

# CENTRE PIN POST ANCHOR (PSCP)

## FEATURES AND BENEFITS

**CONCEALED:** The central pin allows for a hidden appearance after installation

**VERSATILE:** Bolt to existing concrete or submerge into wet concrete

**STRONG:** Hot dip galvanised coating and made from 4mm steel

## SPECIFICATIONS

|                      |  |
|----------------------|--|
| STEEL                | G250                                       |
| STIRRUP THICKNESS    | 4mm  |
| CORROSION RESISTANCE | Hot dip galvanised (500 g/m <sup>2</sup> ) |
| STEM SIZES           | 130, 300                                   |
| POST SIZES           | 90 - 125                                   |

## FASTENERS REQUIRED

|                             |  |
|-----------------------------|--|
| POST STIRRUP TO TIMBER POST | M10 x 75mm 4.6 grade galvanised coach screws |
| POST BASE TO CONCRETE       | M10 galvanised Ramset Ankascrew              |

For use where the post anchor is NOT to be visible.

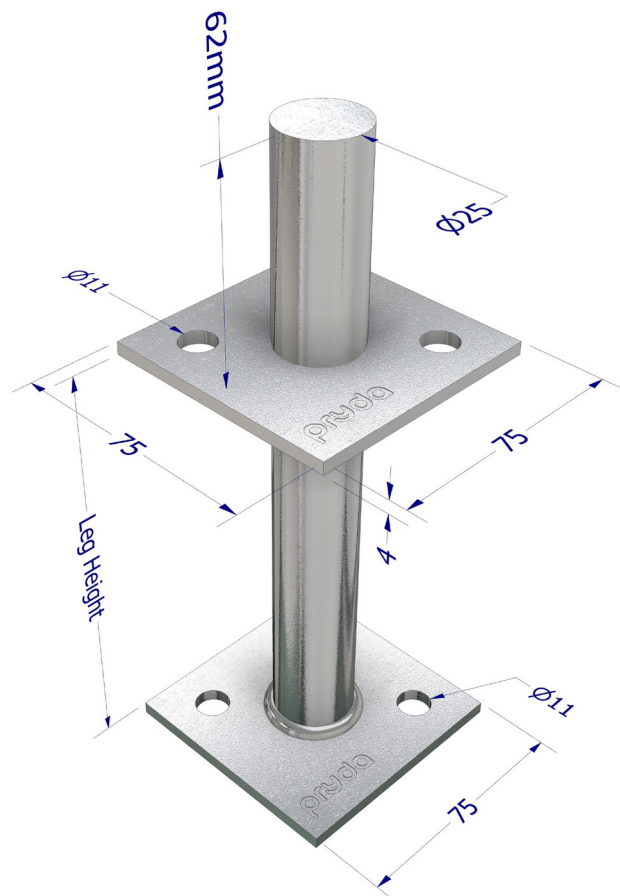
Due to the fixing method, it is only suitable for small spans or where no roofing is used Timber post to be installed central to the post anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure the product is verified to be "Fit for purpose" for each project.

Post anchors must be installed plumb and on flat level ground. Maximum post height 3m, N3 Wind category.



## 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 |
|--------------|--|----------------|----------------|----------------|----------|
| PSCP130      | G250 Steel,<br>Hot Dip Galvanised<br>(500 g/m <sup>2</sup> ) | 130            | 90 - 125       | M10            | 10       |
| PSCP300/6    |  | 300            |                |                | 6        |

## DESIGN CAPACITIES

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

| CENTRE FIX POST ANCHOR        |           | UPLIFT CAPACITIES FOR VARYING JOINT GROUPS |    |     |     |     |     |      |
|-------------------------------|-----------|--|----|-----|-----|-----|-----|------|
| FIXINGS                       | POST (MM) | J4   | J3 | J2  | JD5 | JD4 | JD3 | JD2  |
| 2 x 75mm x M10<br>coach screw | All       | 4.1  | 6  | 8.2 | 3.9 | 5.2 | 7.5 | 10.3 |

### NOTES:

- Design dead and live loads are likely to be limited by the capacity of the post, but should not exceed 16kN at the maximum stem height of 130mm and 24kN for 75mm stem height. For all other heights, design is to be by the consulting Project Engineer. As a guide, limit the axial compression load approximately 50% design capacity for all eccentrically loaded conditions.
- 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 90 x 90mm 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.

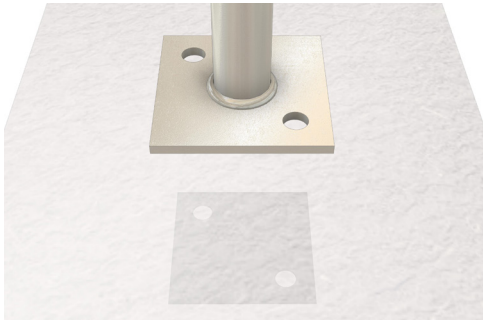
### IMPORTANT:

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 DRY CONCRETE

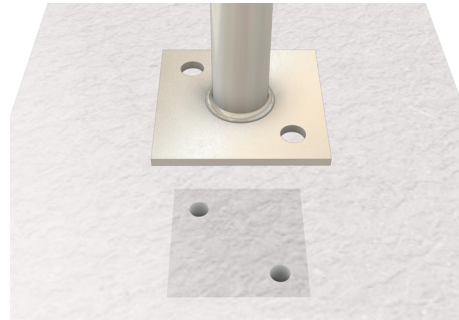
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset Galvanised AnkaScrew. Refer to bolt 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



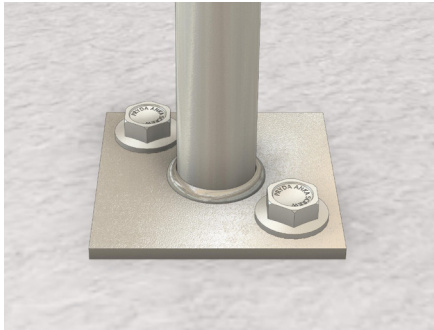
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

### 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 M10 Ramset galvanised AnkaScrew fastener.
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

### STEP 4



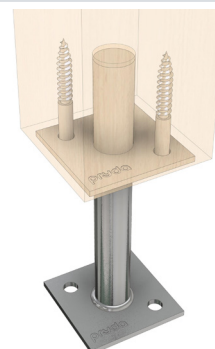
- Drill a hole 26mm in diameter by 65mm in length central to the post.
- Place timber upright into Post Anchor stirrup.

### STEP 5



- Using the base holes as guides, drill 75mm pilot holes.

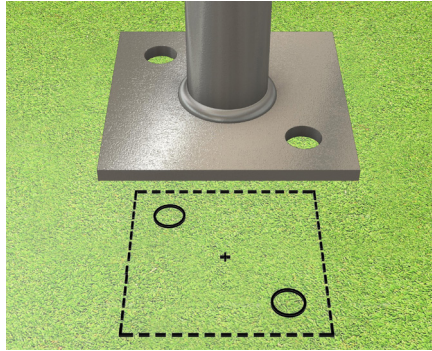
### STEP 6



- Insert M10 x 75mm coach screws and securely fasten.

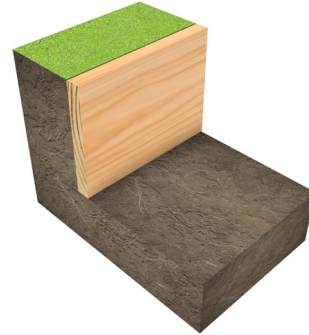
## INSTALLATION - FIXING TO WET CONCRETE

### STEP 1



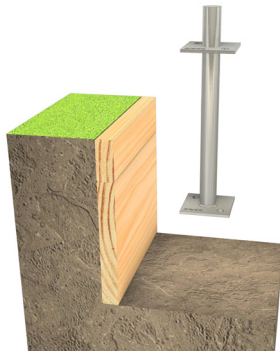
- Orientate anchor as required, measure and mark location of anchor positioning
- Isolated footing should be restricted to stable soil. i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

### STEP 2



- Dig out ground and construct formwork to required depth as specified by your consulting Engineer.
- Allowance for 150mm stem 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



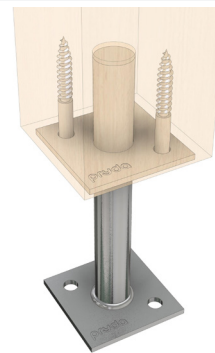
- Drill a hole 26mm in diameter by 65mm in length central to the post.
- Place timber upright into Post Anchor stirrup and secure into position.

### STEP 5



- Using the base holes as guides, drill 75mm pilot holes.

### STEP 6



- Insert M10 x 75mm coach screws and securely fasten.

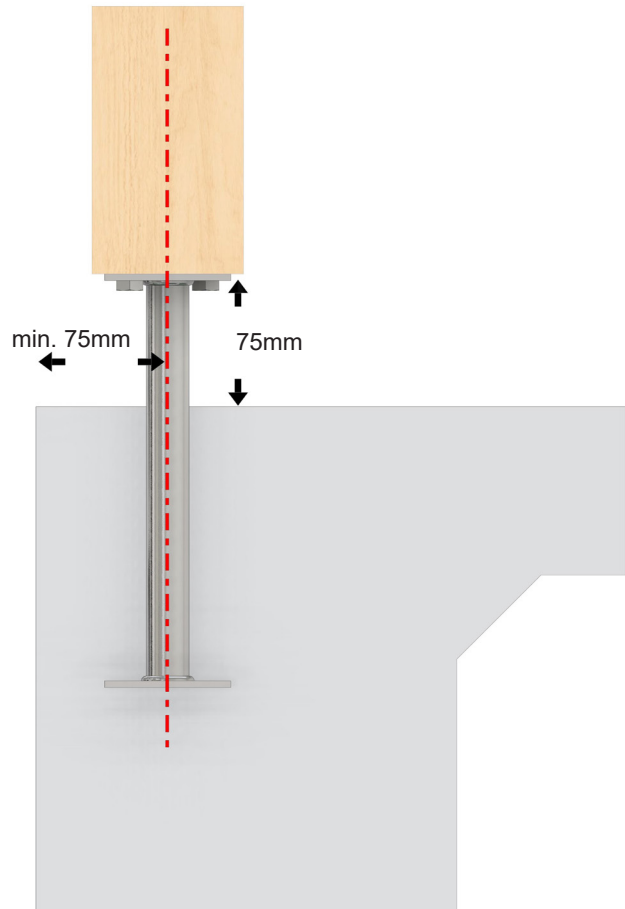
## INSTALLATION TIPS

### 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.

### 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.
- Important to have a regular maintenance routine to clear any debris away from anchor base and stem.



### 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](http://www.ramset.com.au)



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

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT [PRYDA.COM.AU](http://PRYDA.COM.AU)