21.87 | 25.51 | 29.15 | 32.80 | 36.44 | 40.09 | 43.73 | 51.02 | 58.31 | 65.60 |
| | | 100 | | | 26.42 | 33.02 | 39.63 | 46.23 | 52.84 | 59.44 | 66.05 | 72.65 | 79.26 | 92.46 | 105.67 | 118.88 |
| 24 | 30 | 80 | | | | 21.87 | 26.24 | 30.61 | 34.99 | 39.36 | 43.73 | 48.10 | 52.48 | 61.22 | 69.97 | 78.72 |
| | | 100 | | | | 39.63 | 47.55 | 55.48 | 63.40 | 71.33 | 79.26 | 87.18 | 95.11 | 110.96 | 126.81 | 142.66 |
| 25 | 30 | 80 | | | | 22.78 | 27.33 | 31.89 | 36.44 | 41.00 | 45.55 | 50.11 | 54.66 | 63.78 | 72.89 | 82.00 |
| | | 100 | | | | 41.28 | 49.53 | 57.79 | 66.05 | 74.30 | 82.56 | 90.81 | 99.07 | 115.58 | 132.09 | 148.60 |
| 28 | 35 | 80 | | | | | 30.61 | 35.71 | 40.82 | 45.92 | 51.02 | 56.12 | 61.22 | 71.43 | 81.63 | 91.84 |
| | | 100 | | | | | 55.48 | 64.73 | 73.97 | 83.22 | 92.46 | 101.71 | 110.96 | 129.45 | 147.94 | 166.44 |
| 32 | 40 | 80 | | | | | | 40.82 | 46.65 | 52.48 | 58.31 | 64.14 | 69.97 | 81.63 | 93.29 | 104.96 |
| | | 100 | | | | | | 73.97 | 84.54 | 95.11 | 105.67 | 116.24 | 126.81 | 147.94 | 169.08 | 190.21 |
| 36 | 45 | 80 | | | | | | 45.92 | 52.48 | 59.04 | 65.60 | 72.16 | 78.72 | 91.84 | 104.96 | 118.08 |
| | | 100 | | | | | | 83.22 | 95.11 | 107.00 | 118.88 | 130.77 | 142.66 | 166.44 | 190.21 | 213.99 |
| 40 | 50 | 80 | | | | | | 51.02 | 58.31 | 65.60 | 72.89 | 80.17 | 87.46 | 102.04 | 116.62 | 131.19 |
| | | 100 | | | | | | 92.46 | 105.67 | 118.88 | 132.09 | 145.30 | 158.51 | 184.93 | 211.35 | 237.77 |
| Embedment (mm) | | | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 700 | 800 | 900 |

*Note: Minimum concrete cover based on minimum slab thickness of 200mm according to Eurocode 2 Part 1.2 (EN 1992-1-2)

**Note: Performance data based on hammer drilling technique. For data using core drilling technique, please refer to Ramset Engineer.

Bold values depicts design tensile steel resistance governs

**Note: Design resistance is based on 20 MPa concrete strength. For values in higher concrete strengths, and design optimisation, please refer to Ramset iExpert Anchor Software.**

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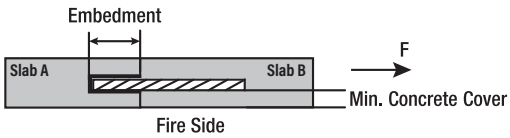


**Design Case 3**

## Fire resistance duration = 90 minutes

**For Reinforcing Bar Steel Grade - 500 MPa and Concrete cylinder compressive strength $f'_c$ = 20 MPa**

| Rebar Size | Hole Diameter (mm) | *Min. Concrete Cover(mm) | **Design reistance in accordance with Eurocode 2 for fire duration 90 minutes - $R_{d,fi}$ (kN) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 12 | 90 | 4.05 | 5.39 | 6.74 | 8.09 | 9.44 | 10.79 | 12.14 | 13.49 | 14.84 | 16.18 | 18.88 | 21.58 | 24.28 | 26.97 |
| | | 100 | 5.28 | 7.03 | 8.79 | 10.55 | 12.31 | 14.07 | 15.83 | 17.59 | 19.34 | 21.10 | 24.62 | 28.14 | **31.42** | **31.42** |
| 12 | 15 | 90 | 4.86 | 6.47 | 8.09 | 9.71 | 11.33 | 12.95 | 14.57 | 16.18 | 17.80 | 19.42 | 22.66 | 25.90 | 29.13 | 32.37 |
| | | 100 | 6.33 | 8.44 | 10.55 | 12.66 | 14.77 | 16.88 | 18.99 | 21.10 | 23.21 | 25.32 | 29.54 | 33.76 | 37.98 | 42.20 |
| 16 | 20 | 90 | | 8.63 | 10.79 | 12.95 | 15.11 | 17.26 | 19.42 | 21.58 | 23.74 | 25.90 | 30.21 | 34.53 | 38.84 | 43.16 |
| | | 100 | | 11.25 | 14.07 | 16.88 | 19.70 | 22.51 | 25.32 | 28.14 | 30.95 | 33.76 | 39.39 | 45.02 | 50.65 | 56.27 |
| 20 | 25 | 90 | | | 13.49 | 16.18 | 18.88 | 21.58 | 24.28 | 26.97 | 29.67 | 32.37 | 37.76 | 43.16 | 48.55 | 53.95 |
| | | 100 | | | 17.59 | 21.10 | 24.62 | 28.14 | 31.65 | 35.17 | 38.69 | 42.20 | 49.24 | 56.27 | 63.31 | 70.34 |
| 24 | 30 | 90 | | | | 19.42 | 22.66 | 25.90 | 29.13 | 32.37 | 35.61 | 38.84 | 45.32 | 51.79 | 58.27 | 64.74 |
| | | 100 | | | | 25.32 | 29.54 | 33.76 | 37.98 | 42.20 | 46.42 | 50.65 | 59.09 | 67.53 | 75.97 | 84.41 |
| 25 | 30 | 90 | | | | 20.23 | 23.60 | 26.97 | 30.35 | 33.72 | 37.09 | 40.46 | 47.21 | 53.95 | 60.69 | 67.44 |
| | | 100 | | | | 26.38 | 30.77 | 35.17 | 39.57 | 43.96 | 48.36 | 52.76 | 61.55 | 70.34 | 79.13 | 87.93 |
| 28 | 35 | 90 | | | | | 26.44 | 30.21 | 33.99 | 37.76 | 41.54 | 45.32 | 52.87 | 60.42 | 67.98 | 75.53 |
| | | 100 | | | | | 34.47 | 39.39 | 44.31 | 49.24 | 54.16 | 59.09 | 68.93 | 78.78 | 88.63 | 98.48 |
| 32 | 40 | 90 | | | | | | 34.53 | 38.84 | 43.16 | 47.48 | 51.79 | 60.42 | 69.05 | 77.69 | 86.32 |
| | | 100 | | | | | | 45.02 | 50.65 | 56.27 | 61.90 | 67.53 | 78.78 | 90.04 | 101.29 | 112.55 |
| 36 | 45 | 90 | | | | | | 38.84 | 43.70 | 48.55 | 53.41 | 58.27 | 67.98 | 77.69 | 87.40 | 97.11 |
| | | 100 | | | | | | 50.65 | 56.98 | 63.31 | 69.64 | 75.97 | 88.63 | 101.29 | 113.95 | 126.61 |
| 40 | 50 | 90 | | | | | | 43.16 | 48.55 | 53.95 | 59.34 | 64.74 | 75.53 | 86.32 | 97.11 | 107.90 |
| | | 100 | | | | | | 56.27 | 63.31 | 70.34 | 77.37 | 84.41 | 98.48 | 112.55 | 126.61 | 140.68 |
| Embedment (mm) | | | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 700 | 800 | 900 | 1000 |

*Note: Minimum concrete cover based on minimum slab thickness of 200mm according to Eurocode 2 Part 1.2 (EN 1992-1-2)
**Note: Performance data based on hammer drilling technique. For data using core drilling technique, please refer to Ramset Engineer.
Bold values depicts design tensile steel resistance governs

**Design Case 4**

## Fire resistance duration = 120 minutes

**For Reinforcing Bar Steel Grade - 500 MPa and Concrete cylinder compressive strength $f'_c$ = 20 MPa**

| Rebar Size | Hole Diameter (mm) | *Min. Concrete Cover(mm) | **Design reistance in accordance with Eurocode 2 for fire duration 120 minutes - $R_{d,fi}$ (kN) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 12 | 90 | 3.64 | 4.55 | 5.47 | 6.38 | 7.29 | 8.20 | 9.11 | 10.02 | 10.93 | 12.75 | 14.57 | 16.40 | 18.22 | 20.04 |
| | | 100 | 4.64 | 5.80 | 6.96 | 8.12 | 9.28 | 10.44 | 11.60 | 12.76 | 13.92 | 16.24 | 18.56 | 20.88 | 23.20 | 25.52 |
| 12 | 15 | 90 | 4.37 | 5.47 | 6.56 | 7.65 | 8.74 | 9.84 | 10.93 | 12.02 | 13.12 | 15.30 | 17.49 | 19.67 | 21.86 | 24.05 |
| | | 100 | 5.57 | 6.96 | 8.35 | 9.74 | 11.13 | 12.53 | 13.92 | 15.31 | 16.70 | 19.48 | 22.27 | 25.05 | 27.84 | 30.62 |
| 16 | 20 | 90 | | 7.29 | 8.74 | 10.20 | 11.66 | 13.12 | 14.57 | 16.03 | 17.49 | 20.40 | 23.32 | 26.23 | 29.15 | 32.06 |
| | | 100 | | 9.28 | 11.13 | 12.99 | 14.85 | 16.70 | 18.56 | 20.41 | 22.27 | 25.98 | 29.69 | 33.40 | 37.11 | 40.83 |
| 20 | 25 | 90 | | | 10.93 | 12.75 | 14.57 | 16.40 | 18.22 | 20.04 | 21.86 | 25.50 | 29.15 | 32.79 | 36.43 | 40.08 |
| | | 100 | | | 13.92 | 16.24 | 18.56 | 20.88 | 23.20 | 25.52 | 27.84 | 32.47 | 37.11 | 41.75 | 46.39 | 51.03 |
| 24 | 30 | 90 | | | | 15.30 | 17.49 | 19.67 | 21.86 | 24.05 | 26.23 | 30.60 | 34.98 | 39.35 | 43.72 | 48.09 |
| | | 100 | | | | 19.48 | 22.27 | 25.05 | 27.84 | 30.62 | 33.40 | 38.97 | 44.54 | 50.10 | 55.67 | 61.24 |
| 25 | 30 | 90 | | | | 15.94 | 18.22 | 20.49 | 22.77 | 25.05 | 27.33 | 31.88 | 36.43 | 40.99 | 45.54 | 50.10 |
| | | 100 | | | | 20.30 | 23.20 | 26.10 | 29.00 | 31.89 | 34.79 | 40.59 | 46.39 | 52.19 | 57.99 | 63.79 |
| 28 | 35 | 90 | | | | | 20.40 | 22.95 | 25.50 | 28.05 | 30.60 | 35.71 | 40.81 | 45.91 | 51.01 | 56.11 |
| | | 100 | | | | | 25.98 | 29.23 | 32.47 | 35.72 | 38.97 | 45.46 | 51.96 | 58.45 | 64.95 | 71.44 |
| 32 | 40 | 90 | | | | | | 26.23 | 29.15 | 32.06 | 34.98 | 40.81 | 46.64 | 52.47 | 58.29 | 64.12 |
| | | 100 | | | | | | 33.40 | 37.11 | 40.83 | 44.54 | 51.96 | 59.38 | 66.80 | 74.23 | 81.65 |
| 36 | 45 | 90 | | | | | | 29.51 | 32.79 | 36.07 | 39.35 | 45.91 | 52.47 | 59.02 | 65.58 | 72.14 |
| | | 100 | | | | | | 37.58 | 41.75 | 45.93 | 50.10 | 58.45 | 66.80 | 75.16 | 83.51 | 91.86 |
| 40 | 50 | 90 | | | | | | 32.79 | 36.43 | 40.08 | 43.72 | 51.01 | 58.29 | 65.58 | 72.87 | 80.16 |
| | | 100 | | | | | | 41.75 | 46.39 | 51.03 | 55.67 | 64.95 | 74.23 | 83.51 | 92.78 | 102.06 |
| Embedment (mm) | | | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 700 | 800 | 900 | 1000 | 1100 |

*Note: Minimum concrete cover based on minimum slab thickness of 200mm according to Eurocode 2 Part 1.2 (EN 1992-1-2)
**Note: Performance data based on hammer drilling technique. For data using core drilling technique, please refer to Ramset Engineer.

**Note: Design resistance is based on 20 MPa concrete strength. For values in higher concrete strengths, and design optimisation, please refer to Ramset iExpert Anchor Software.**