

# HIGH WIND POST ANCHOR (PSQ)

## FEATURES AND BENEFITS

**STRONG:** The U shape base is designed for maximum hold-down in concrete.

**VERSATILE:** A large range of sizes to suit both post widths and base lengths.

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

## SPECIFICATIONS

STEEL	G250
STIRRUP THICKNESS	5mm
CORROSION RESISTANCE	Hot dip galvanised (500 g/m <sup>2</sup> )
STEM SIZES	300, 450, 600
POST SIZES	75, 90, 100, 125, 150

## FASTENERS REQUIRED

POST STIRRUP TO TIMBER POST	M12 4.6 grade galvanised hex head bolts
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Engineered for high wind areas, including tropical regions. The U shape base is designed for maximum hold-down in concrete.

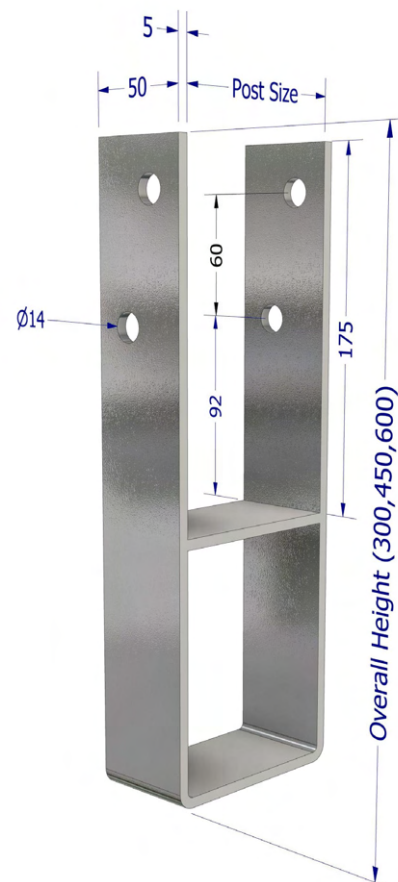
See AS1684:2010 Part 3 - Table 9.20 (j) reinforcing rod install over anchor end.

To be installed central to post and deem to be "fit for purpose" by project Engineer / End user. Post anchors must be installed plumb.



### AS1684, AS1720 & AS4055 COMPLIANT

- Designed in accordance with Pryda testing and relevant Australian standards
- Engineering computations in accordance with the relevant Australian standards



## RANGE

PRODUCT CODE	MATERIAL	STEM SIZE (MM)	POST SIZE (MM)	BOLT HOLE SIZE	QUANTITY	
PSQ30075/12	G250 Steel, Hot Dip Galvanised (500 g/m <sup>2</sup> )	300	75	M12	6	
PSQ30090/12			90			
PSQ300100/12			100			
PSQ45075/12		450	75			4
PSQ45090/12			90			
PSQ450100/12			100			
PSQ60090/12/4		600	90			
PSQ600100/12/4			100			
PSQ600125/12/4			125			
PSQ600150/12/4			150			
PSQ600100/12/4B			100			
		G250 Steel, Hot Dipped Galvanised (500 g/m <sup>2</sup> ) + Black Powder Coating				

## DESIGN CAPACITIES

Limit State Design capacities ( $\Phi N_j$ ) for Pryda Standard Post Anchors resisting wind uplift loads are as follows:

HIGH WIND POST ANCHOR		UPLIFT CAPACITIES FOR VARYING JOINT GROUPS						
FIXINGS	POST (MM)	J4	J3	J2	JD5	JD4	JD3	JD2
2 x M12 bolts	All	33	36	36	36	36	36	36

### NOTES:

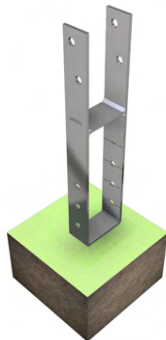
- The maximum downward loading is limited to 25kN at a height of 75mm from base of post to foundation.
- The design loads tabulated above require that:
  - the timber post must bear on the Post Anchor base and
  - all posts must be a minimum of 75 x 75mm section.
- Select design capacity according to the standard used for determining the design loads.
- Specified capacities are for concentric vertical load transfer only.
- The base concrete and fixings to the concrete must provide sufficient resistance to the uplift forces and dead + live loads when embedding into concrete.
- Wind uplift capacities are based on the AS/NZS 1170.2 wind code and AS4055:2012.
- 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.
- Post must be laterally restrained at top.
- 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 FOUND ON PAGES 4 TO 7.

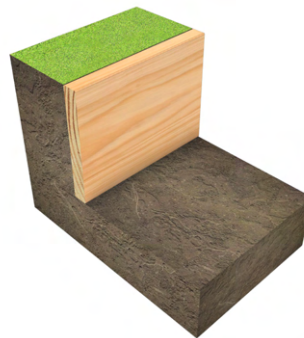
## INSTALLATION - FIXING TO WET CONCRETE

### STEP 1



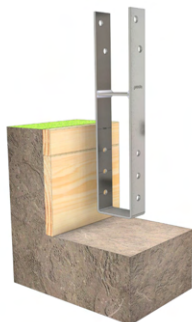
- Orientate anchor as required, measure and mark location of anchor positioning
- Isolated footing should be restricted to stable soil.
- i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

### STEP 2



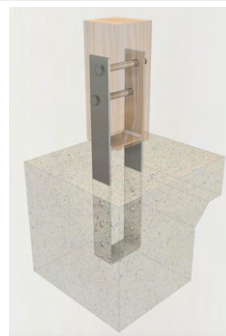
- Dig out ground and construct formwork to required depth as specified by your consulting Engineer.
- Allowance for 150mm anchor embedment and 75mm clearance between underside of post to foundation surface.

### STEP 3



- Position your Post Anchor in the dugout and suspend at location using temporary framing.
- Ensure post anchor is vertically plumb and level.
- Suggested clearance between underside of post to concrete slab finish surface 75mm.
- Pour your concrete and allow to set.

### STEP 4



- Place timber post 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.

### STEP 6



- Insert 2x M12 bolt through saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten

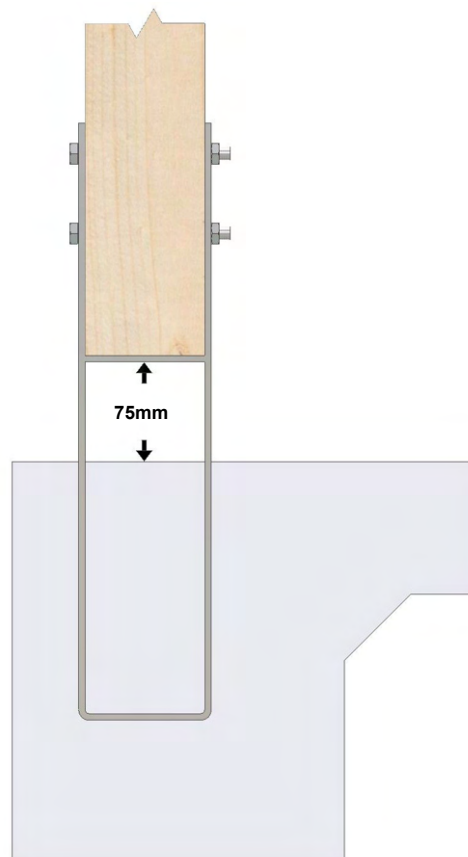
## INSTALLATION TIPS

### 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 and stem.

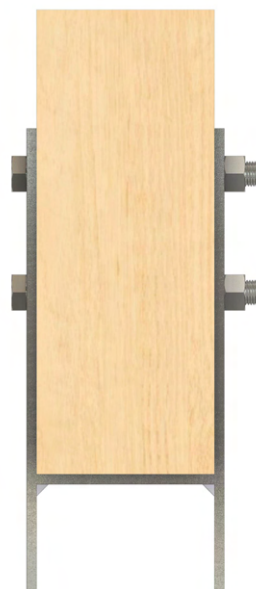
### TERMITE & BUSHFIRE MANAGEMENT

- To meet the requirements of AS 3660.1-2014, a minimum of 75mm clearance between the underside of the Post Anchor saddle and the ground surface or concrete is recommended.
- Routinely clear away debris or any obstructions at anchor base on a regular basis.



### 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 and allow sufficient thread of the bolt to pass the hex nut.
- For example, a 115mm-120mm hex head bolt would suit a 90mm post anchor.



**LOOKING FOR MORE DETAILS OR OTHER ANCHORS IN OUR RANGE?**

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT [PRYDA.COM.AU](https://www.pryda.com.au)