Date	4th August 2009
Number	RTD04 – Issue D

IMPORTANT USER INFORMATION

Reid™ Panel Anchor – PA1

Precast and Tilt-Up Panel Bracing

INSTALLATION – 4 Steps

Step 1: CONCRETE

- Minimum concrete strength 20MPa
- Minimum anchor spacing 500mm
- Minimum edge distance 225mm
- Minimum concrete thickness 125mm

Step 2: DRILL

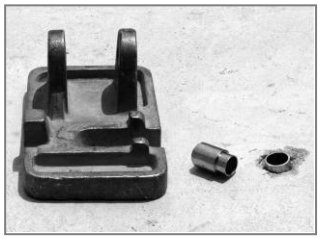
1 - Drill a 20mm hole to a minimum depth of 110mm
2 - Blow or vacuum dust from hole

Step 3: PLACE and SET

1 – Place Brace foot over drilled hole
2 – Use 2 to 5 blows from ash hammer to drive anchor into hole until washer is flush with brace foot
3 – Apply torque of 130Nm to set

Step 4: REMOVAL

1 – Remove bolt
2 – Slide brace foot away from Drilled hole
3 – Kick spacer out of hole
4 – Fill hole with grout



ORDERING – Panel Anchor

Part Number PA1 (Box of 50)

INSTALLATION – Features and Benefits

Manufacturers mark and WLL stamped on the bolt head.
Simple on site inspection, no hold ups!

30mm flange head diameter, 21mm AF head and 38mm washer.
Site-tough and ready for installation

'Kick out' spacer makes Brace removal simple.
Simply kick out the spacer and grout up the hole

20mm diameter anchor size and hole size.
Uses the most commonly Available drill bit size on site

Heavy duty, thick expansion sleeve.
Reliable, high performance

Locking cone nut engages the concrete.
Ensures reliable removal Of bolt – every time!

1300 780 250

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Precast and Tilt-Up Panel Bracing

AS3850 – 2003 Compliance Statement

The use of expansion anchors for the purpose of securing precast concrete wall panel braces is subject to the requirements of AS3850 – 2003, Tilt – Up Concrete Construction.

Reid Panel Anchor complies with AS3850 – 2003, specifically as follows:

✓ Clause 2.4.3 (iii) "Expansion anchors shall be of the load controlled type"

COMPLIES **Reid Panel Anchor is a thick shield load controlled expansion anchor.**

✓ Clause 2.2 (b) Shall be derived: "By Dividing $\emptyset R_u$, obtained from the relevant Australian Standard, by the Limit State Factor (LSF)"

Appendix A Clause A8.2.1 requires anchors to be tested to tensile failure to determine characteristic tensile capacity, R_u.

COMPLIES **Reid Panel Anchor achieves a Tensile WLL of 27.8kN** in accordance with these clauses

✓ Clause 2.2 (c) WLL shall be obtained: "By dividing the multiple of the mean value of the test results (x) (see Appendix A) and the capacity reduction factor (Ø), by the limit state factor (LSF) and the sampling factor, k_s:

i.e. WLL = $\emptyset x / k_s$ (LSF)

Appendix A Clause A8.2.1 – "The WLL of panel brace fixings shall be determined by measuring the residual preload in tension 14 days after setting".

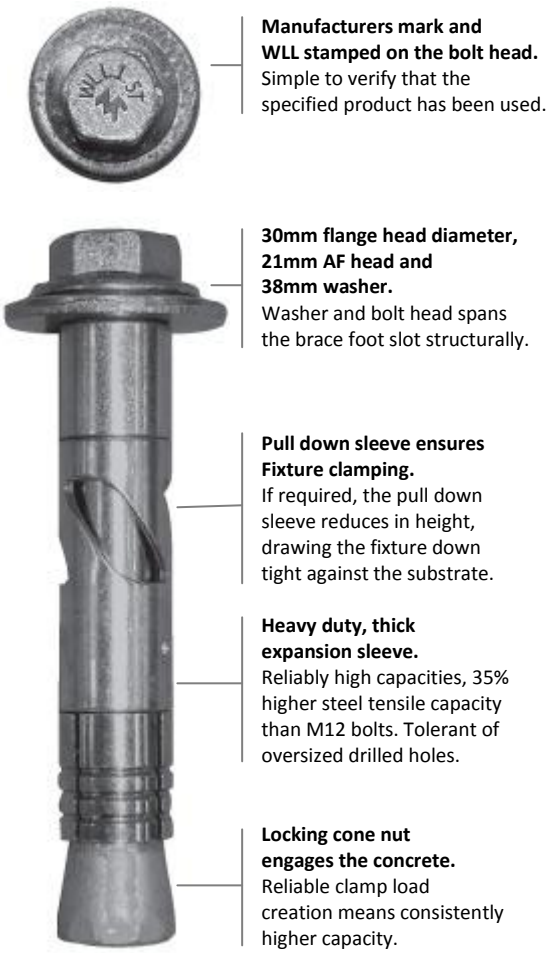
COMPLIES **Reid Panel Anchor achieves a Tensile WLL of 15.1kN** in accordance with these clauses

✓ Clause 2.4.3 (iii) Bracing Inserts; Expansion anchors: "Where these anchors are used, the WLL shall be limited to 0.65 of the 'first slip load', established in accordance with Appendix A"

Appendix A clause A8.2.6 provides the test method

COMPLIES **Reid Panel Bracing Anchor achieves a max WLL of 17.4kN** in accordance with these clauses

ENGINEERING – Features and Benefits



Manufacturers mark and WLL stamped on the bolt head. Simple to verify that the specified product has been used.

30mm flange head diameter, 21mm AF head and 38mm washer. Washer and bolt head spans the brace foot slot structurally.

Pull down sleeve ensures Fixture clamping. If required, the pull down sleeve reduces in height, drawing the fixture down tight against the substrate.

Heavy duty, thick expansion sleeve. Reliably high capacities, 35% higher steel tensile capacity than M12 bolts. Tolerant of oversized drilled holes.

Locking cone nut engages the concrete. Reliable clamp load creation means consistently higher capacity.

PERFORMANCE TESTED

The Reid™ Panel Anchor is recommended, based on our (independently witnessed) testing, a max. Tensile WLL of 15.0kN, and a max. Shear WLL of 29.6kN, for the purpose of anchoring precast concrete wall panels in accordance with AS3850-2003 and as outlined above will exceed this limit.

CONCRETE INSTITUTE of AUSTRALIA

ACAA

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