PRODUCT DATA SHEET

HEAVY DUTY BOLT DOWN ANCHOR (PSBT)

FEATURES AND BENEFITS

ECONOMICAL: Inexpensive solution for fixing posts to concrete.

STRONG: Hot dip galvanised coating after manufacture and made from 5mm steel.

VERSATILE: Range covers common post sizes.

SPECIFICATIONS

STEEL	G250
THICKNESS	5mm
CORROSION RESISTANCE	Hot dip galvanised (500 g/m^2)
POST SIZES	75mm, 90mm, 100mm

FASTENER REQUIRED

POST STIRRUP TO TIMBER POST	M10 or M12 4.6 grade galvanised Hex Head Bolts M10 or M12 x 50mm 4.6 grade galvanised coach screws
POST BASE TO CONCRETE	M10 or M12 x 100mm galvanised Ramset™t AnkaScrew™

AS1720 & AS4055 COMPLIANT

- Designed in accordance with Pryda testing and relevant Australian standards
- Engineering computations in accordance with the relevant Australian standards
- Not suitable for bushfire-prone or termite-prone areas

RANGE

PRODUCT CODE	MATERIAL	POST SIZE (mm)	BOLT HOLE SIZE	QTY
PSBT75	G250 Steel Hot Dip Galvanised (500 g/m^2)	75	M10	10
PSBT75/12			M12	
PSBT90		90	M10	10
PSBT90/12			M12	
PSBT100		100	M10	10
PSBT100/12			M12	

DESIGN CAPACITIES

Limit State Design capacities (ΦNj) for Pryda Standard Post Anchors resisting wind uplift loads are as follows:

UPLIFT CAPACITIES FOR VARYING JOINT GROUPS								
FIXINGS	POST (mm)	J4	J3	J2	JD5	JD4	JD3	JD2
2 x M10 bolts	75-100	12.0	12.0	12.0	12.0	12.0	12.0	12.0
4 x M10 x 50mm coach screws	75	6.3	10.1	12.0	6.7	10.6	12.0	12.0
	90	6.3	10.1	12.0	6.7	10.6	12.0	12.0
	100	6.1	9.6	12.0	6.5	10.3	12.0	12.0

Notes:

1. The design loads tabulated above require that:
   (a) The timber post must bear on the Post Anchor base and
   (b) All posts must be a minimum of 75 x 75mm section.
2. Select design capacity according to the standard used for determining the design loads.
3. Specified capacities are for concentric vertical load transfer only.
4. The base concrete and fixings to the concrete must provide sufficient resistance to the uplift forces and dead + live loads when embedding into concrete.
5. Wind uplift capacities are based on the AS/NZS1170.2 wind code and AS4055:2012.
6. Post Anchors should NOT be assumed to contribute towards lateral bracing/raking stability of a structure in decks or stumps in sub-structure, unless pre-approved by an Engineer.
7. Post must be laterally restrained at top.
8. Post Anchors are not intended to be used for cantilever posts and balustrades without pre-approval from an Engineer.

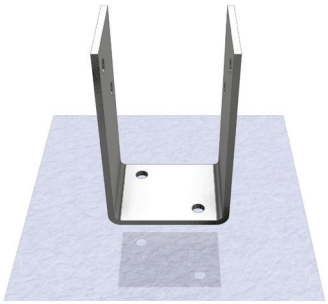
IMPORTANT:

READ THIS DATASHEET IN CONJUNCTION WITH PRYDA POST ANCHORS GUIDE AND REFER TO GENERAL NOTES AND LIMITATIONS.

INSTALLATION

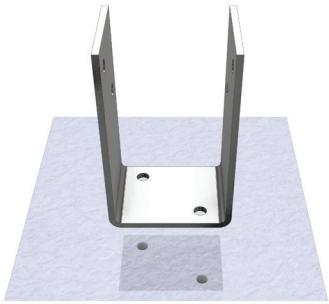
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer to bolt manufacturer guidelines for recommended pre-drill hole size and depth for selected fastener. The design engineer should ensure the structural element is capable of supporting the intended design loads.

STEP 1



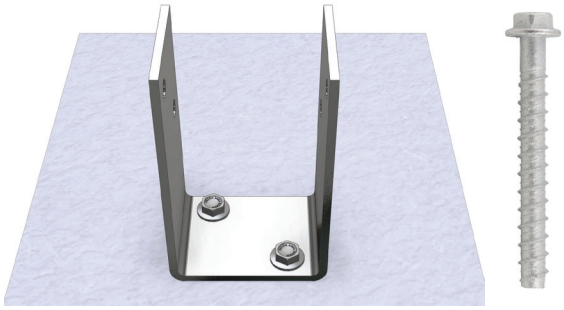
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



- Drill two holes at marked location to required depth for selected hold-down bolt. Refer to bolt manufacturer guidelines for recommended pre-drill hole size and depth. Suggested minimum screw embedment depth 100mm or greater (section detail shown above).

STEP 3



- Position Post Anchor and insert (either M10 or M12) Ramset™ galvanized AnkaScrew™ fastener.
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

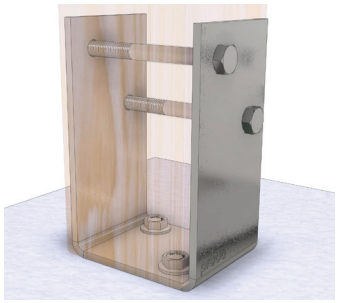
STEP 4

- Place timber post (90 x 90mm) upright into Post Anchor stirrup for direct bearing.
- Ensure to locate post central to support base and vertically plumb.

STEP 5

- Drill through post using saddle holes to mark location. Ensure drill through holes are horizontally levelled and perpendicular to saddle.
- For coach screws, drill pilot holes to the length of selected screws.

STEP 6



- Insert bolt through saddle and passing through timber post. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

INSTALLATION TIPS

FOUNDATION SLOPE

- It is recommended to slope foundations away from the base of the Post Anchor all around.
- Avoid water pooling and buildup of debris around anchor base.
- Not suitable for foundation that is at the same level as natural ground unless deemed fit for purpose and approved by consulting design Engineer.
- Routinely clear away debris or any obstructions at anchor base on a regular basis.
- Tiling or paving around anchor is not recommended as this may result in a recess space around the anchor that may facilitate water pooling and debris buildup.

BOLT LENGTH

- When using Hex Head Bolts for fastening your post, it is recommended to use a length 20mm longer than post side or have a minimum of 2 x thread pitch extend beyond the outward surface of the hex nut.
- Account for the thickness of the saddle, washer(s) and allow sufficient thread of the bolt to pass the hex nut.
- For example, a 110mm Hex Head Bolt would suit a 90mm Post Anchor as shown for Half-Stirrup, Full-Stirrup and Centre-Fix.

POST FASTENERS

- Buildex offer a 40mm & 50mm Construction Screw designed specifically for fixing Post Anchors.
- The enlarged shank is designed for M10 holes and the self drilling point requires no pre-drilling.
- Product Information:
  18G x 40mm, 20 pack – X998278
  18G x 50mm, 20 pack – X998292

CONCRETE FASTENERS

- For fixing to existing concrete, Pryda recommend the use of M10 Hex Head Ramset™ WERCS™ AnkaScrew™ AS10100WGM50 screw in anchor. Having a 100mm minimum length or longer.
- Alternatively, Ramset™ M10 galvanised Dynabolts™ can also be considered provided the connection is deemed fit for purpose by the project consulting Engineer.
- Product Code – DP10100GH or DP12100GH
- For detailed instructions on installation and design properties, see the Ramset™ website: www.ramset.com.au