

PBA PANEL BRACE ANCHOR



ICCONS®
Serious Connections®

INDEPENDENTLY TESTED IN ACCORDANCE WITH THE LATEST AS 3850.1:2015

TDS | 1001.3

AS 3850.1:2015

Torque controlled
expansion anchor

Engineered
compression ring
for fixture
clamping effect

30mm
socket size

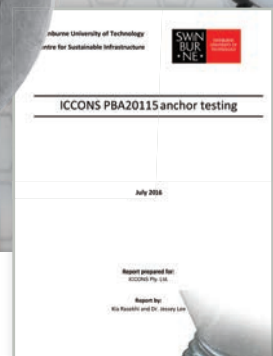
Optimum
geometry for
high performance
(low slip)

Heavy duty heat
treated washer

Class 8.8 bolt for
high shear capacity

Tested in
accordance with
AS3850.1:2015

Class 8.8
Clear plated



Testing of the **ICCONS® PBA20115** Panel Bracing Anchor has been conducted via an independent NATA accredited laboratory in accordance with clause A9 of AS 3850.1:2015.

AS 3850:2003 was revised in 2015 and published as AS 3850 (Prefabricated concrete elements) Part 1 and 2. Part 1 – General requirements and Part 2 - Building construction.

Testing of Brace inserts is covered in Appendix A9 of AS 3850.1:2015 and consists of a much more rigorous testing regime to that referenced in the previous AS 3850:2003.

The new testing criteria assesses the performance of brace inserts for;

- Static tension
- Shear
- Cyclic
- Installation Torque



CLEAR

Part No.	Description	mm	mm	mm	mm	Nm	qty	qty
PBA20115	M14 x 115mm Panel Brace Anchor	20	95	30	20	150	25	75



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ARE YOU USING INDEPENDENTLY TESTED AND COMPLIANT PANEL BRACING ANCHORS!

AS 3850.1&2:2015 and Appendix A9 now provide an improved level of safety and quality control for the prefabricated concrete construction industry.

Due to the rigorous testing regime outlined in Appendix A9, all Brace Inserts tested to the new standard will have revised Working Load Limits (WLL), this does not reflect a reduction in product quality but an improved level of safety. Iccons PBA20115 has been independently tested providing a true and unbiased assessment of the PBA20115.



PBA20115 INDEPENDENT COMPLIANCE DATA

Test Type	 Anchor Size	 Drill Size (mm)	 Anchor Depth (mm)	Concrete Compressive Strength 20MPa	
				Characteristic Ultimate Strength (kN)	Working Load Limit (WLL) (kN)
AS 3850.1:2015 (Clause 2.2)				(kN)	(kN)
Tension	M14	20	95	37.7	16.8
Shear				96.9	43.1

COMBINED TENSION AND SHEAR

Where the PBA anchor is subjected to combined tension and shear the anchor shall conform to the interaction relationship included in the following equation:

$$\left[\frac{N_s}{(R_{u,N}/F)} \right]^{1.5} + \left[\frac{V_s}{(R_{u,V}/F)} \right]^{1.5} \leq 1.0$$

where

$R_{u,N}$ = characteristic ultimate tensile strength of PBA anchor

$R_{u,V}$ = characteristic ultimate shear strength of PBA anchor

N_s = tensile component of the unfactored applied load

V_s = shear component of the unfactored applied load

F = factor of safety = 2.25

NOTE: If the applied load, or a component of it, is a wind load calculated from AS/NZS 1170.2 or AS/NZS 1170.0, it should be divided by 1.5 before placed in this formula (see Clause 2.5.6 of AS 3850.2).

SPECIFICATION

Part #	PBA20115
Product	Panel Brace Anchor
Drill Diameter	20mm
Embedment Depth	95mm
Anchor Spacing	240mm (nominal)
Anchor Edge Distance	300mm (nominal)
Base Material Thickness	150mm (nominal)
Fixture Thickness	20mm (nominal)
Fixture Hole Clearance	22mm - 24mm
Tightening Torque	150Nm



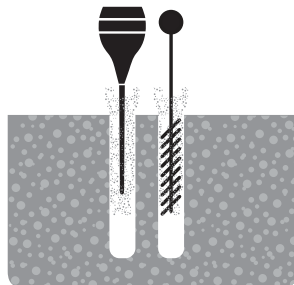
MATERIAL SPECIFICATION

Part #	PBA20115
Bolt	M14 Class 8.8
Washer	C1040 (heat treated)
Compression Ring	Nylon
Head Style	Hex 30mm A/F
Socket Size	30mm
Expansion Sleeve	C1022
Expansion Cone	C1022 heat treated with special torque assist coating for easy expansion and preload functionality
Plating	Clear Zinc plated in accordance with AS 1789-2003

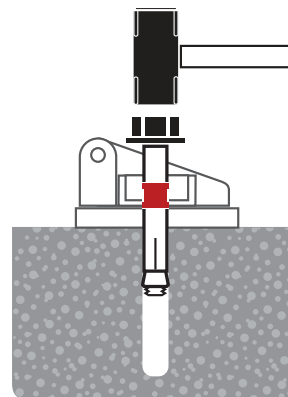
INSTALLATION



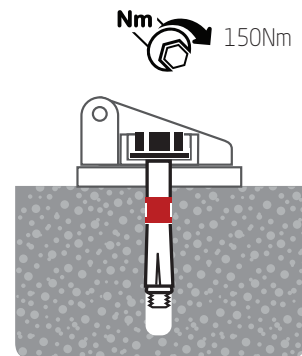
Drill a 20mm hole (Y-Cutter drill bit recommended) to the correct embedment, this should be no more than 80% of the base material thickness.



Blow and brush the hole clean of dust and other material.



Insert the anchor so the bolt head and washer seats firmly against the fixture.



Using a calibrated torque wrench tighten the anchor to 150Nm.

Please contact ICCONS for information on PBA post-installation inspection guidelines as specified in AS 3850.2:2015, clause 5.1.2