

DESIGN GUIDE

POST ANCHORS

2022

POST ANCHOR - DESIGN GUIDE

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Product Information Updates

Information contained in this product guide is subject to change.

The latest updates are available from www.pryda.com.au.

POST ANCHORS

Economical Timber Post Anchors



- The distance from the top of the concrete to the underside of the post anchor saddle must not exceed 75mm when used with this design guide. All other distance greater than 75mm will need to be designed by the consulting project Engineer.

Specification

The general specification for Pryda Post Anchors is:

| | |
|---------------------|---|
| STEEL: | Grade 250 - AS1397 Hot dip galvanised |
| SIZES: | To suit all widths of timber posts. A variety of leg lengths – refer to each post anchor type for more detail. |
| APPLICATION: | Wet or dry concrete fixing. |

Advantages

Pryda Post Anchors are manufactured to a consistent quality. Advantages are:

- Compliance with building code requirements
- Hot dip galvanised coating after manufacture, to provide long term protection, suitable for severe external environments (as defined in the Building Code of Australia, HDG 300g/m²) which include sites within 1 km from the coast. (Excludes PSB anchors)
- Stems in stirrup anchors are sealed for termite protection
- Improved stability of the base with bolt holes close to the stem
- A large range of sizes to suit: (a) leg lengths from 65 mm to 600 mm (b) stirrup widths 75, 90, 100, 115, 125 mm (c) several configurations: Full Stirrup, Half Stirrup, Bolt Down, Centre Fix, Centre Pin, High Wind and Adjustable.

Installation

Fixing requirements are included in the Design Capacities table on page 5. To install Pryda Post Anchors:

- Unless noted otherwise, adopt commercial bolts of strength grade 4.6 or greater conforming to AS1111. Use 10 mm (or 3/8") diameter galvanised bolts, except for the High Wind type (PSQ) which requires 12 mm (or 1/2") diameter bolts. Where the bolt head or nut bears directly on the timber (Half Stirrup and Centre Fix types), a 30 mm diameter by 3 mm thick washer is required.
- Use galvanised coach screws- 50x10 mm into side grain and 75x10 mm into end grain.
- Anchors embedded in wet concrete must extend at least 150mm into the concrete to develop the uplift loads tabulated in this guide.
- Recommended minimum bolt length 100mm.

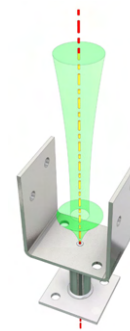
Typical application for all Pryda Post Anchors are for attached open verandah or similar structures for dwellings.

All other usage must be verified/designed by consulting Structural Engineer.

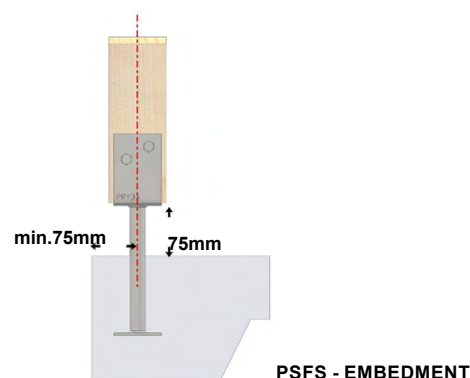
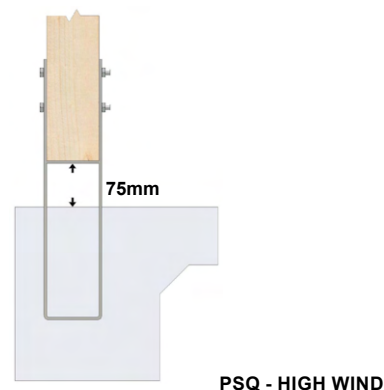
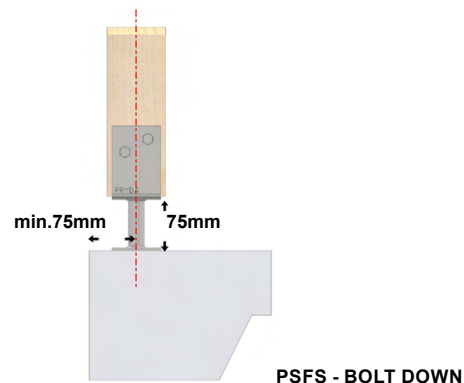
1. The design loads tabulated above require that:
 - (a) the timber post must bear on the Post Anchor base and
 - (b) all post sizes to be a minimum of 75x75 mm section UNO
 - (c) all anchors must be installed plumb
 - (d) for all bolt down anchors, support foundation must be flat and level supporting base plate fully.
2. Select design capacity according to the standard used for determining the design loads.
3. Specified capacities are for concentric vertical load transfer only. Refer to each post anchor notes for recommended capacities for eccentrically loaded conditions.
4. The base concrete and fixings to the concrete must provide sufficient resistance to the uplift forces and dead +live loads. Uplift capacities stated in this document are stated for the steel and timber ONLY, these capacities may be limited by the fixing to the supporting foundation. This should be verified by the Project Engineer or designer prior to installation.
5. Wind uplift capacities are based on the AS/NZS 1170.2 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 a Structural Engineer.
7. Post Anchors are not Intended to be used for cantilever posts, balustrades and free standing structures .i.e Carports and gazebo. Unless designed and approved by a consulting structural Engineer.
8. Post must be laterally restrained at top.
9. It is recommended to slope the foundation away from the anchor to prevent water pooling at the base.
10. Do not cover exposed base plate and stem with debris or obstacles that will facilitate collection of debris around anchor base.
11. Maximum post height 3m and N3 Wind category unless noted otherwise.
12. Local settlement, ground water and soil reactivity will cause isolated concrete footings to 'TILT' and therefore induce bending in to the post stirrup stem. Isolated footing should be restricted to stable soil. ie. Class A and S foundation classification to AS2870.

Bushfire Attack Resistance / Termite Management

Most Pryda Post Anchors meet the requirements of the AS3959 Bush Fire Code. A minimum of 75 mm clearance between the underside of the Post Anchor saddle and the ground surface or paving level is recommended. Complies with AS3660.1-2014 "Termite Management".



Specified capacities are for concentric vertical load transfer only. Load must be directed along geometric center of anchor.



Embedment depth to be designed by Structural Engineer to suit uplift capacity, Concrete edge beam design and stability of structure. suggested minimum edge setback and base clearance shown. Seek advice from Project Consulting Engineer for approved details specific for each project.

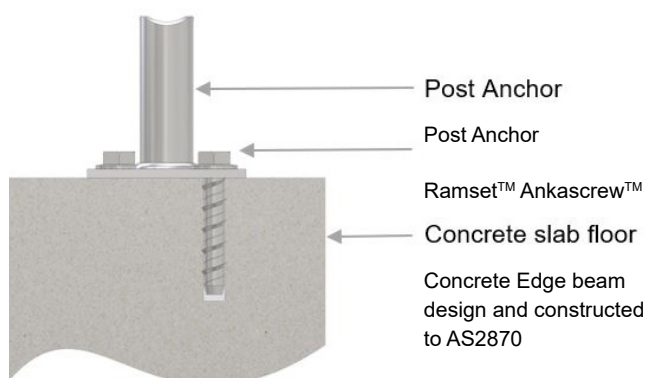
Pryda Post Anchor Concrete Fixing

Pryda Post Anchors can be either embedded into concrete or fixed to the top surface of reinforced concrete slab edge beams to AS2870 using screw bolt anchors.

Pryda recommends M10x100 Hex Head Ramset™ WERCSTM AnkaScrew™ AS10100WGM50 screw in anchor.

Installation of AnkaScrews is quick and easy.

They are self-tapping and non-expansive. Refer to Ramset installation instructions on their web site: www.ramset.com.au or contact Ramset. Direct product information and design Specifications from Ramset data sheets takes precedence over information shown on this page.

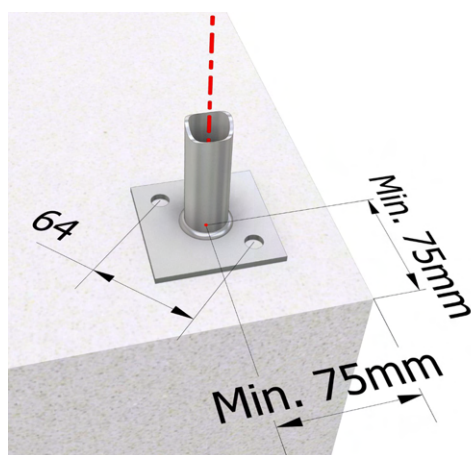


Design value for 2 x M10 x 100 Ramset™ WERCSTM AnkaScrew™ AS10100WGM50

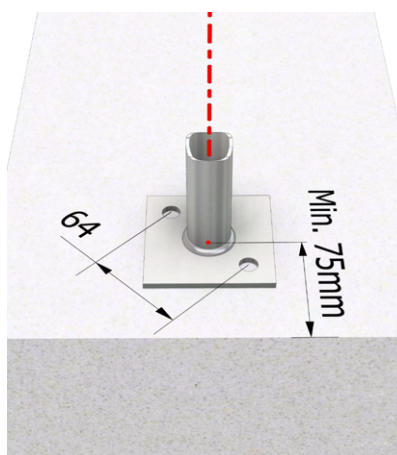
| WERCSTM AnkaScrew™ Code | AS10100WGM50 |
|---|--------------|
| Diameter (mm) | 10 |
| Concrete depth min. (mm) | 120 |
| Concrete capacity (MPa) | 20 |
| Bolt center to edge distance min. (mm) | 50 |
| Design Uplift Capacity (kN) – two anchors, Uncracked Concrete | 16 |
| Design Uplift Capacity (kN) – two anchors, Cracked Concrete | 11 |

*Refer to selected fastener manufacture for:

- Alternative fasteners
- Fit for purpose, consult your project Engineer for advice
- Screw bolt corrosion category and corrosion protection for project



MINIMUM SET-BACK.
CENTER OF STEM TO EACH CORNER EDGE OF CONCRETE
MINIMUM 75MM



MINIMUM SET-BACK.
CENTER OF STEM TO EDGE OF CONCRETE MINIMUM 75MM

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 ²) |
| 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 |
|-----------------------------|---|

Engineered for high wind areas, including tropical regions. The U shape base is designed for maximum hold-down in concrete.

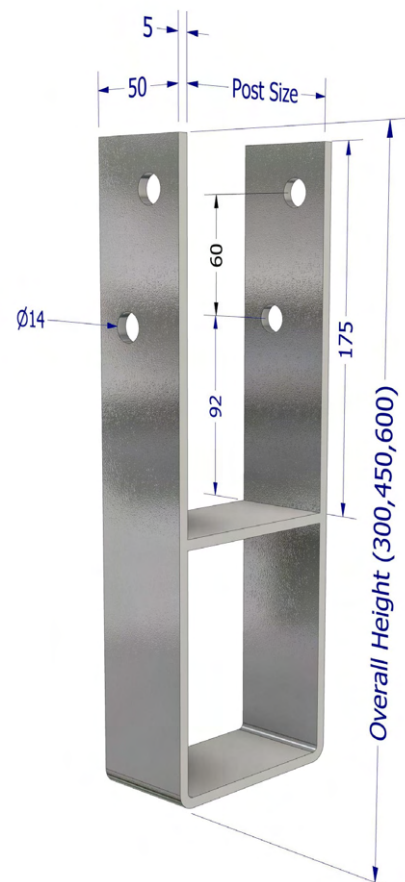
See AS1684:2010 Part 3 - Table 9.20 (j) reinforcing rod install over anchor end.

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 ²) | 300 | 75 | M12 | 6 |
| PSQ30090/12 | | | 90 | | |
| PSQ300100/12 | | | 100 | | |
| PSQ45075/12 | | 450 | 75 | | |
| PSQ45090/12 | | | 90 | | |
| PSQ450100/12 | | | 100 | | |
| PSQ60090/12/4 | | 600 | 90 | | 4 |
| PSQ600100/12/4 | | | 100 | | |
| PSQ600125/12/4 | | | 125 | | |
| PSQ600150/12/4 | | | 150 | | |
| PSQ600100/12/4B | G250 Steel, Hot Dipped Galvanised (500 g/m ²) + Black Powder Coating | | 100 | | |

DESIGN CAPACITIES

Limit State Design capacities (ΦN_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:

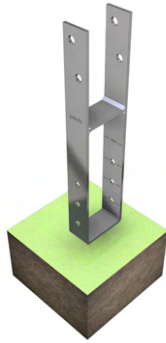
- The maximum downward loading is limited to 25kN at a height of 75mm from base of post to foundation.
- The design loads tabulated above require that:
 - the timber post must bear on the Post Anchor base and
 - all posts must be a minimum of 75 x 75mm section.
- Select design capacity according to the 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.

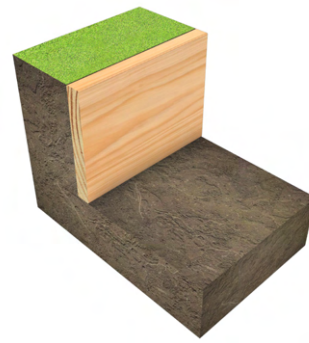
INSTALLATION - FIXING TO WET CONCRETE

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



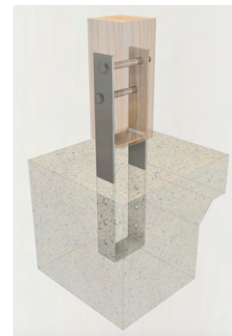
- Dig out ground and construct formwork to required depth as specified by your consulting Engineer.
- Allowance for 150mm anchor embedment and 75mm clearance between underside of post to foundation surface.

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

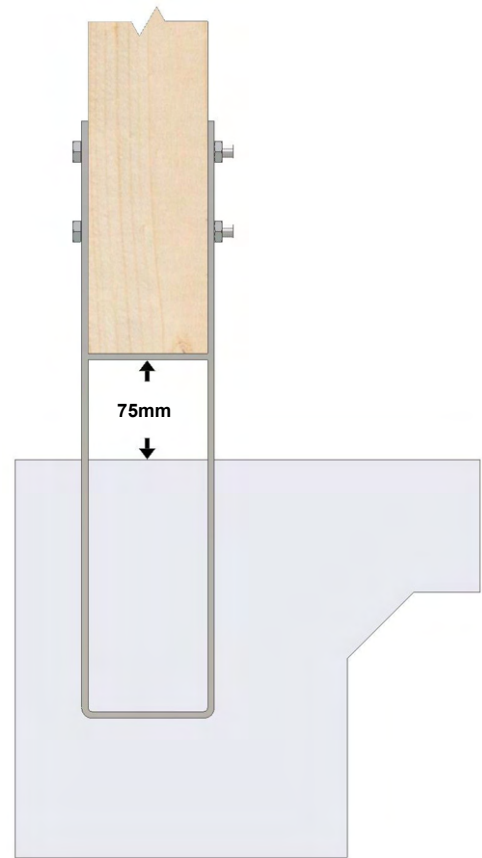
INSTALLATION TIPS

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.

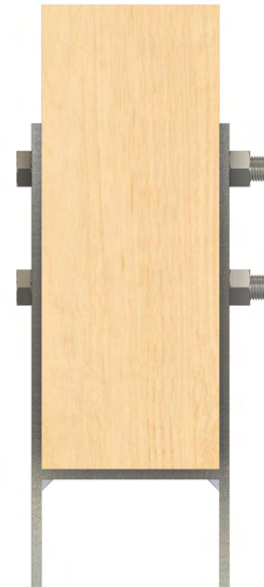
TERMITE & BUSHFIRE MANAGEMENT

- 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)

ADJUSTABLE POST ANCHOR (PS)

FEATURES AND BENEFITS

EASY: No checking of post size is required.

VERSATILE: Can be used with a range of post sizes up to 150mm.

STRONG: Hot dip galvanised coating after manufacture and made from 4mm steel.

SPECIFICATIONS

| | |
|----------------------|--|
| STEEL | G250 |
| THICKNESS | 4mm |
| CORROSION RESISTANCE | Hot dip galvanised (500 g/m ²) |
| STEM SIZE | 85, 160 |
| POST SIZE | 90 - 150 |

FASTENERS REQUIRED

| | |
|-----------------------------|---|
| POST STIRRUP TO TIMBER POST | M10 4.6 grade galvanised hex head bolts |
| POST BASE TO CONCRETE | M10 galvanised Ramset Ankascrew |

Convenient and fully adjustable for any practical post size. No checking of the post is required. Recommended post size 90mm-150mm.

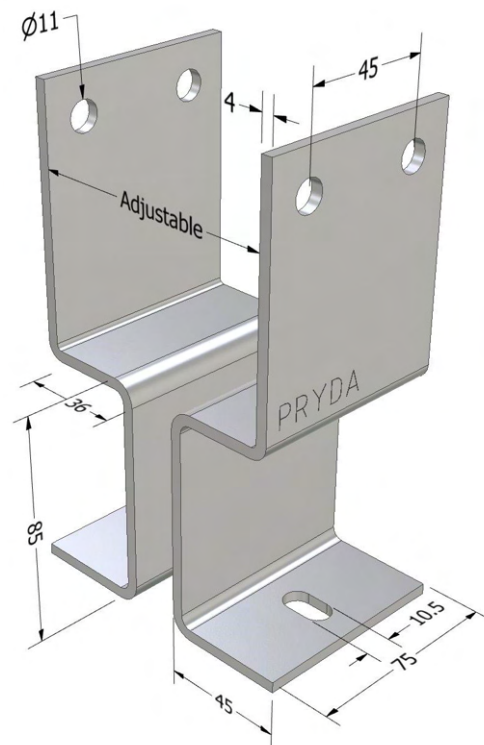
Timber post to be installed central to the post anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure the product is verified to be "fit for purpose" for each project.

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 |
|--------------|---|----------------|----------------|----------------|----------|
| PS85 | G250 Steel Hot Dip Galvanised (500 g/m ²) | 85 | 90 - 150 | M10 | 10 |
| PS160 | | 160 | 90 - 150 | M10 | 10 |

DESIGN CAPACITIES - STEEL STRENGTH ONLY

Ultimate Limit State Design capacities (ΦN_c , ΦN_t) for Pryda Standard Post:

| PRODUCT CODE | AXIAL COMPRESSION ΦN_c (KN) | AXIAL TENSION ΦN_t (KN) |
|--------------|-----------------------------------|-------------------------------|
| PS85 | 24 | 8 |
| PS160 | 12 | |

DESIGN CAPACITIES - WIND UPLIFT

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

| ADJUSTABLE POST ANCHOR | | UPLIFT CAPACITIES FOR VARYING JOINT GROUP | | | | | | |
|---|-----------|---|-----|----|-----|-----|-----|-----|
| FIXINGS | POST (MM) | J4 | J3 | J2 | JD5 | JD4 | JD3 | JD2 |
| 4 x M10 x 50mm coach screws or 2 x M10 Bolts. | 90 | 4.6 | 7.4 | 8 | 5.8 | 8 | 8 | 8 |

NOTES:

- 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. As a guide, limit the axial compression load to approximately 50% of the design capacity for eccentrically loaded conditions.
- 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.

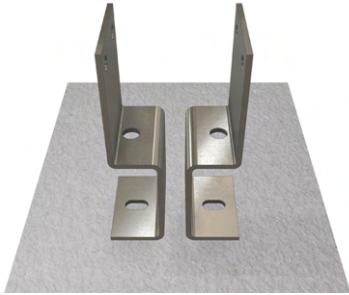
IMPORTANT:

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

INSTALLATION

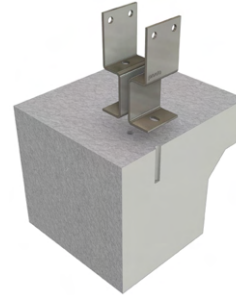
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset Galvanised AnkaScrew. Refer to bolt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

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 (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



- 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 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.

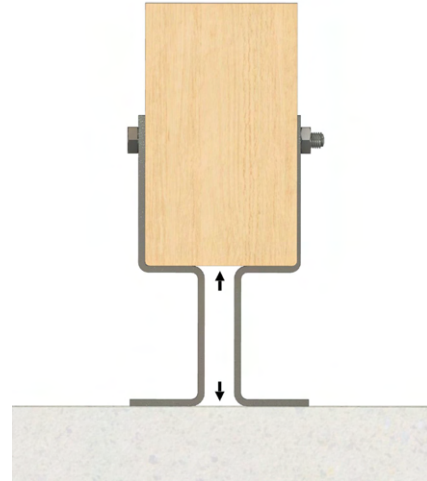
INSTALLATION TIPS

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.

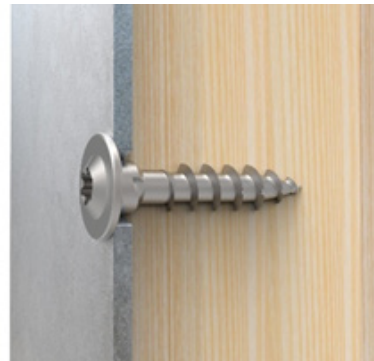
TERMITE & BUSHFIRE MANAGEMENT

- 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.



POST FASTENERS

- Buildex offer a 40 & 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



LOOKING FOR MORE DETAILS AND OTHER ANCHORS IN OUR RANGE?

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

BOLT DOWN POST ANCHOR WITH BASE SADDLE (PSB)

FEATURES AND BENEFITS

ECONOMICAL: Inexpensive solution for fixing posts to concrete

ADJUSTABLE: Knockout washer facilitates position adjustment after anchor holes are drilled

VERSATILE: Range covers common post sizes

SPECIFICATIONS

| | |
|----------------------|---|
| STEEL | G250 |
| THICKNESS | 2mm Stirrup / 3mm base |
| CORROSION RESISTANCE | Hot dip galvanised 300 g/m ² |
| POST SIZES | 90, 100, 115 |

FASTENER REQUIRED

| | |
|-----------------------------|--|
| POST STIRRUP TO TIMBER POST | M10 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 Ankascrew |

With knockout 3 mm adjustable washer- to facilitate adjustment after bolt holes have been drilled. Used for locating posts onto new/existing concrete footing.

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 concrete footing. Maximum post height 3m, N3 Wind category.

AS1720 & AS4055 COMPLIANT

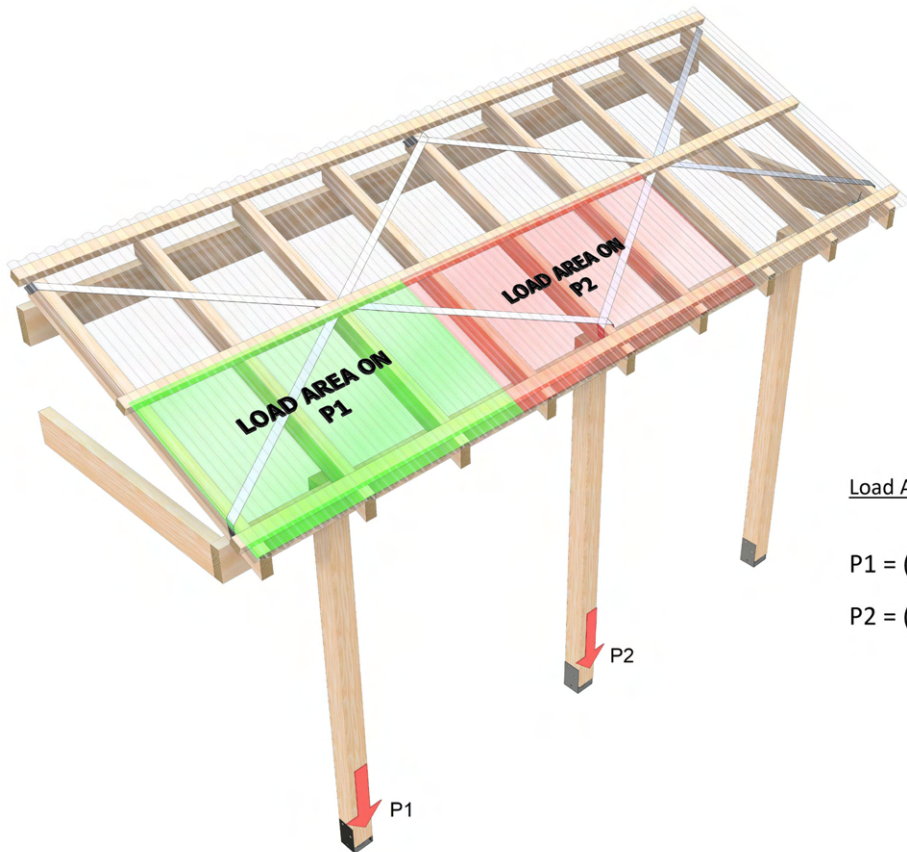
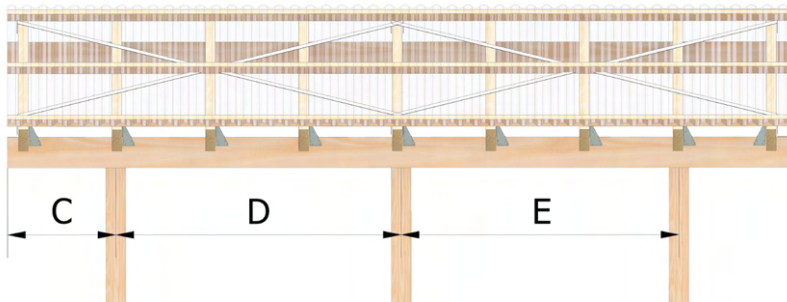
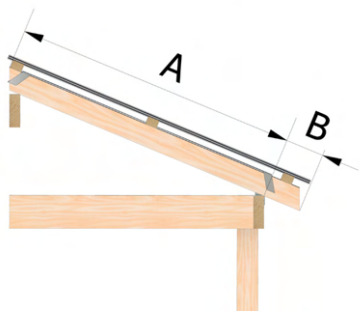


- Designed in accordance with Pryda testing and relevant Australian standards
- Engineering computations in accordance with the relevant Australian standards
- Not suitable for bushfire-prone or termite-prone areas



RANGE

| PRODUCT CODE | MATERIAL | POST SIZE (MM) | BOLT HOLE SIZE | QTY |
|--------------|---|----------------|----------------|-----|
| PSB90G | G250 Steel Hot Dip Galvanised (300 g/m ²) | 90 | M10 | 12 |
| PSB90G/12 | | | M12 | |
| PSB100G | | 100 | M10 | |
| PSB100G/12 | | | M12 | |
| PSB115G | | 115 | M10 | |
| PSB90GB | G250 Steel Hot Dip Galvanised (300 g/m ²) + Black Powder Coating | 90 | M10 | |



Load Area Calculations for:

$$P1 = \left(\frac{A}{2} + B\right) \times \left(C + \frac{D}{2}\right)$$

$$P2 = \left(\frac{A}{2} + B\right) \times \left(\frac{D}{2} + \frac{E}{2}\right)$$

| RECOMMENDED LOAD AREA FOR ATTACHED OPEN VERANDAH FOR CLASS 1 DWELLING AND CLASS 10 STRUCTURES | | | |
|--|--|--------------------------------------|--------------------------------------|
| | LIGHT SHEET ROOF (10KG/M ²) | SHEET ROOF (40KG/M ²) | TILED ROOF (75KG/M ²) |
| WIND SPEED | Maximum Roof Area m ² | | |
| N2 | 3.9 | 4.9 | 5.0 |
| N3/C1 | 2.4 | 2.8 | 3.3 |
| N4/C2 | 1.6 | 1.7 | 2.0 |

- Light Sheet Roof: Sheet roofing 0.50mm thick and battens.
- Sheet Roof: Steel sheet roofing 0.75mm thick and fiberboard ceiling lining
- Tiled Roof: Terracotta or concrete tile and plasterboard ceiling.

NOTES:

- 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 75x75 mm section (3m max. height)
 - (c) reduce load area for 115x115 Post on PSB115G, multiplier to be applied to tabulated areas x 0.83
- Select design capacity according to the standard used for determining the design loads.
- Specified capacities are for 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 Anchors are not intended to be used for cantilever posts and balustrades without pre-approval from an Engineer

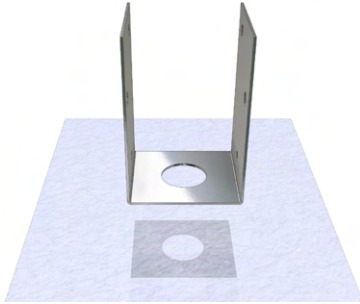
IMPORTANT:

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

INSTALLATION

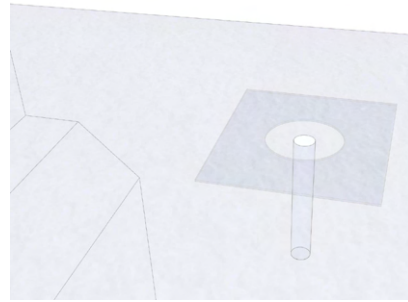
Note: these anchors can only fit a single fastener in the base. It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. 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



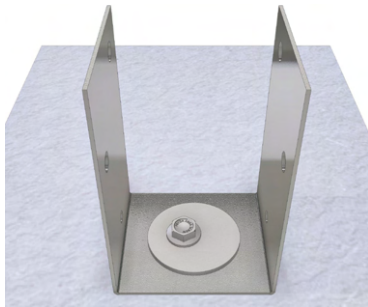
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.

STEP 2



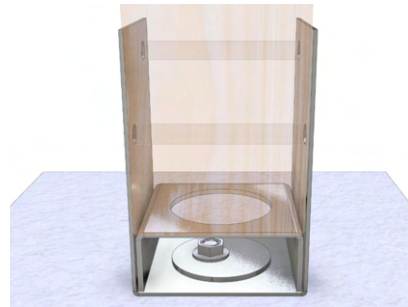
- Drill single hole at marked location to required depth for selected hold-down bolt. Hole can be offset from center point within cut-out for adjustment purposes. Suggested minimum screw embedment depth 100mm or greater.

STEP 3



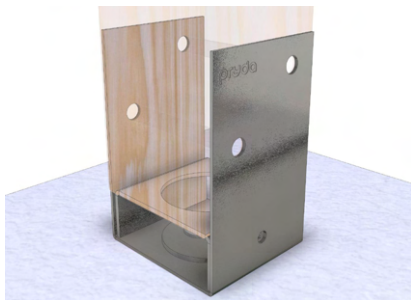
- Position Post Anchor base over hole location and install large washer over cut-out. Align washer bolt hole to drilled hole and insert selected Ramset galvanised AnkaScrew fastener. (AnkaScrew shown)
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

STEP 4



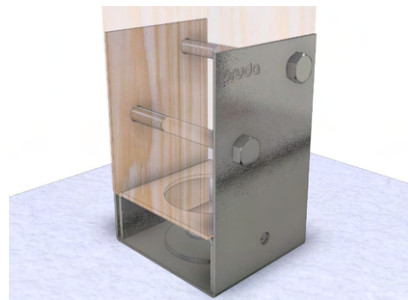
- Install insert over washer and lock into position by aligning side dimples to corresponding side holes.
- Place timber post upright into Post Anchor stirrup for direct bearing on insert.
- Ensure to locate post central to support base and vertically plumb.

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

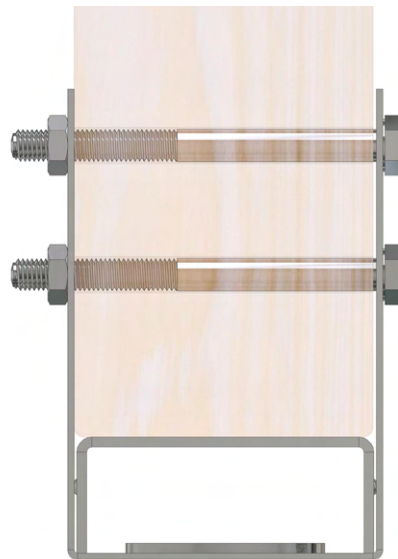


- Insert either 2 x hex head bolts or 4 x coach screws and securely fasten.

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 and stem.
- 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.

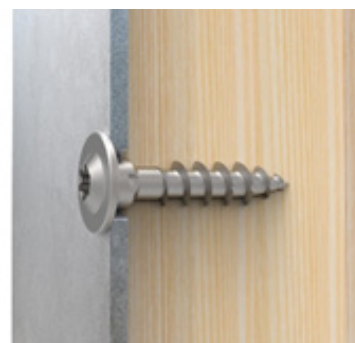


BOLT LENGTH

- 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 40 & 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



LOOKING FOR MORE DETAILED DESIGN VALUES?

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

BOLT DOWN POST ANCHOR (PSBD)

FEATURES AND BENEFITS

ECONOMICAL: Inexpensive solution for fixing posts to concrete

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

VERSATILE: Range covers common post sizes

SPECIFICATIONS

| | |
|----------------------|--|
| STEEL | G250 |
| THICKNESS | 4mm |
| 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 galvanised Ramset Ankascrew |

Heavy duty 4mm thick U-stirrup bolt down anchor are ideal for directly anchoring post to concrete or approved support where no base clearance is required.

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 |
|--------------|---|----------------|----------------|-----|
| PSBD75 | G250 Steel Hot Dip Galvanised (500 g/m ²) | 75 | M10 | 10 |
| PSBD75/12 | | | M12 | |
| PSBD90 | | 90 | M10 | 10 |
| PSBD90/12 | | | M12 | |
| PSBD100 | | 100 | M10 | 10 |
| PSBD100/12 | | | M12 | |

DESIGN CAPACITIES

Limit State Design capacities (ΦN_j) 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 | | 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:

- 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 75 mm 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.

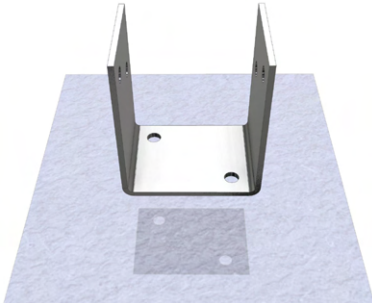
IMPORTANT:

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INSTALLATION

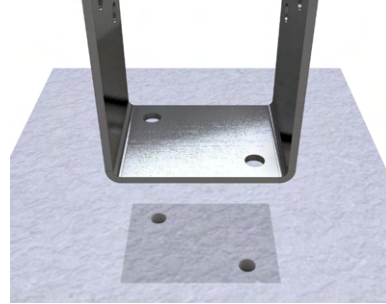
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset Galvanised AnkaScrew. Refer to bolt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



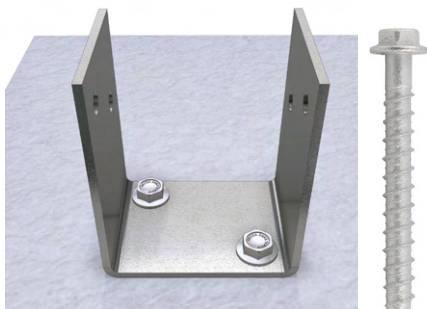
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



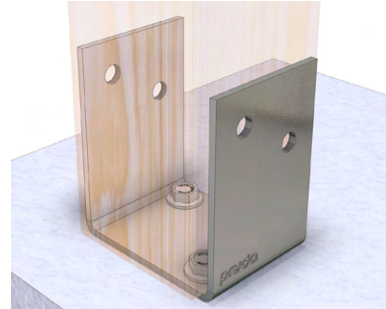
- Drill two holes at marked location to required depth for selected hold-down bolt. Refer to bolt manufacturer guidelines for recommended pre-drill hole size and depth. Suggested minimum screw embedment depth 100mm or greater (section detail shown above).

STEP 3



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

STEP 4



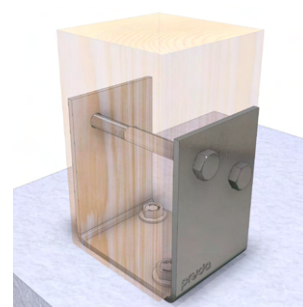
- Place timber post upright into Post Anchor stirrup for direct bearing.
- Ensure to locate post central to support base and vertically plumb.

STEP 5



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

STEP 6

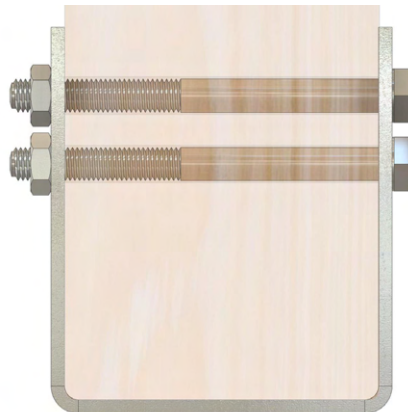


- Insert bolt through saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

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.
- 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.

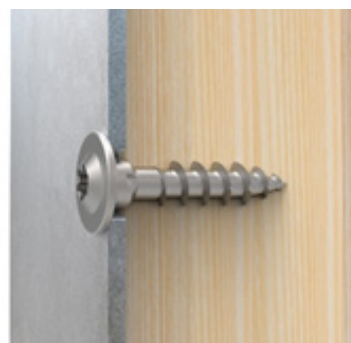


BOLT LENGTH

- 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 2x 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 40 & 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



LOOKING FOR MORE DETAILED DESIGN VALUES?

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

BOLT DOWN POST ANCHOR WITH RAISED MOUNT (PSBM)

FEATURES AND BENEFITS

ECONOMICAL: Inexpensive solution for fixing posts to concrete

EASY: Includes mounts to easily install post off the ground

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

SPECIFICATIONS

| | |
|----------------------|--|
| STEEL | G250 |
| THICKNESS | 4mm |
| CORROSION RESISTANCE | Hot dip galvanised (500 g/m ²) |
| POST SIZES | 90mm, 100mm |

FASTENER REQUIRED

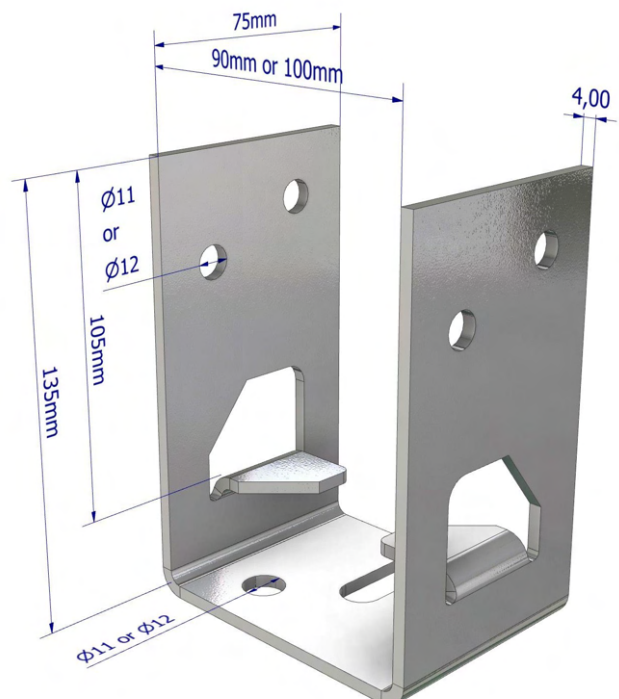
| | |
|-----------------------------|---|
| POST STIRRUP TO TIMBER POST | M10 or M12 4.6 grade galvanised hex head bolts M10 or M12 x 50mm 4.6 grade galvanised coach screws |
| POST BASE TO CONCRETE | M10 x galvanised Ramset Ankascrew |

Heavy Duty Pryda Bolt Down anchor with raised mount is ideal for post having low clearance connection. The integrated raise mount simplifies installation, raising the post end 35mm off the ground.

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 |
|--------------|---|----------------|----------------|-----|
| PSBM90 | G250 Steel Hot Dip Galvanised (500 g/m ²) | 90 | M10 | 10 |
| PSBM90/12 | | | M12 | |
| PSBM100 | | 100 | M10 | |
| PSBM100/12 | | | M12 | |

DESIGN CAPACITIES

Limit State Design capacities (ΦN_j) 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 | | 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:

- 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 90 mm 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.

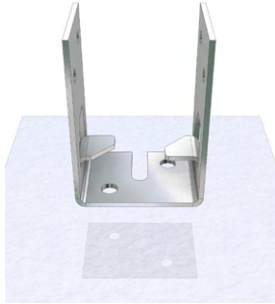
IMPORTANT:

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INSTALLATION

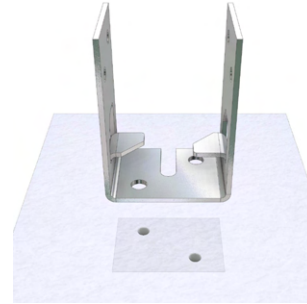
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset Galvanised AnkaScrew. Refer to bolt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



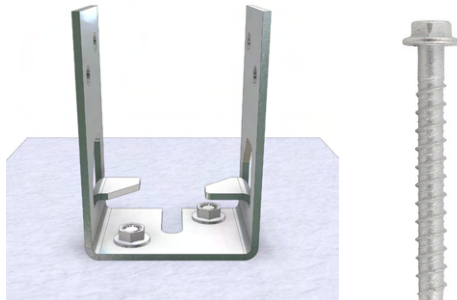
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

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



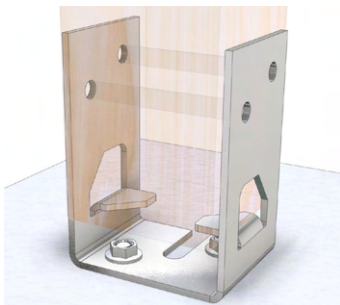
- Position Post Anchor and insert (either M10 or M12) Ramset galvanised AnkaScrew fastener.
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

STEP 4



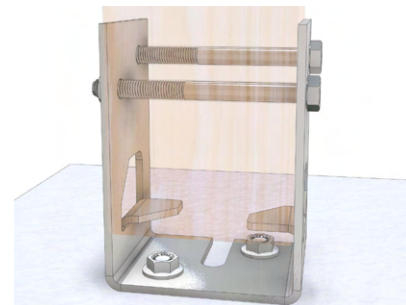
- Place timber post upright into Post Anchor stirrup for direct bearing.
- Ensure to locate post central to support base and vertically plumb.

STEP 5



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

STEP 6

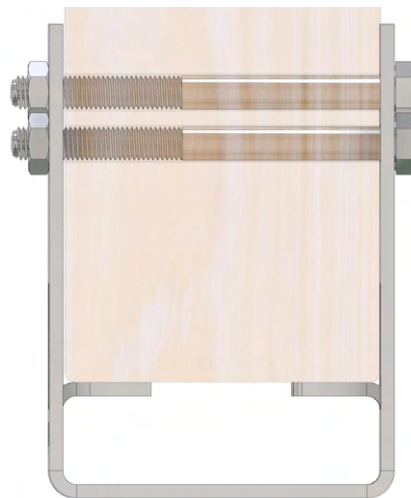


- Insert bolt through saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

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.
- 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.

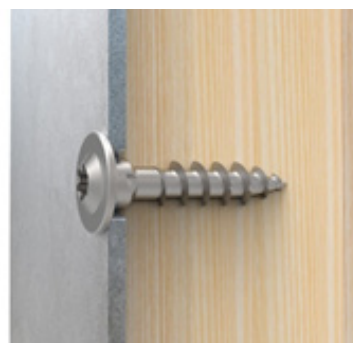


BOLT LENGTH

- 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 2x 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 40 & 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™ WERCST™ 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



LOOKING FOR MORE DETAILED DESIGN VALUES?

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

CENTRE FIX POST ANCHOR (PSCF)

FEATURES AND BENEFITS

CONCEALED: The central blade 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 ²) |
| STEM SIZES | 130, 300 |
| POST SIZES | 90-150 |

FASTENERS REQUIRED

| | |
|-----------------------------|---|
| POST STIRRUP TO TIMBER POST | M10 4.6 grade galvanised hex head bolts |
| POST BASE TO CONCRETE | M10 galvanised Ramset Ankascrew |

Generally used to “hide” the post anchor. The post is slotted at the bottom and bolted through the post and anchor, leaving only the bolt heads, nuts and washers visible.

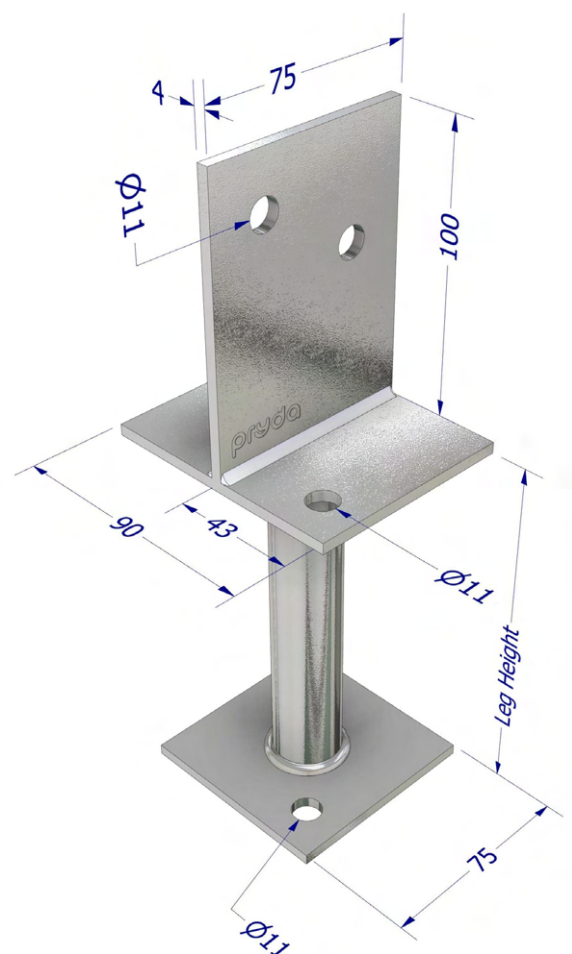
Can be bolted to existing concrete or set into concrete. Timber post to be installed central to the post anchor. It is the responsibility of the Project Engineer / Architect/ Building practitioner / Trade person and end user to ensure the product is verified to be “Fit for purpose” for each project.

Post anchors must be installed plumb and on 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 |
|--------------|--|----------------|----------------|----------------|----------|
| PSCF130 | G250 Steel, Hot Dip Galvanised (500 g/m ²) | 130 | 90 - 150 | M10 | 10 |
| PSCF300 | | 300 | | | |

DESIGN CAPACITIES

Limit State Design capacities (ΦN_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 M10 bolts | 90 | 9.1 | 11.5 | 12 | 11.5 | 12 | 12 | 12 |

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.

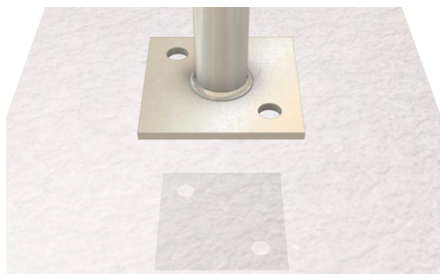
IMPORTANT:

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INSTALLATION - FIXING TO DRY CONCRETE

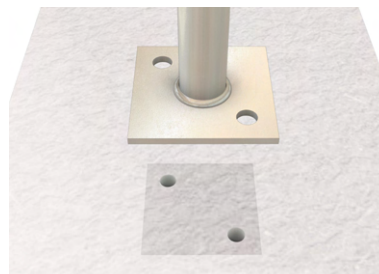
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset Galvanised AnkaScrew. Refer to bolt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



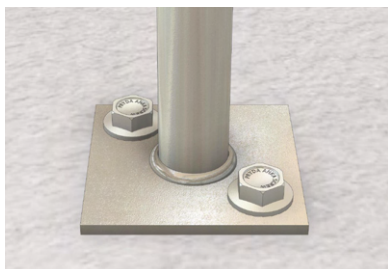
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

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 galvanized AnkaScrew fastener.
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

STEP 4



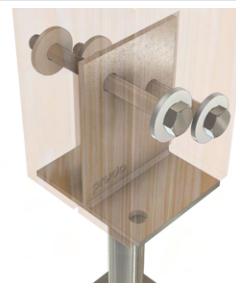
- Use a circular saw to cut a 4mm slot through the center of the post to a depth of 100mm.
- Mark side holes using anchor center fix flange as stencil to mark post bolted holes location.
- Place timber upright into Post Anchor stirrup, ensure post is located centrally.

STEP 5



- Drill holes either side of the timber, meeting at the middle holes of the blade of the post anchor. Ensure drill through holes are horizontally levelled and perpendicular to saddle.
- For coach screws, drill pilot holes to the length of selected screws.

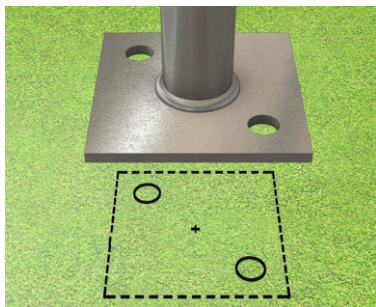
STEP 6



- Insert bolt through washer, saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install washer, nut and securely fasten. (Washer: min. 30x3mm at both ends of each bolt).

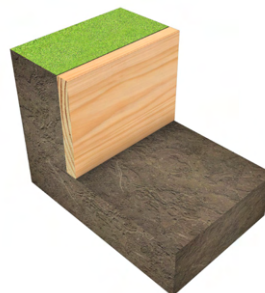
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



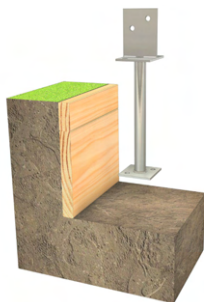
- Orientate anchor as required, measure and mark location of anchor positioning.
- Isolated footing should be restricted to stable soil. i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

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



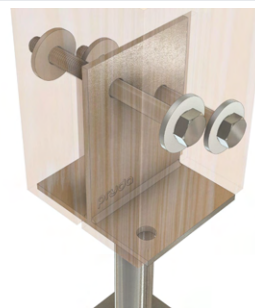
- Use a circular saw to cut a 4mm slot through the center of the post to a depth of 100mm.
- Mark side holes using anchor center fix flange as stencil to mark post bolted holes location.
- Place timber upright into Post Anchor stirrup, ensure post is located centrally.

STEP 5



- Drill holes either side of the timber, meeting at the middle holes of the blade of the post anchor. 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

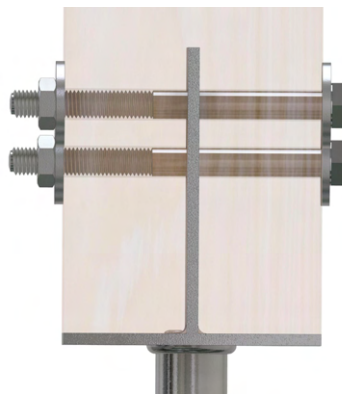


- Insert bolt through washer, saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install washer, nut and securely fasten. (Washer: min. 30x3mm at both ends of each bolt).

INSTALLATION TIPS

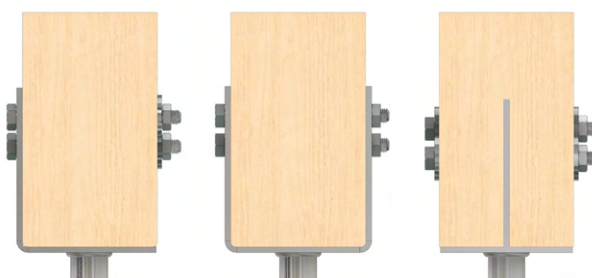
FOUNDATION SLOPE

- 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.



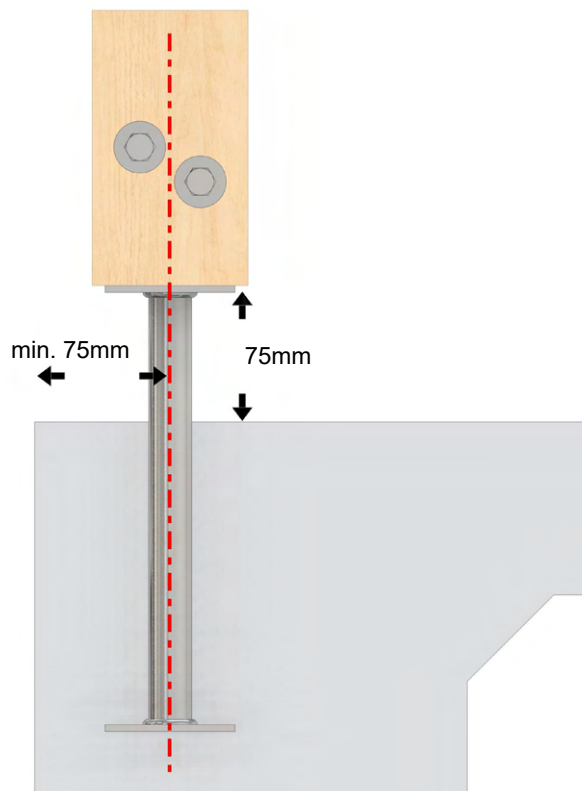
BOLT LENGTH

- When using hex head bolts for fastening your post, it is recommended to use a length 20mm longer than post side.
- This accounts for the thickness of the saddle, washer and allows for sufficient thread of the bolt.
- For example, a 110mm hex head bolt would suit a 90mm post anchor.



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



LOOKING FOR MORE DETAILS AND OTHER ANCHORS IN OUR RANGE?

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

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 ²) |
| 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.

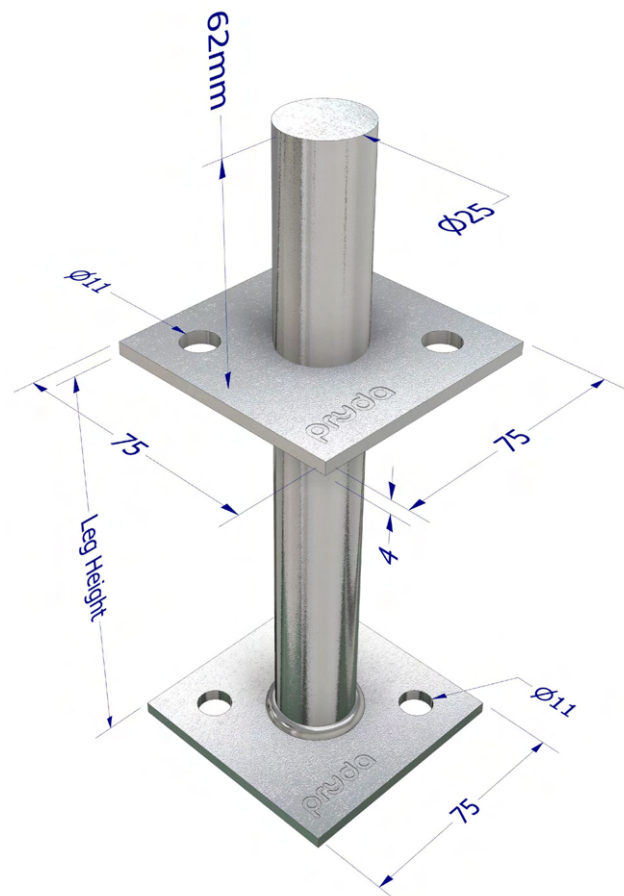
Due to the fixing method, it is only suitable for small spans or where no roofing is used Timber post to be installed central to the post anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure the product is verified to be "Fit 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, Hot Dip Galvanised (500 g/m ²) | 130 | 90 - 125 | M10 | 10 |
| PSCP300/6 | | 300 | | | 6 |

DESIGN CAPACITIES

Limit State Design capacities (ΦN_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 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.

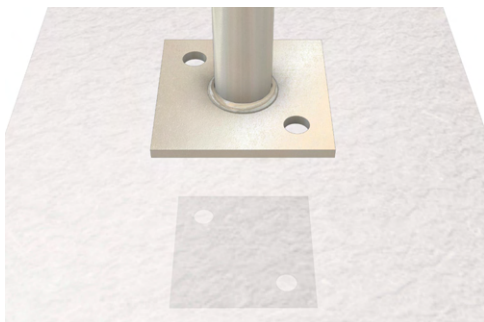
IMPORTANT:

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

INSTALLATION - FIXING TO DRY CONCRETE

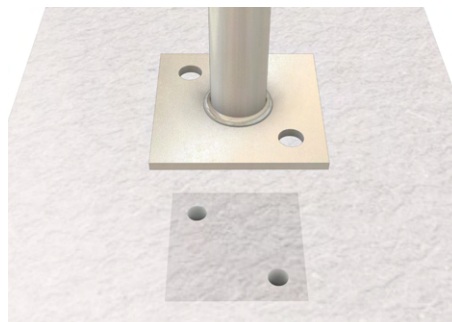
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset Galvanised AnkaScrew. Refer to bolt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



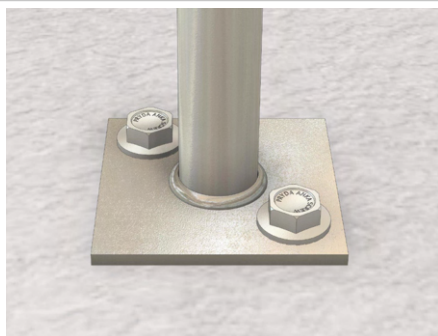
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



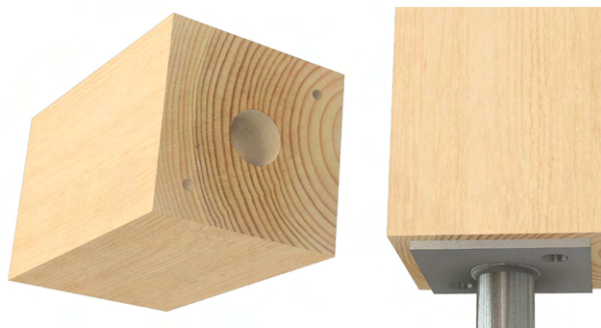
- Drill two holes at marked location to required depth for selected hold-down bolt. Refer to bolt manufacturer guidelines for recommended pre-drill hole size and depth. Suggested minimum screw embedment depth 100mm or greater. (Section detail shown above).

STEP 3



- Position Post Anchor and insert M10 Ramset galvanized AnkaScrew fastener.
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

STEP 4



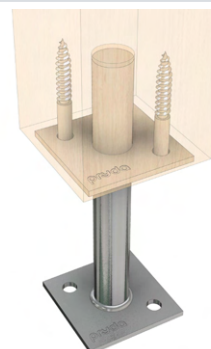
- Drill a hole 26mm in diameter by 65mm in length central to the post.
- Place timber upright into Post Anchor stirrup.

STEP 5



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

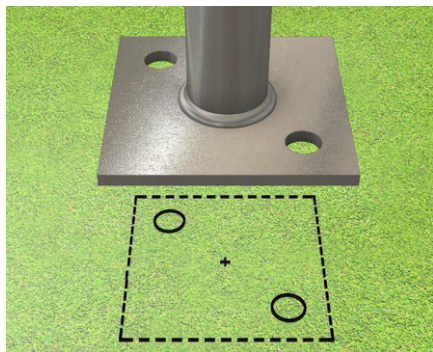
STEP 6



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

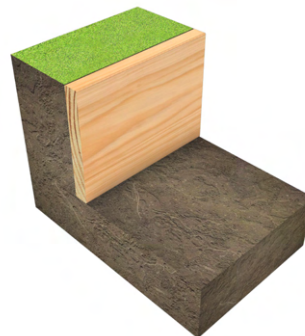
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



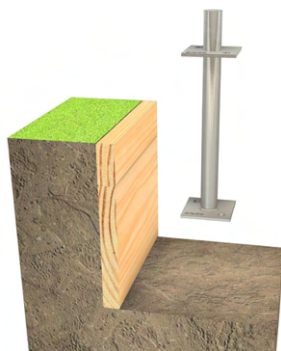
- Orientate anchor as required, measure and mark location of anchor positioning
- Isolated footing should be restricted to stable soil. i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



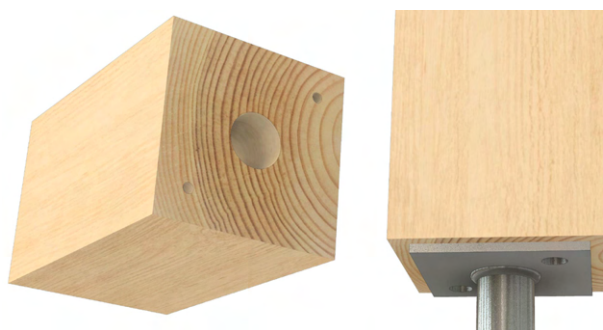
- Dig out ground and construct formwork to required depth as specified by your consulting Engineer.
- Allowance for 150mm stem embedment and 75mm clearance between underside of post to foundation surface.

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



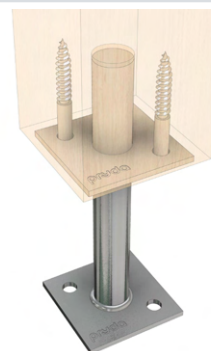
- Drill a hole 26mm in diameter by 65mm in length central to the post.
- Place timber upright into Post Anchor stirrup and secure into position.

STEP 5



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

STEP 6



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

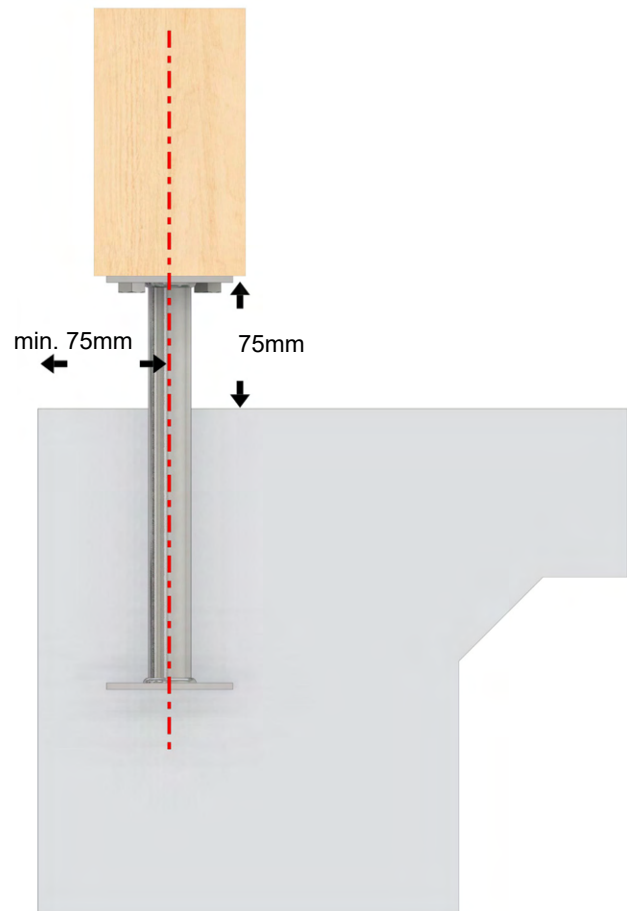
INSTALLATION TIPS

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



LOOKING FOR MORE DETAILS AND OTHER ANCHORS IN OUR RANGE?

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

FULL STIRRUP POST ANCHOR (PSFS)

FEATURES AND BENEFITS

EASY: Can be either fixed to existing concrete or set into wet concrete

VERSATILE: A large range of sizes to suit both post widths and stem lengths

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

SPECIFICATIONS

| | |
|----------------------|--|
| STEEL | G250 |
| STIRRUP THICKNESS | 4mm |
| CORROSION RESISTANCE | Hot dip galvanised (500 g/m ²) |
| STEM SIZES | 65, 130, 200, 250, 300, 450, 600 |
| POST SIZES | 75, 90, 100, 115, 125 |

FASTENERS 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 Ankascrew™ |

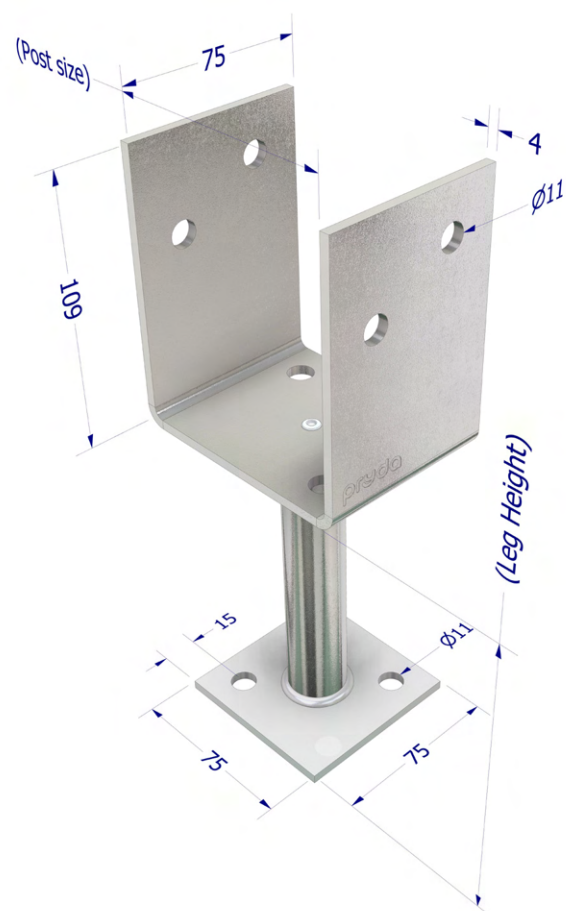
Primarily used for bolting to existing concrete. Can also be used for setting to concrete having a maximum 75mm clearance. Timber post to be installed central to the post anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure 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 |
|-----------------|---|----------------|----------------|----------------|----------|
| PSFS6575 | G250 Steel, Hot Dip Galvanised (500 g/m²) | 65 | 75 | M10 | 10 |
| PSFS6575/12 | | | | M12 | |
| PSFS6590 | | | 90 | M10 | |
| PSFS6590/12 | | | | M12 | |
| PSFS65100 | | | 100 | M10 | |
| PSFS65100/12 | | | | M12 | |
| PSFS75100 | | 75 | 100 | M10 | |
| PSFS13075 | | 130 | 75 | | |
| PSFS13075/12 | | | | M12 | |
| PSFS13090 | | | 90 | | |
| PSFS130100 | | | 100 | | |
| PSFS130115 | | | 115 | | |
| PSFS20075 | | 200 | 75 | M12 | |
| PSFS20075/12 | | | 90 | | |
| PSFS20090 | | | | M10 | |
| PSFS20090/12 | | | | M12 | |
| PSFS200100 | | | | 100 | |
| PSFS200100/12 | | | M12 | | |
| PSFS25090 | | 250 | 90 | M10 | |
| PSFS30075 | | 300 | 75 | M12 | |
| PSFS30075/12 | | | | M10 | |
| PSFS30090 | | | 90 | M12 | |
| PSFS30090/12 | | | | M10 | |
| PSFS300100 | | | 100 | M12 | |
| PSFS300100/12 | | | | M10 | |
| PSFS300115 | | | 115 | M12 | |
| PSFS300115/12 | | | | M10 | |
| PSFS300125 | | | 125 | M12 | |
| PSFS300125/12 | | | | M10 | |
| PSFS45090 | | 450 | 90 | M12 | |
| PSFS45090/12 | | | | M10 | |
| PSFS450100 | | | 100 | M12 | |
| PSFS45100/12 | | | | M10 | |
| PSFS60090/6 | | 600 | 90 | M12 | |
| PSFS60090/12/6 | | | | M10 | |
| PSFS600100/6 | | | 100 | M12 | |
| PSFS600100/12/6 | | | | M10 | |

DESIGN CAPACITIES

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

| FULL STIRRUP POST ANCHOR | | UPLIFT CAPACITIES FOR VARYING JOINT GROUPS | | | | | | |
|------------------------------------|-----------|--|------|------|------|------|------|------|
| FIXINGS | POST (MM) | J4 | J3 | J2 | JD5 | JD4 | JD3 | JD2 |
| 2 x M10 or M12 bolts | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 4 x M10 or M12 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 | 11.0 | 11.0 |
| | 115 | 5.7 | 9.0 | 12.0 | 6.1 | 9.8 | 10.0 | 10.0 |
| | 125 | 5.3 | 8.5 | 11.7 | 5.9 | 9.0 | 9.0 | 9.0 |

NOTES:

- 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 75 mm 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.
- 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 24 kN for 75mm stem height or less. For all other heights, to be designed by consulting project Engineer. As a guide, limit the axial compression load approximately 50% design capacity for all eccentrically loaded conditions

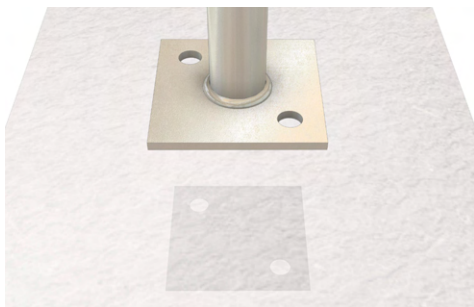
IMPORTANT:

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

INSTALLATION - FIXING TO DRY CONCRETE

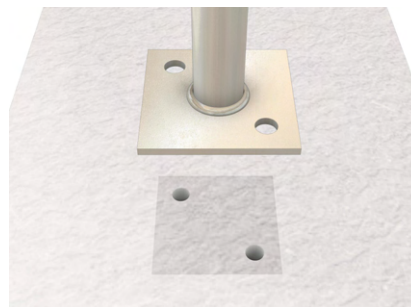
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset Galvanised AnkaScrew. Refer to bolt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



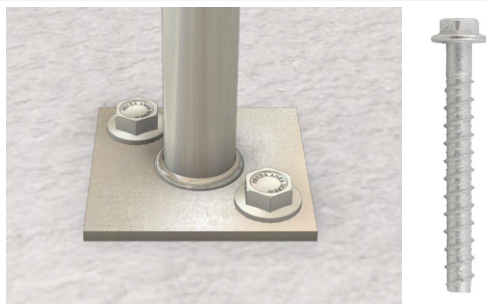
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

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 galvanized AnkaScrew fastener.
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

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.
- For coach screws, drill pilot holes to the length of selected screws.

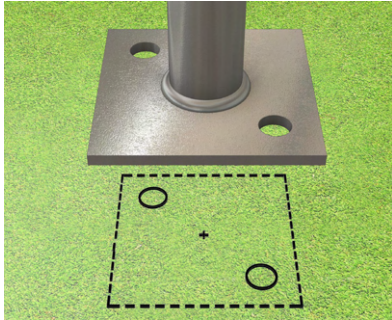
STEP 6



- 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.

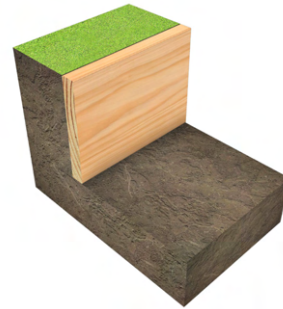
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



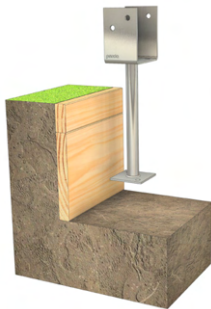
- Orientate anchor as required, measure and mark location of anchor positioning.
- Isolated footing should be restricted to stable soil. i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

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



- 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.
- 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 2x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

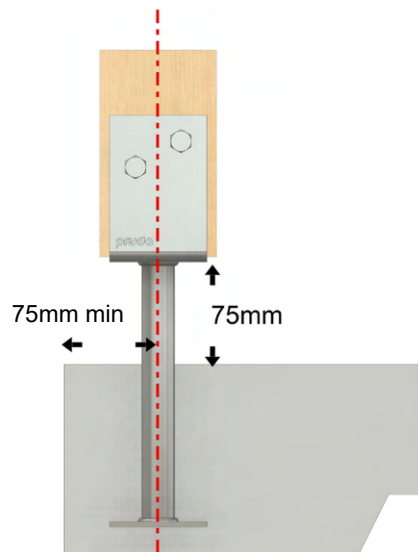
INSTALLATION TIPS

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.

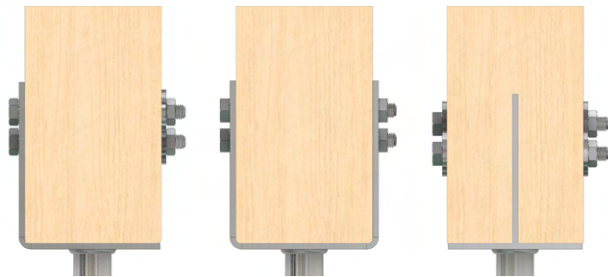
TERMITE & BUSHFIRE MANAGEMENT

- 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.



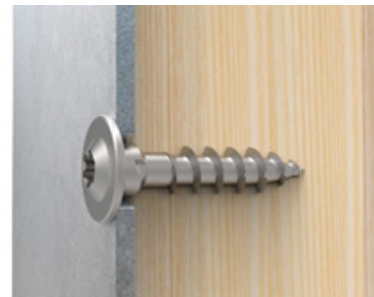
BOLT LENGTH

- When using hex head bolts for fastening your post, it is recommended to use a length 20mm longer than post side.
- This accounts for the thickness of the saddle and allows for sufficient thread of the bolt.
- For example, a 110mm hex head bolt would suit a 90mm post anchor.



POST FASTENERS

- Buildex offer a 40 and 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



LOOKING FOR MORE DETAILS AND OTHER ANCHORS IN OUR RANGE?

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

HALF STIRRUP POST ANCHOR (PSHS)

FEATURES AND BENEFITS

EASY: Simplifies installing posts that are located against walls with minimal access to one side

VERSATILE: Can be either fixed to existing concrete or set into wet concrete

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

SPECIFICATIONS

| | |
|----------------------|-------------------------------|
| STEEL | G250 |
| STIRRUP THICKNESS | 4mm |
| CORROSION RESISTANCE | Hot dip galvanised (500 g/m²) |
| STEM SIZES | 65, 130, 200, 300 |
| POST SIZES | 90 |

FASTENERS REQUIRED

| | |
|--|--|
| POST STIRRUP TO TIMBER POST | M10 or M12 4.6 grade galvanised hex head bolts |
| POST BASE TO CONCRETE | M10 or M12 galvanised Ramset Ankascrew |

Ideally suited to uses where the post is located against a wall or step and can only be bolted from one side.

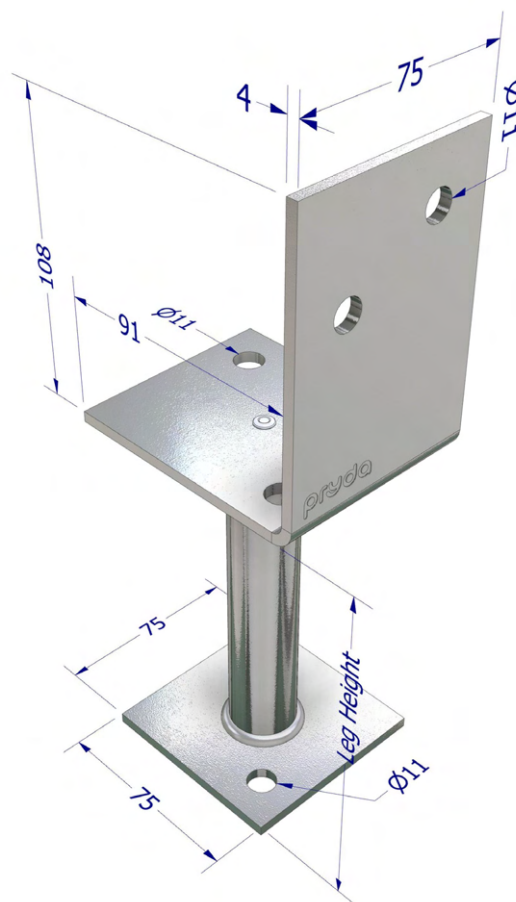
Can be bolted to existing concrete or set into concrete. Recommend maximum post size 90mm. Timber post to be installed central to the post anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure the product is verified to be "Fit 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 |
|--------------|---|----------------|----------------|----------------|----------|
| PSHS65 | G250 Steel, Hot Dip Galvanised (500 g/m²) | 65 | 90 | M10 | 10 |
| PSHS65/12 | | | | M12 | |
| PSHS130 | | 130 | | M10 | |
| PSHS130/12 | | | | M12 | |
| PSHS200 | | 200 | | M10 | |
| PSHS200/12 | | | | M12 | |
| PSHS300 | | 300 | | M10 | |
| PSHS300/12 | | | | M12 | |

DESIGN CAPACITIES

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

| FULL STIRRUP POST ANCHOR | | UPLIFT CAPACITIES FOR VARYING JOINT GROUPS | | | | | | |
|------------------------------------|-----------|--|-----|-----|-----|-----|-----|-----|
| FIXINGS | POST (MM) | J4 | J3 | J2 | JD5 | JD4 | JD3 | JD2 |
| 2 X M10 or M12 bolts | 90 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| 2 x M10 or M12 x 50mm coach screws | | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |

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 90 mm 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.

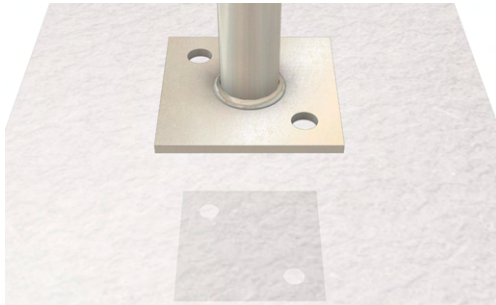
IMPORTANT:

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

INSTALLATION - FIXING TO DRY CONCRETE

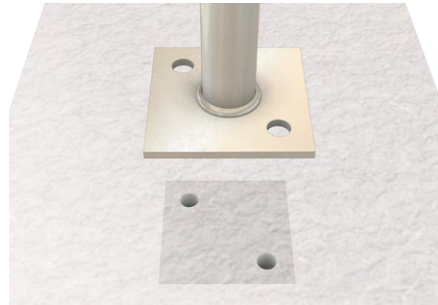
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset Galvanised AnkaScrew. Refer to bolt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



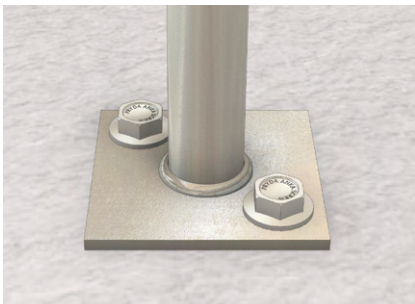
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

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

STEP 4



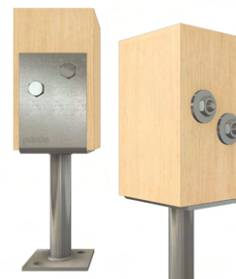
- Place timber post (90mmx90mm) upright into Post Anchor stirrup for direct bearing.
- Ensure to locate post central to support base and vertically plumb.

STEP 5



- Drill through post using saddle holes to mark location. Ensure drill through holes are horizontally levelled and perpendicular to saddle.

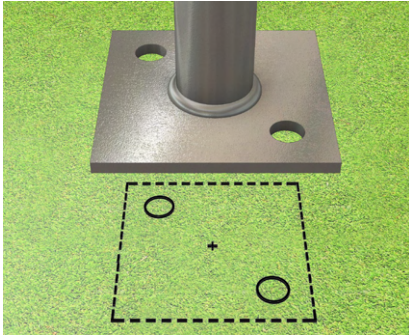
STEP 6



- Insert bolt through saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install washer to timber interface only. (30mm dia.x3mm)
- Install nut and securely fasten.

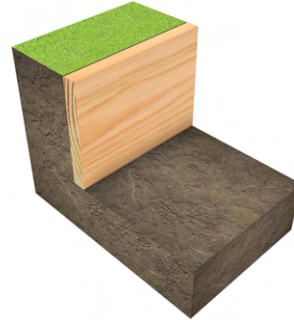
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



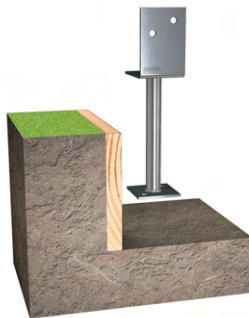
- Orientate anchor as required, measure and mark location of anchor positioning
- Isolated footing should be restricted to stable soil. i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



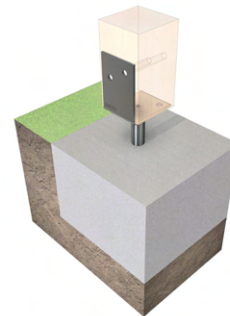
- Dig out ground and construct formwork to required depth as specified by your consulting Engineer.
- Allowance for 150mm stem embedment and 75mm clearance between underside of post to foundation surface.

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



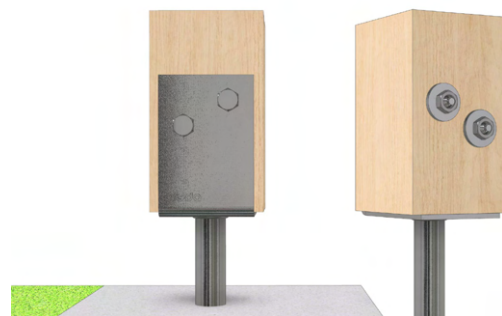
- Place timber post (90mmx90mm) upright into Post Anchor stirrup for direct bearing.
- Ensure to locate post central to support base and vertically plumb.

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 bolt through saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install washer to timber interface only. (30mm dia.x3mm)
- Install nut and securely fasten.

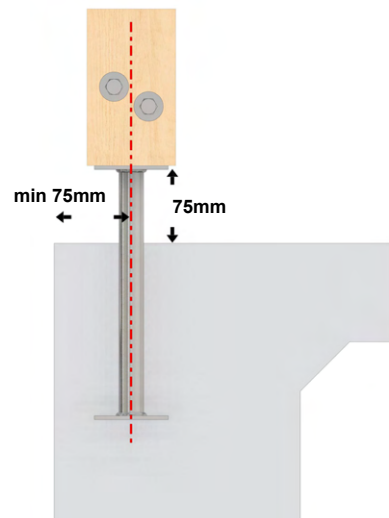
INSTALLATION TIPS

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.

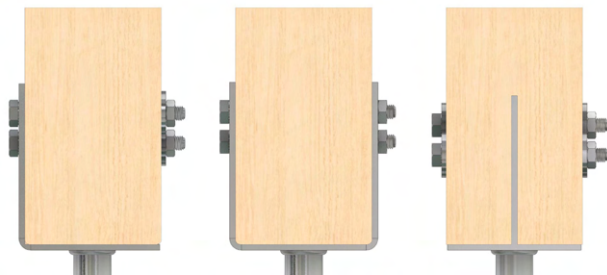
TERMITE & BUSHFIRE MANAGEMENT

- 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.



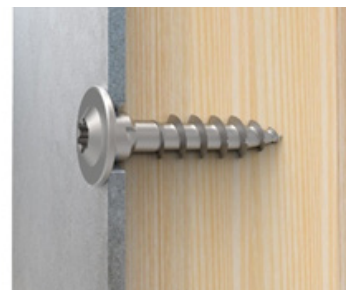
BOLT LENGTH

- 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 2x 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 40 and 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.



LOOKING FOR MORE DETAILS OR OTHER ANCHORS IN OUR RANGE?

SEE OUR POST ANCHOR DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU

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

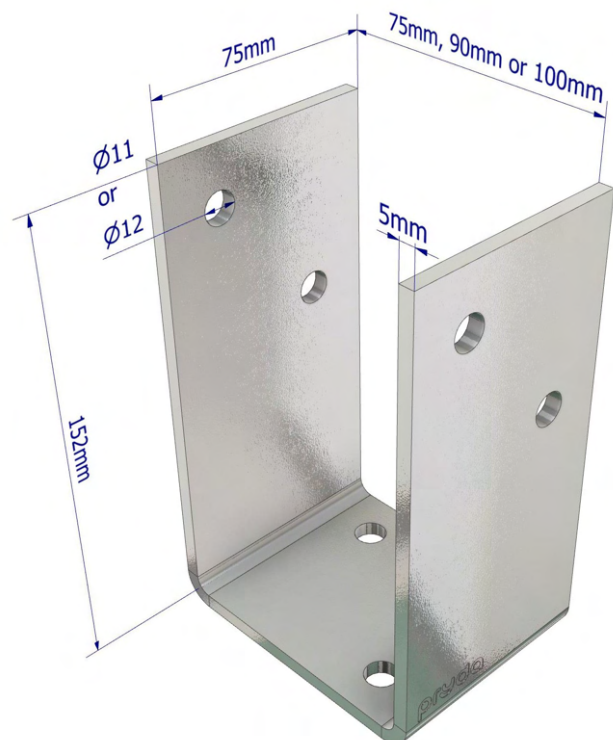
| | |
|-----------------------------|---|
| POST STIRRUP TO TIMBER POST | M10 or M12 4.6 grade galvanised hex head bolts |
| | M10 or M12 x 50mm 4.6 grade galvanised coach screws |
| POST BASE TO CONCRETE | M10 or M12 x 100mm galvanised Ramset Ankascrew™ |

Heavy duty 5mm thick U-stirrup bolt down anchor are ideal for directly anchoring post to concrete or approved support where no base clearance is required.

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 (ΦN_j) 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 | | 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:

- 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 75 mm 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.

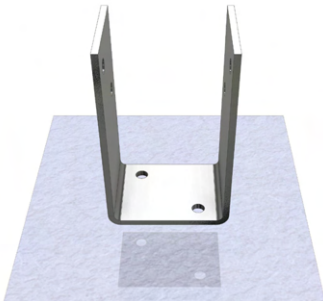
IMPORTANT:

READ THIS DATASHEET IN CONJUNCTION WITH PRYDA POST ANCHORS GUIDE AND REFER TO GENERAL NOTES AND LIMITATIONS FOUND ON PAGES 4 TO 7.

INSTALLATION

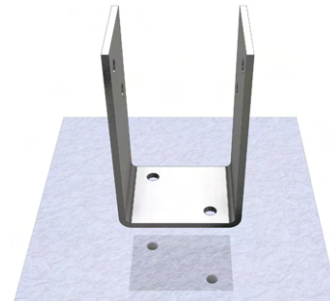
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deem fit for purpose. Consider the use of Ramset™ Galvanised AnkaScrew™. Refer to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



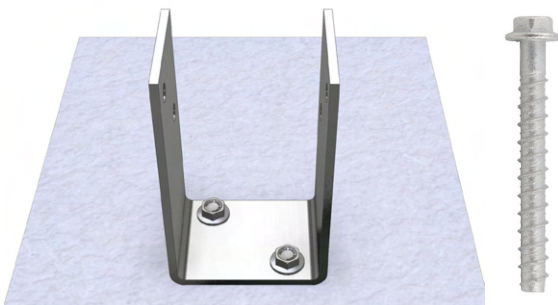
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

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 (either M10 or M12) Ramset galvanised AnkaScrew fastener.
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

STEP 4



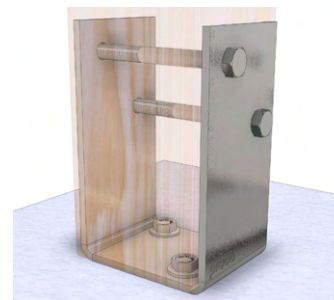
- Place timber post (90mmx90mm) upright into Post Anchor stirrup for direct bearing.
- Ensure to locate post central to support base and vertically plumb.

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

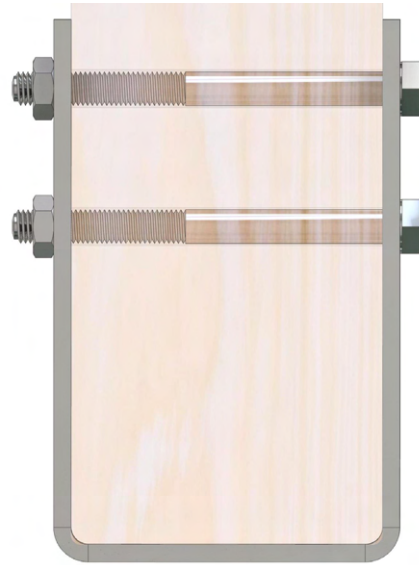


- Insert bolt through saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

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.
- 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.



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 2x 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

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- Product Information:
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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.
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- For detailed instructions on installation and design properties, see the Ramset website www.ramset.com.au



LOOKING FOR MORE DETAILED DESIGN VALUES?

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www.pryda.com.au www.pryda.co.nz

For more information call 1300 657 052 (Australia), 0800 88 22 44 (New Zealand) or email info@pryda.com.au