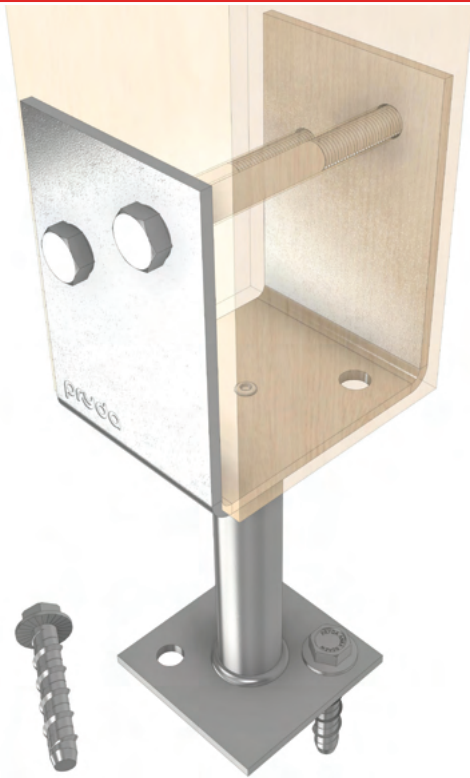




DESIGN GUIDE

POST ANCHORS

2026

POST ANCHORS DESIGN GUIDE

TABLE OF CONTENTS

POST ANCHORS	2
ADJUSTABLE POST ANCHOR (PS)	5
BOLT DOWN POST ANCHOR (PSBD).....	9
BOLT DOWN POST ANCHOR WITH BASE SADDLE (PSB)	13
BOLT DOWN POST ANCHOR WITH RAISED MOUNT (PSBM).....	18
CENTRE FIX POST ANCHOR (PSCF).....	22
CENTRE PIN POST ANCHOR (PSCP)	27
FULL STIRRUP POST ANCHOR (PSFS)	32
FULL STIRRUP POST ANCHOR WITH SOLID STEM (PSFW)	38
HALF STIRRUP POST ANCHOR (PSHS)	42
HALF STIRRUP POST ANCHOR WITH SOLID STEM (PSHW)	47
HEAVY DUTY BOLT DOWN ANCHOR (PSBT)	51
HIGH WIND POST ANCHOR (PSQ).....	55
T-BLADE CENTRE FIX POST ANCHOR (PSCFB).....	59

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 65mm to 600mm (b) stirrup widths 75, 90, 100, 115, 125mm (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 10mm (or 3/8") diameter galvanised bolts, except for the High Wind type (PSQ) which requires 12mm (or 1/2") diameter bolts. Where the bolt head or nut bears directly on the timber (Half Stirrup and Centre Fix types), a 30mm diameter by 3mm thick washer is required.
- Use galvanised coach screws- 50 x 10mm into side grain and 75 x 10mm 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.

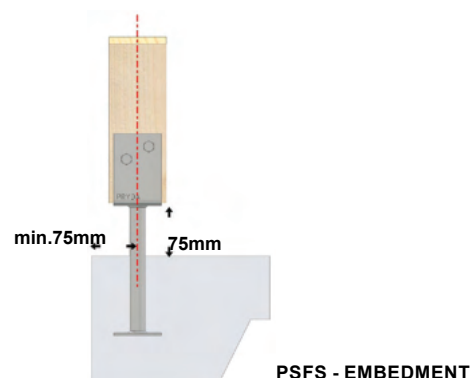
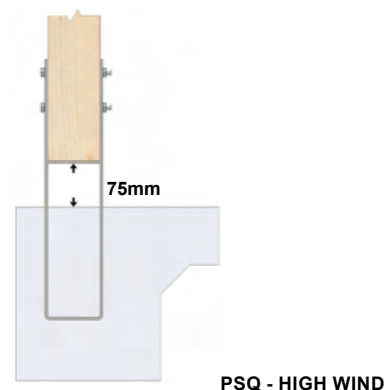
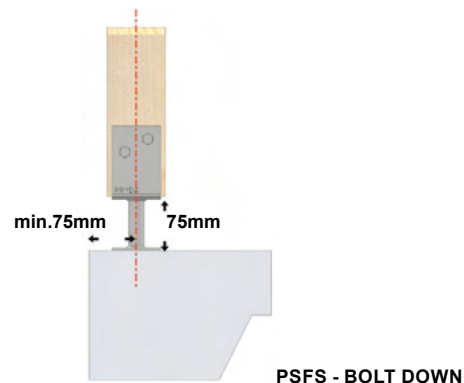
1. The design loads tabulated above require that:
 - (a) the timber post must bear on the Post Anchor base and
 - (b) all post sizes to be a minimum of 75 x 75mm section UNO
 - (c) all anchors must be installed plumb
 - (d) for all bolt down anchors, support foundation must be flat and level supporting 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/NZS1170.2 wind code and AS4055:2012.
6. Post Anchors should NOT be assumed to contribute towards lateral bracing/ raking stability of a structure in decks or stumps in sub-structure, unless pre-approved by 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, i.e. 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 75mm 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.

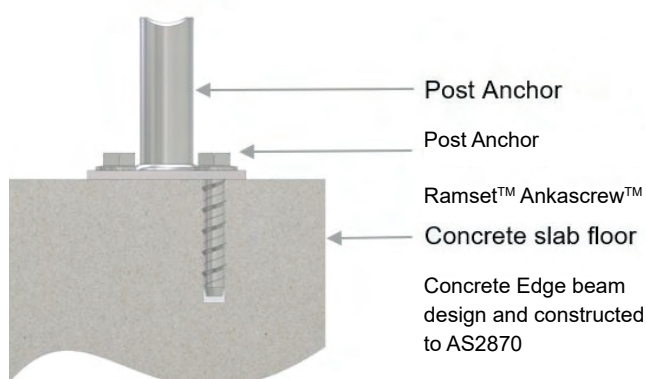
Pryda Post Anchor Concrete Fixing

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 using either Ramset™ WERCS™ AnkaScrew™ M10 x 100mm Hex Head (AS10100WGM) or M12 x 100mm Hex Head (AS12100WGM) depending on selected post anchor style.

Installation of AnkaScrews is quick and easy.

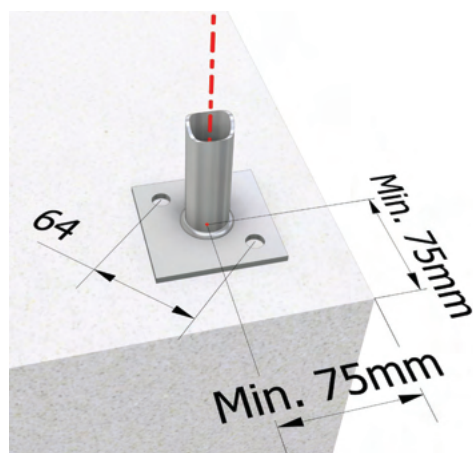
They are self-tapping and non-expansive. Refer to Ramset™ installation instructions on their web site: www.ramset.com.au or contact Ramset™ direct. Product information and design Specifications from Ramset™ data sheets takes precedence over information shown on this page.



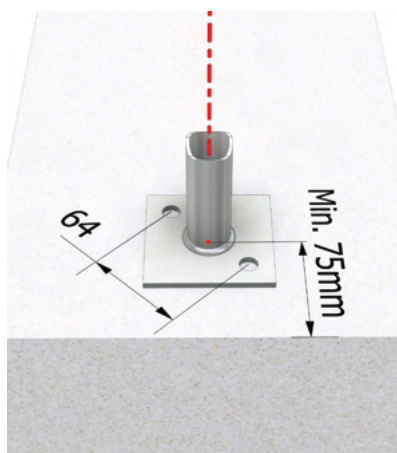
End user shall refer to selected fastener manufacturer for :

- Alternative fasteners that meet or exceeds tie-down capacity of selected Post Anchor.
- Consult with your project Engineer for advice to ensure the selected Post Anchor is “fit for purpose” for the intended support conditions before proceeding.
- Check screw bolt corrosion category and protection level is acceptable for the project environment and supporting substrate.

Suggested edge distance. Refer to selected fastener manufacturer Technical Data Sheet or contact manufacturer for further information on fastener installation conditions and limitations.



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

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.

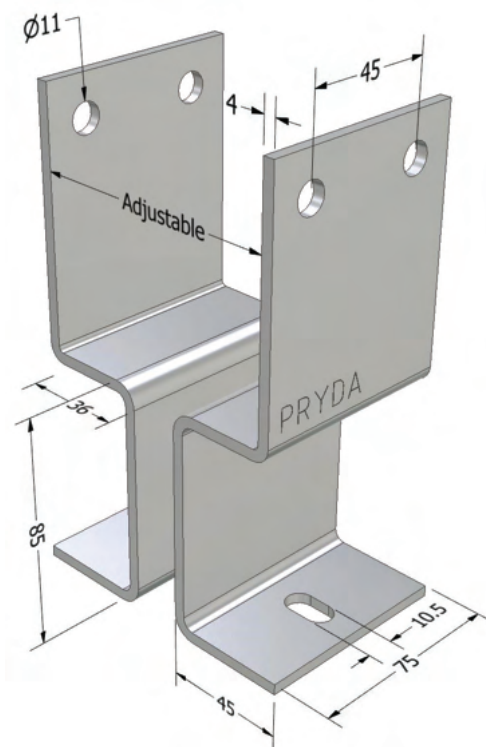
Timber post to be installed central to the post anchor. It is the responsibility of the Project Engineer / Architect / Building Practitioner / Trade person and end user to ensure the product is verified to be "fit for purpose" for each project.

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 HEIGHT (mm)	POST SIZE (mm)	BOLT HOLE SIZE	QUANTITY
PS85/6	G250 Steel Hot Dip Galvanised (500 g/m ²)	85	90 - 150	M10	6
PS160/6		160	90 - 150	M10	6

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)
PS85/6	24	8
PS160/6	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/NZS1170.2 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

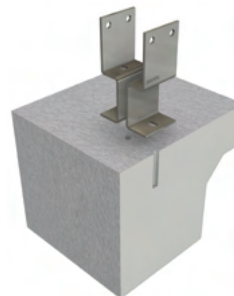
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer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

STEP 6



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

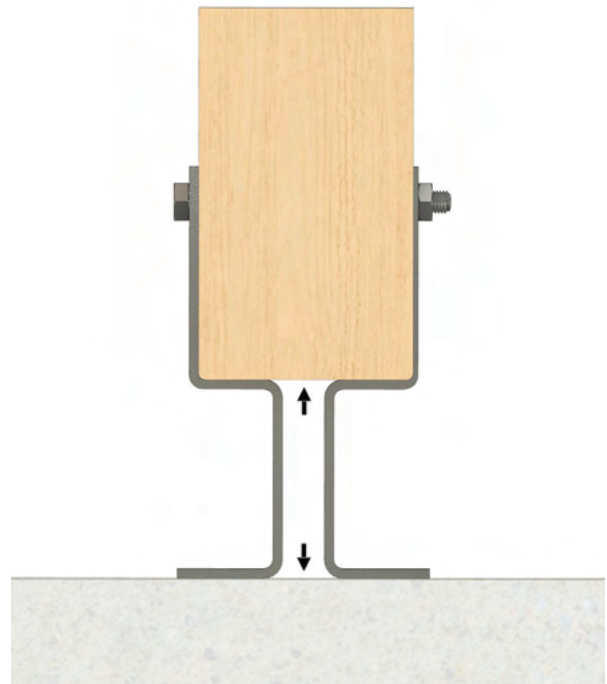
INSTALLATION TIPS

FOUNDATION SLOPE

- It is recommended to slope foundations away from the base of the Post Anchor all around.
- Avoid water pooling and buildup of debris around anchor base 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.
- Tiling or paving around anchor is not recommended as this may result in a recess space around the anchor that may facilitate water pooling and debris buildup.

TERMITE & BUSHFIRE MANAGEMENT

- To meet the requirements of AS3660.1-2014, 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.



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

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 and 90mm

FASTENER REQUIRED

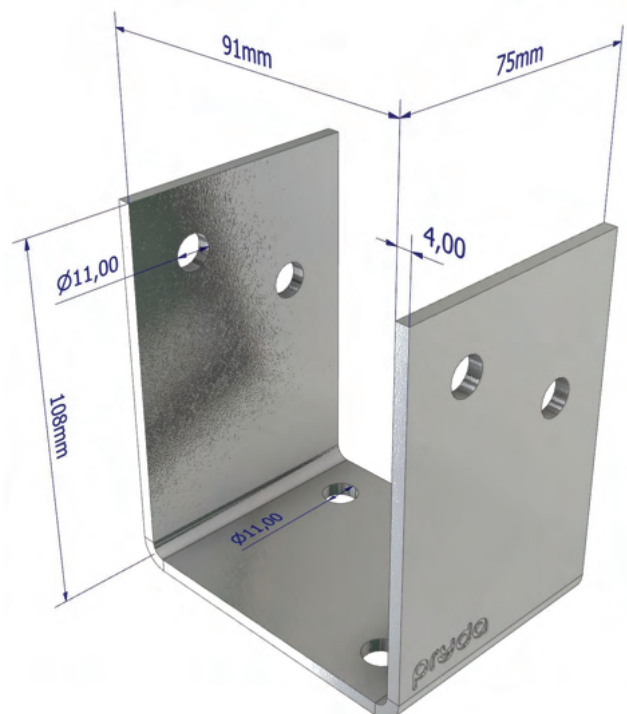
POST STIRRUP TO TIMBER POST	M10 or M12 4.6 grade galvanised Hex Head Bolts
	M10 or M12 x 50mm 4.6 grade galvanised Coach Screws
POST BASE TO CONCRETE	M10 or M12 galvanised Ramset™ AnkaScrew™

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	STEM HEIGHT (mm)	POST SIZE (mm)	BOLT HOLE SIZE	QTY
PSBD75/12/6	G250 Steel Hot Dip Galvanised (500 g/m ²)	N/A	75	M12	6
PSBD90/6			90	M10	
PSBD90/12/6				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 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/NZS1170.2 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.

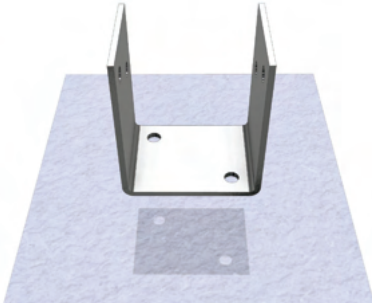
IMPORTANT:

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

INSTALLATION

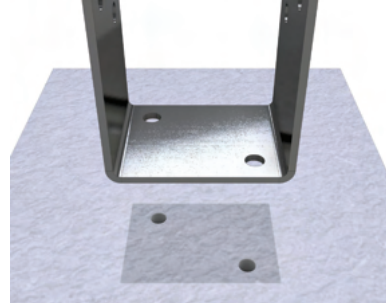
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer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

STEP 1



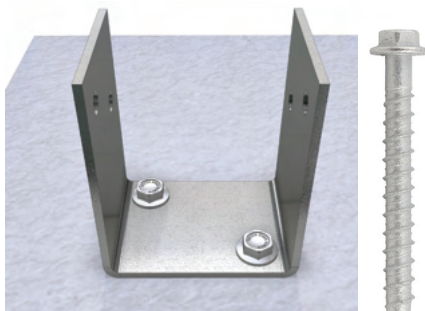
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



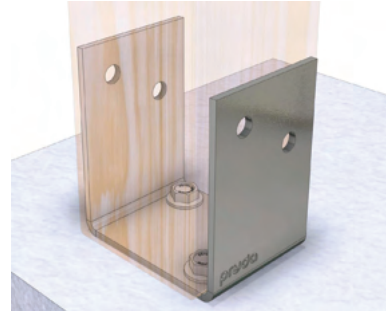
- Drill two holes at marked location to required depth for selected hold-down bolt. Refer to bolt manufacturer guidelines for recommended pre-drill hole size and depth. Suggested minimum screw embedment depth 100mm or greater (section detail shown above).

STEP 3



- Position Post Anchor and insert (either M10 or M12) Ramset™ 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

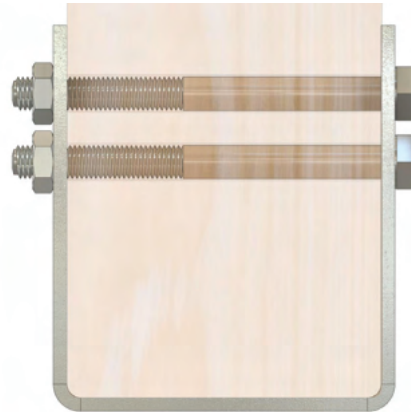


- Insert bolt through saddle and passing through timber post. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

INSTALLATION TIPS

FOUNDATION SLOPE

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

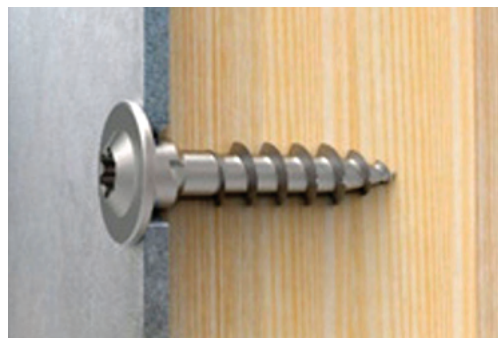


BOLT LENGTH

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

POST FASTENERS

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



CONCRETE FASTENERS

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

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	90mm, 100mm, 115mm

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 3mm 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

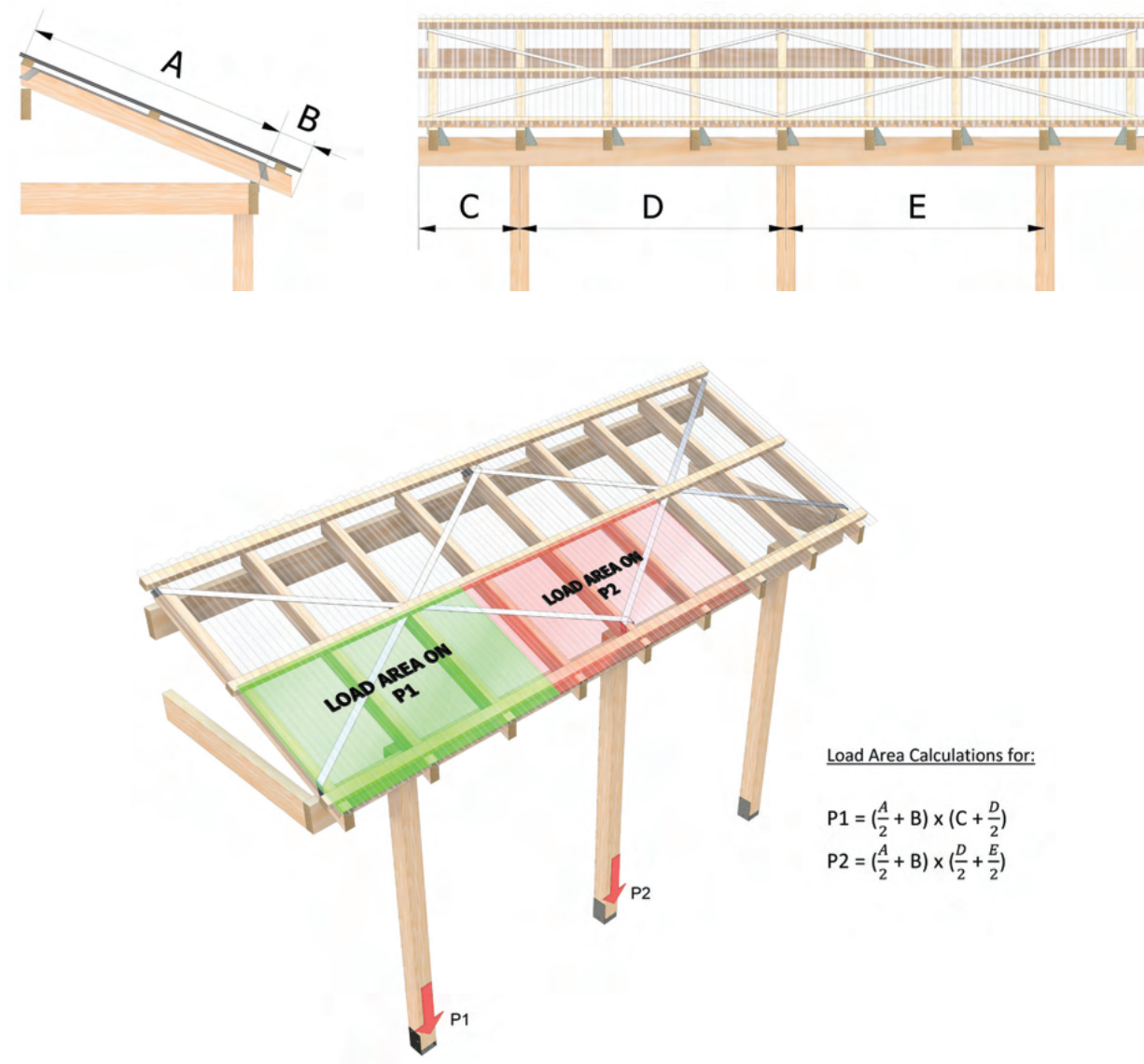


- Designed in accordance with Pryda testing and relevant Australian standards
- Engineering computations in accordance with the relevant Australian standards
- Not suitable for bushfire-prone or termite-prone areas



RANGE

PRODUCT CODE	MATERIAL	STEM HEIGHT (mm)	POST SIZE (mm)	BOLT HOLE SIZE	QTY
PSB90G/6	G250 Steel Hot Dip Galvanised (300 g/m ²)	N/A	90	M10	6
PSB90G/12/6				M12	
PSB100G/6			100	M10	
PSB100G/12/6				M12	
PSB115G/6			115	M10	
PSB90GB/6	G250 Steel Hot Dip Galvanised (300 g/m ²) + Black Powder Coating		90	M10	



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 fibreboard ceiling lining.
- Tiled Roof: Terracotta or concrete tile and plasterboard ceiling.

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 75mm section (3m max. height).
 - Reduce load area for 115 x 115mm 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/NZS1170.2 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.

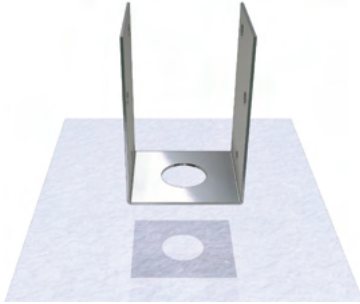
IMPORTANT:

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

INSTALLATION

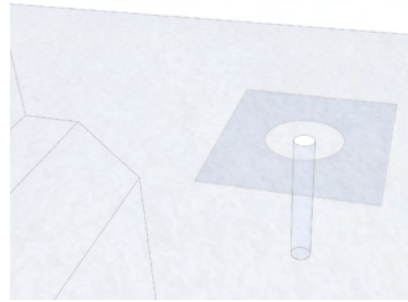
Note: These anchors can only fit a single fastener in the base. It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose.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

STEP 1



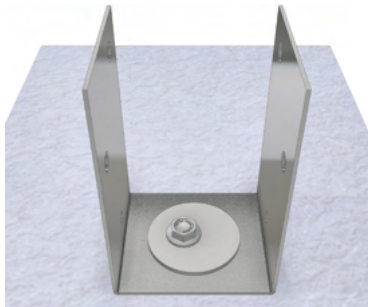
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.

STEP 2



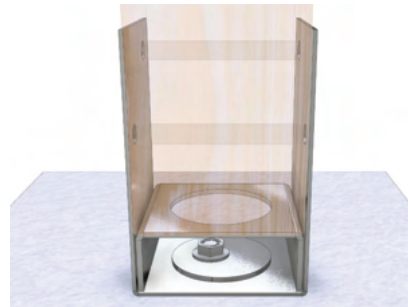
- Drill single hole at marked location to required depth for selected hold-down bolt. Hole can be offset from centre point within cut-out for adjustment purposes. Suggested minimum screw embedment depth 100mm or greater.

STEP 3



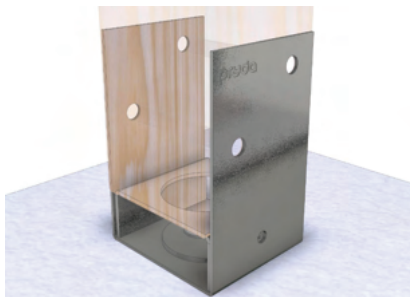
- Position Post Anchor base over hole location and install large washer over cut-out. Align washer bolt hole to drilled hole and insert selected Ramset™ galvanised AnkaScrew™ fastener. (AnkaScrew™ shown).
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

STEP 4



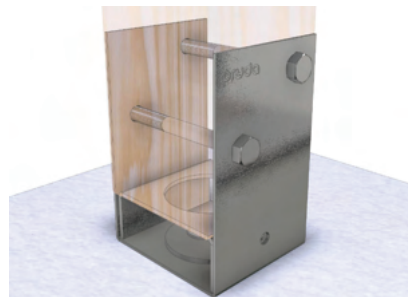
- Install insert over washer and lock into position by aligning side dimples to corresponding side holes.
- Place timber post upright into Post Anchor stirrup for direct bearing on insert.
- Ensure to locate post central to support base and vertically plumb.

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

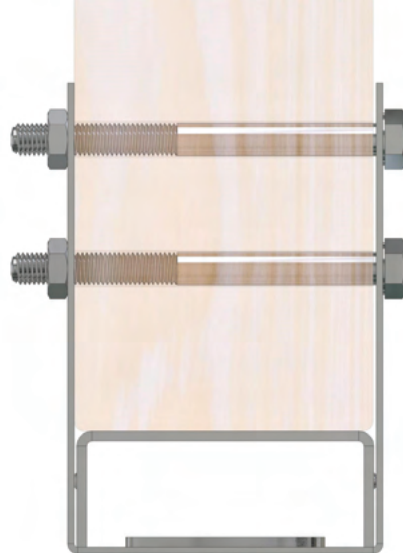


- Insert either 2 x Hex Head Bolts or 4 x Coach Screws and securely fasten.

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.
- Tiling or paving around anchor is not recommended as this may result in a recess space around the anchor that may facilitate water pooling and debris buildup.



BOLT LENGTH

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

POST FASTENERS

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



CONCRETE FASTENERS

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

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

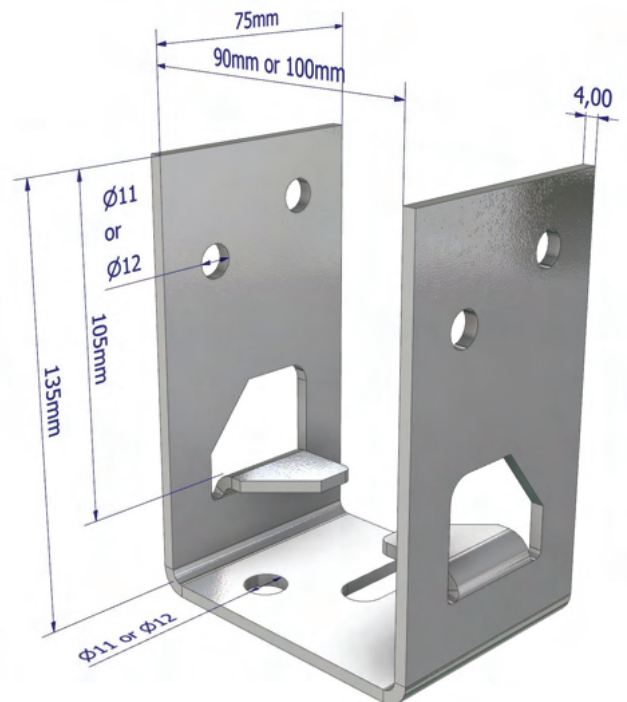
FASTENER REQUIRED

POST STIRRUP TO TIMBER POST	M10 or M12 4.6 grade galvanised Hex Head Bolts
POST	M10 or M12 x 50mm 4.6 grade galvanised Coach Screws
POST BASE TO CONCRETE	M10 x galvanised Ramset™ AnkaScrew™

AS1720 & AS4055 COMPLIANT



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



RANGE

PRODUCT CODE	MATERIAL	STEM HEIGHT (mm)	POST SIZE (mm)	BOLT HOLE SIZE	QTY
PSBM90/6	G250 Steel Hot Dip Galvanised (500 g/m ²)	N/A	90	M10	6
PSBM90/12/6				M12	
PSBM100/6			100	M10	
PSBM100/12/6				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 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/NZS1170.2 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.

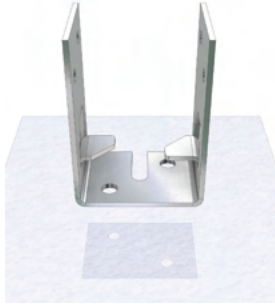
IMPORTANT:

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

INSTALLATION

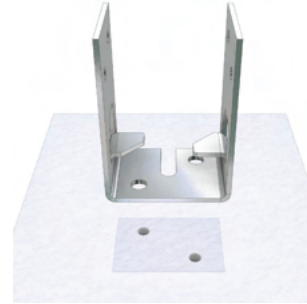
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer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

STEP 1



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

STEP 2



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

STEP 3



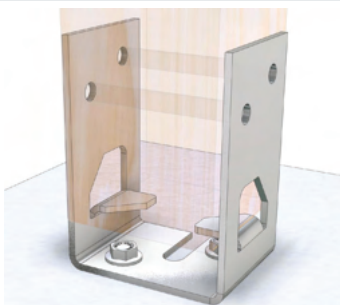
- Position Post Anchor and insert (either M10 or M12) Ramset™ galvanised AnkaScrew™ fastener.
- Tighten fastener to pull down Post Anchor base firmly onto the concrete slab.

STEP 4



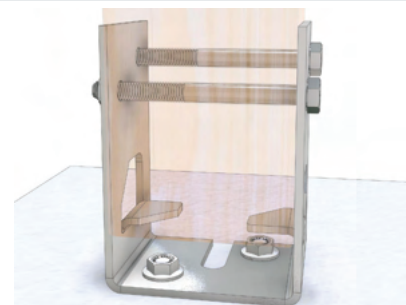
- Place timber post upright into Post Anchor stirrup for direct bearing.
- Ensure to locate post central to support base and vertically plumb.

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

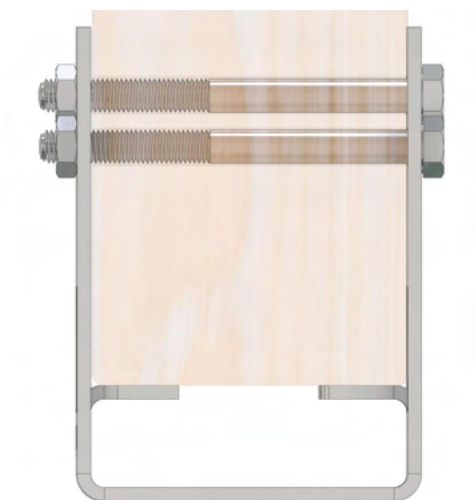


- Insert bolt through saddle and passing through timber post. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

INSTALLATION TIPS

FOUNDATION SLOPE

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



BOLT LENGTH

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

POST FASTENERS

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



CONCRETE FASTENERS

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

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	130mm, 300mm
POST SIZES	90-150mm

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.

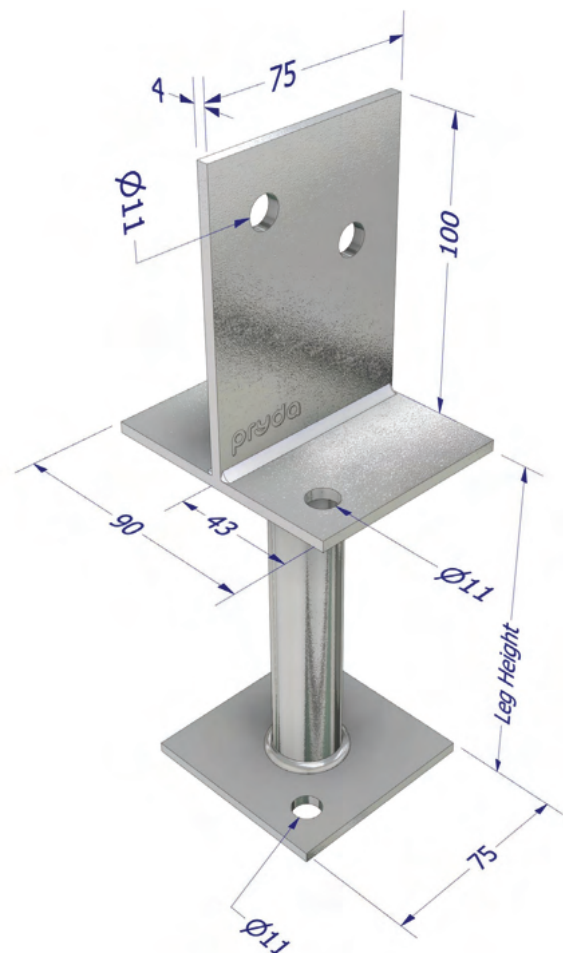
Due to the fixing method, it is only suitable for small spans with limited roof loads, governed by uplift capacity. Timber post to be installed central to the Post Anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure the product 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
PSCF130/6	G250 Steel, Hot Dip Galvanised (500 g/m ²)	130	90 - 150	M10	6
PSCF300/4		300			4

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/NZS1170.2 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.
- Due to the fixing method through the end grain, the post end should be sealed, protected, and routinely maintained.

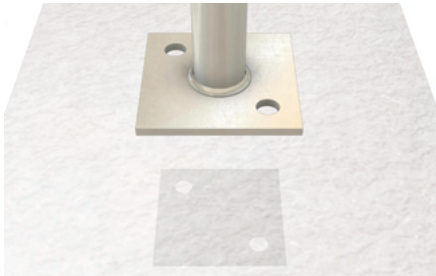
IMPORTANT:

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

INSTALLATION - FIXING TO DRY CONCRETE

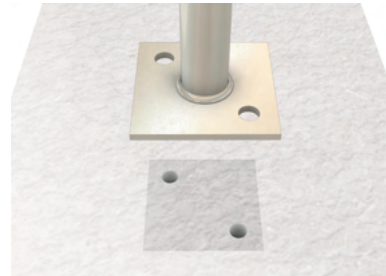
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer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

STEP 1



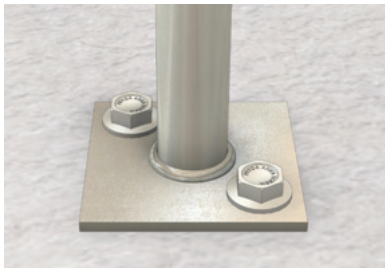
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



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

STEP 3



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

STEP 4



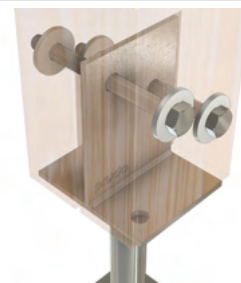
- Use a circular saw to cut a 4mm slot through the centre of the post to a depth of 100mm.
- Mark side holes using anchor centre fix flange as stencil to mark post bolted holes location.
- Place timber upright into Post Anchor stirrup, ensure post is located centrally.

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.

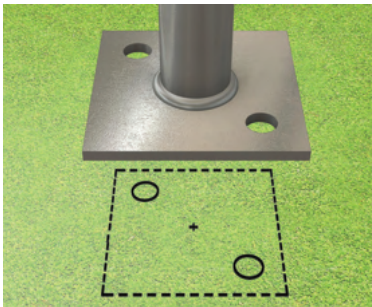
STEP 6



- Insert bolt through washer, saddle and passing through timber post. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.
- Install washer, nut and securely fasten.
(Washer: min. 30 x 3mm at both ends of each bolt).

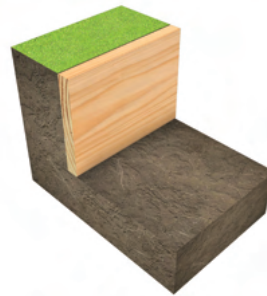
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



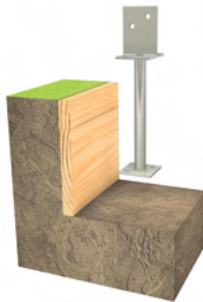
- Orientate anchor as required, measure and mark location of anchor positioning.
- Isolated footing should be restricted to stable soil i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

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



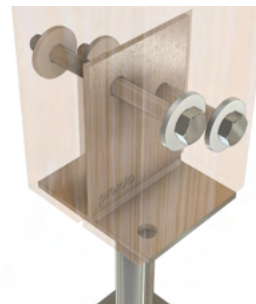
- Use a circular saw to cut a 4mm slot through the centre of the post to a depth of 100mm.
- Mark side holes using anchor centre fix flange as stencil to mark post bolted holes location.
- Place timber upright into Post Anchor stirrup, ensure post is located centrally.

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

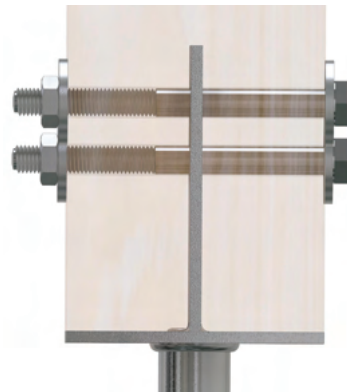


- Insert bolt through washer, saddle and passing through timber post. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.
- Install washer, nut and securely fasten (Washer: min. 30 x 3mm at both ends of each bolt).

INSTALLATION TIPS

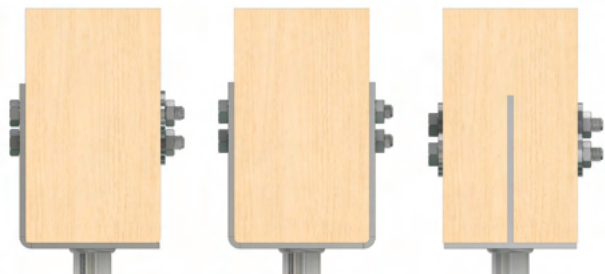
FOUNDATION SLOPE

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



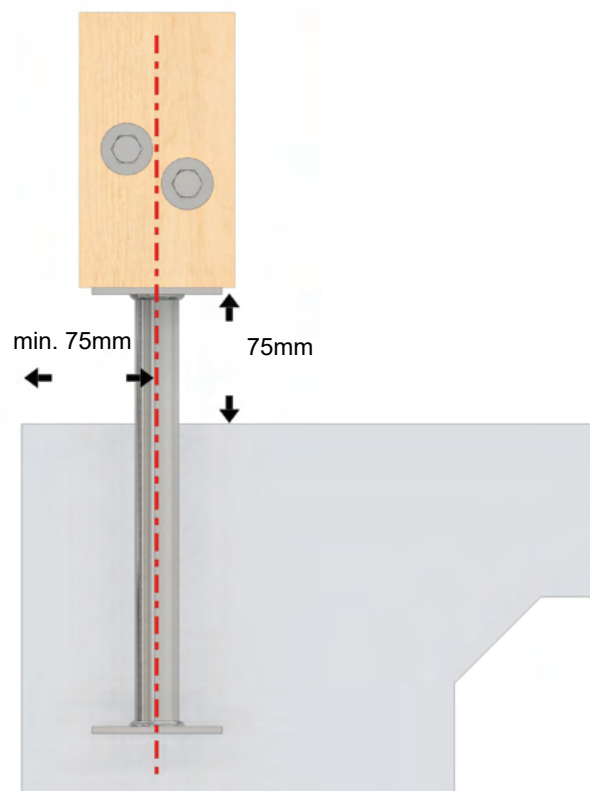
BOLT LENGTH

- When using Hex Head Bolts for fastening your post, it is recommended to use a length 20mm longer than post side.
- 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 AS3660.1-2014, 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

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	130mm, 300mm
POST SIZES	90 - 125mm

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.

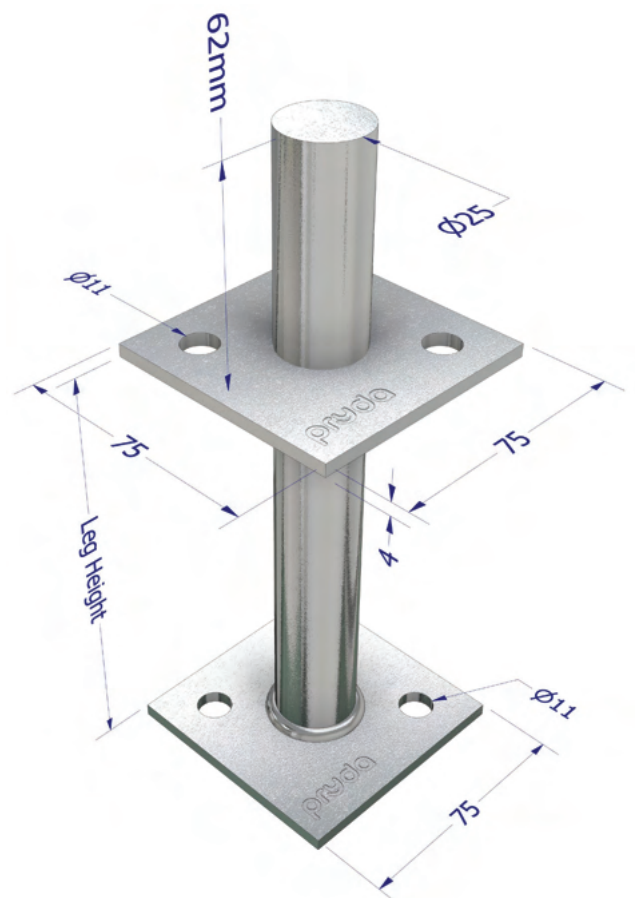
Due to the fixing method, it is only suitable for small spans with limited roof loads, governed by uplift capacity. Timber post to be installed central to the Post Anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure the product 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
PSCP130/6	G250 Steel, Hot Dip Galvanised (500 g/m ²)	130	90 - 125	M10	6
PSCP300/4		300			4

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/NZS1170.2 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.
- Due to the fixing method through the end grain. The post end should be sealed, protected, and routinely maintained.

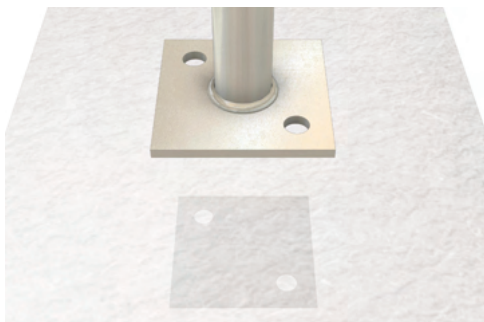
IMPORTANT:

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

INSTALLATION - FIXING TO DRY CONCRETE

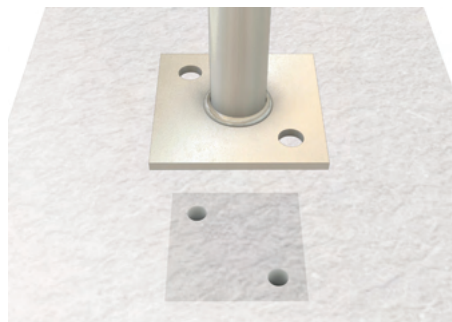
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer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

STEP 1



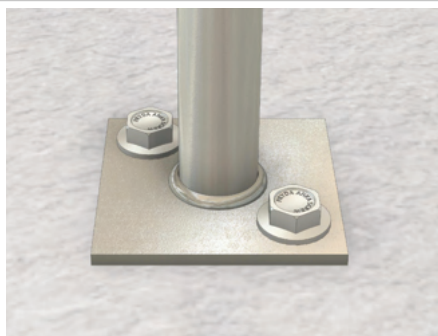
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



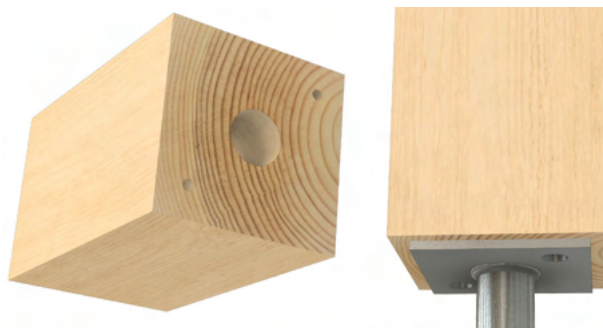
- Drill two holes at marked location to required depth for selected hold-down bolt. Refer to bolt manufacturer guidelines for recommended pre-drill hole size and depth. Suggested minimum screw embedment depth 100mm or greater (section detail shown above).

STEP 3



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

STEP 4



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

STEP 5



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

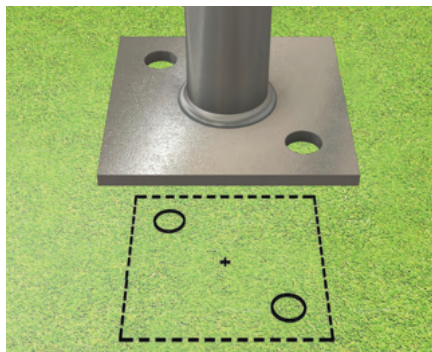
STEP 6



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

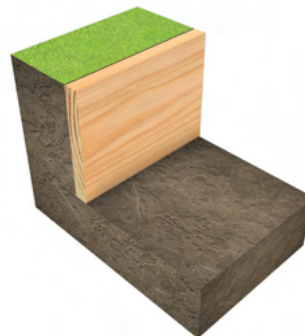
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



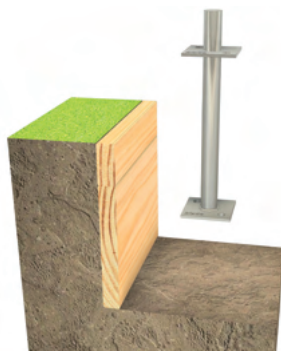
- Orientate anchor as required, measure and mark location of anchor positioning.
- Isolated footing should be restricted to stable soil i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



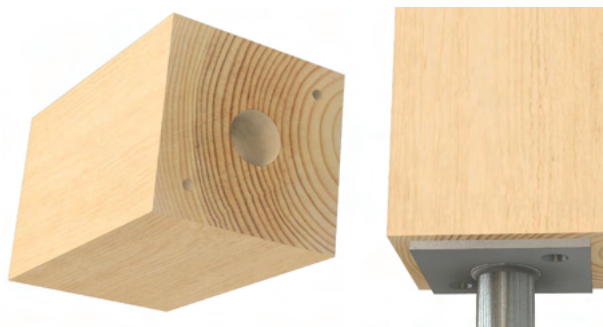
- Dig out ground and construct formwork to required depth as specified by your consulting Engineer.
- Allowance for 150mm stem embedment and 75mm clearance between underside of post to foundation surface.

STEP 3



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

STEP 4



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

STEP 5



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

STEP 6



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

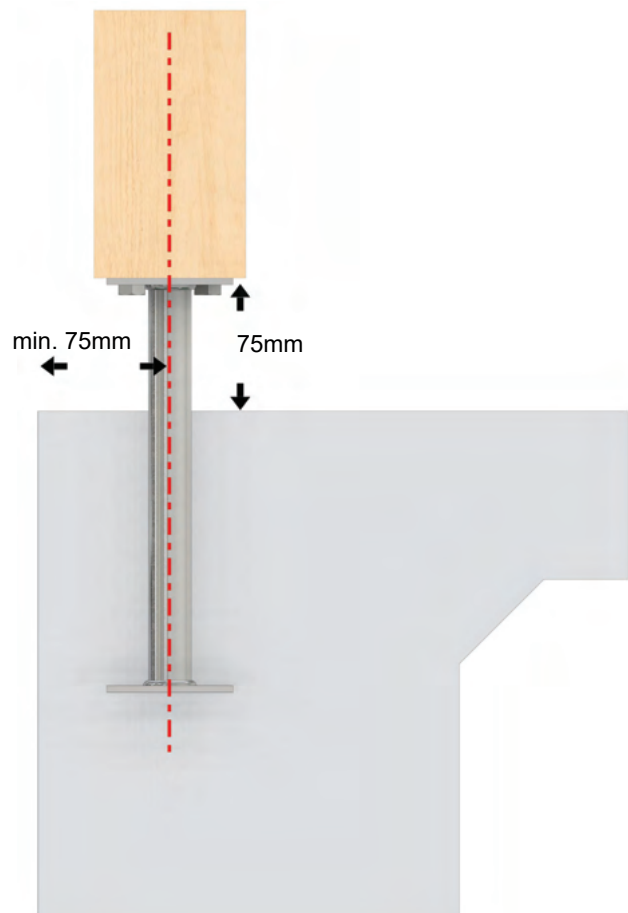
INSTALLATION TIPS

FOUNDATION SLOPE

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

TERMITE & BUSHFIRE MANAGEMENT

- To meet the requirements of AS3660.1-2014, 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

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, 600mm
POST SIZES	75, 90, 100, 115, 125mm

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™

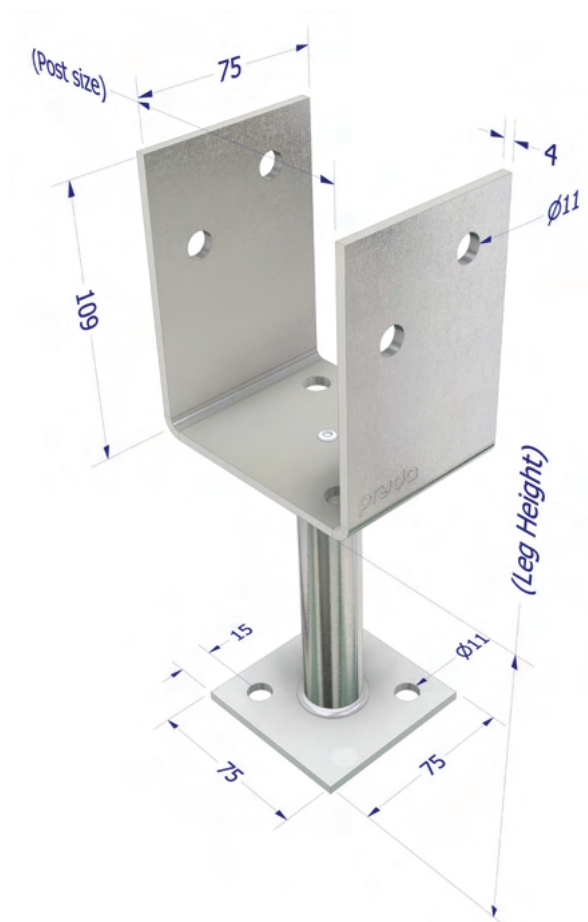
Primarily used for bolting to existing concrete. Can also be used for setting to concrete having a maximum 75mm clearance. Timber post to be installed central to the Post Anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure 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
PSFS6590/6	G250 Steel, Hot Dip Galvanised (500 g/m ²)	65	90	M10	6
PSFS6590/12/6				M12	
PSFS13090/6		130	90	M10	
PSFS130100/6			100	M10	
PSFS130115/6			115	M10	
PSFS20090/6		200	90	M10	
PSFS20090/12/6				M12	
PSFS200100/6			100	M10	
PSFS200100/12/6				M12	
PSFS25090/6		250	90	M10	
PSFS30075/4		300	75	M10	4
PSFS30075/12/4				M12	
PSFS30090/4			90	M10	
PSFS30090/12/4				M12	
PSFS300100/4			100	M10	
PSFS300100/12/4				M12	
PSFS300115/4			115	M10	
PSFS300125/4			125	M10	
PSFS300125/12/4				M12	
PSFS45090/4		450	90	M10	
PSFS45090/12/4				M12	
PSFS450100/4			100	M10	
PSFS45100/12/4				M12	
PSFS60090/4		600	90	M10	
PSFS60090/12/4				M12	
PSFS600100/4			100	M10	
PSFS600100/12/4				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		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 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/NZS1170.2 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 24kN 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

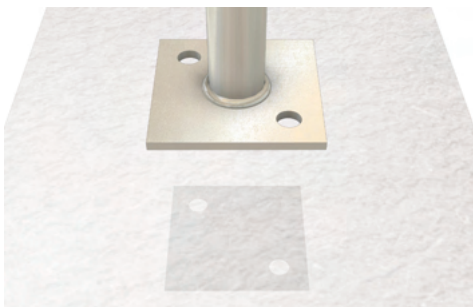
IMPORTANT:

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

INSTALLATION - FIXING TO DRY CONCRETE

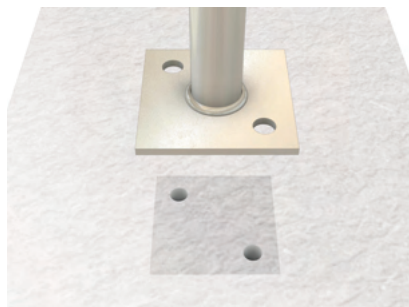
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer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

STEP 1



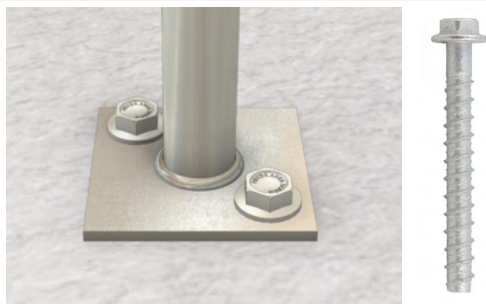
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



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

STEP 3



- Position Post Anchor and insert 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.
- For coach screws, drill pilot holes to the length of selected screws.

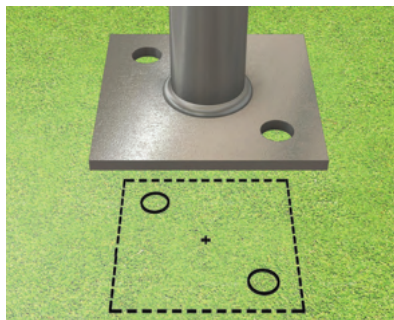
STEP 6



- 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.

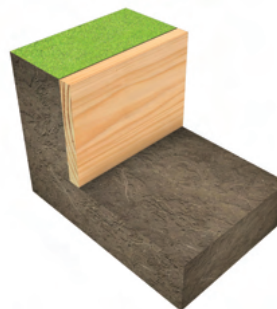
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



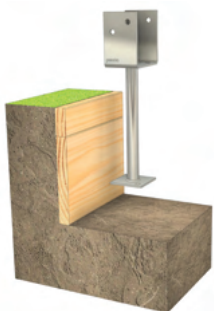
- Orientate anchor as required, measure and mark location of anchor positioning.
- Isolated footing should be restricted to stable soil i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

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

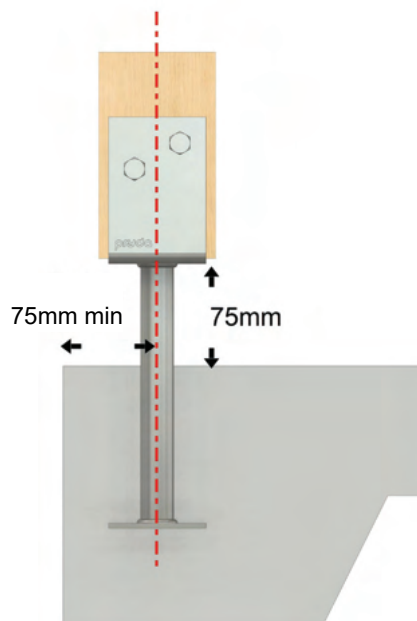


- Insert bolt through saddle and passing through timber post. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

INSTALLATION TIPS

FOUNDATION SLOPE

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

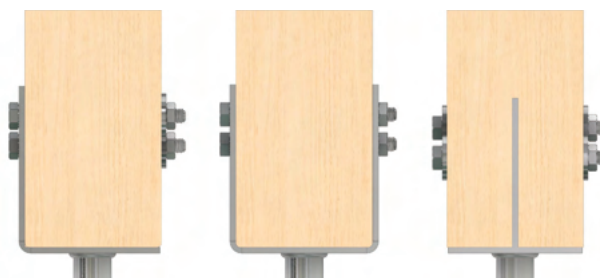


TERMITE & BUSHFIRE MANAGEMENT

- To meet the requirements of AS3660.1-2014, 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.

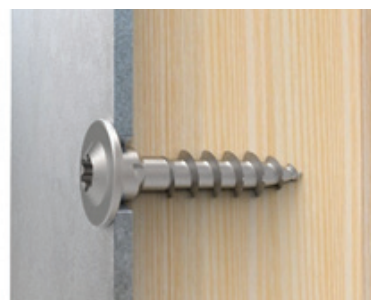
BOLT LENGTH

- 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 40mm 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

FULL STIRRUP POST ANCHOR WITH SOLID STEM

FEATURES AND BENEFITS

ECONOMICAL: Light weight design with cranked solid stem to better resist uplift.

EASY: Simply embed stem into wet concrete with full U stirrup post support using 2 x M10 bolts.

STRONG: Hot dip galvanised coating after manufacture and made from 4mm steel. Full CFW solid stem to saddle.

SPECIFICATIONS

STEEL	G250
STIRRUP THICKNESS	4mm
CORROSION RESISTANCE	HDG500 Hot dip galvanised (500 g/m ²)
STEM SIZES	300mm
POST SIZES	90mm

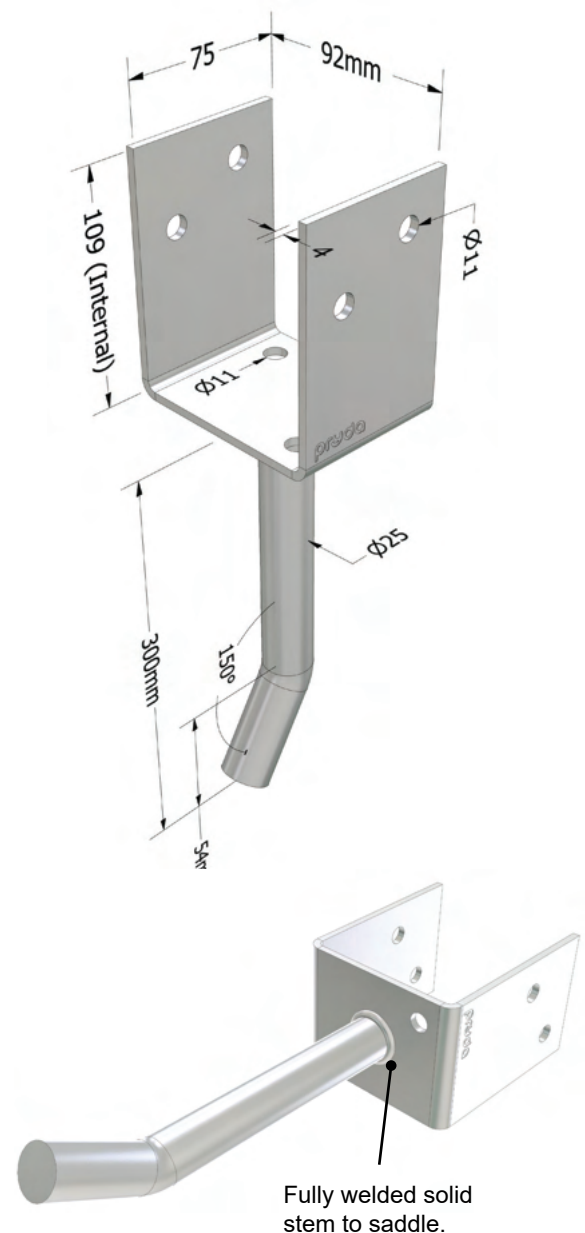
FASTENERS REQUIRED

POST STIRRUP TO TIMBER POST	M10 4.6 grade galvanised Hex Head Bolts
	M10 x 50mm 4.6 grade galvanised coach screws
POST BASE TO CONCRETE	Nil - Set into wet concrete



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 HEIGHT (mm)	POST SIZE (mm)	BOLT HOLE SIZE	QTY
PSFW30090/4	G250 Steel, Hot Dip Galvanised (500 g/m ²)	300	90	M10	4

DURABILITY

Pryda Post Anchors are hot dipped galvanised to standard AS/NZS4680.
Routine inspection and clearing any debris around anchor are an integral part of ongoing care and maintenance.

STORAGE AND HANDLING

Prior to use, the Pryda products shall be stored in a weatherproof environment and protected from moisture. Care must be taken to avoid any damage to the surface of the product protective galvanised coating and profile that may impact performance.

APPLICATION AND SCOPE OF USE

Typical application for all Pryda Post Anchors is for attached open verandah or similar structures for dwellings.
All other usage must be verified/checked by consulting structural Engineer.

DESIGN CAPACITIES

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

FIXINGS	POST (mm)	UPLIFT CAPACITIES FOR VARYING JOINT GROUPS		
		JD5	JD4	JD3
2 x M10 bolts	90	12 ⁽⁴⁾	12 ⁽⁴⁾	12 ⁽⁴⁾
4 x M10 x 50mm coach screws		6.7 ⁽⁴⁾	10.6 ⁽⁴⁾	12 ⁽⁴⁾

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 90 x 90mm section UNO. (c) All anchors must be installed plumb. (d) For all bolt down anchors, support foundation must be flat, level, and supporting base plate fully.
- Select design capacity according to the standard used for determining the design loads.
- Specified capacities are for concentric vertical load transfer only. Refer to each Post Anchor notes for recommended capacities for eccentrically loaded conditions with selected Post Anchors only.
- The base concrete and fixings to the concrete must provide sufficient resistance to the uplift forces and dead + live loads. Uplift loads stated in this document are stated for steel and timber post ONLY, these capacities may be limited by anchoring methods to the supporting foundation, i.e. fastener type, wet concrete embedment depth and concrete design. This should be verified by the project Engineer or designer prior to installation.**
- Wind uplift capacities are based on the AS/NZS1170.2 wind code.
- 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.
- Post Anchors are not intended to be used for cantilever posts, balustrades and, free standing structures, carports and gazebo, unless designed and approved by a consulting structural Engineer.
- Post must be laterally restrained at top, installed centrally to anchor, and deemed to be "fit for purpose" by the project Engineer.
- It is recommended to slope the foundation away from the anchor to prevent water pooling at the base.
- Do not cover exposed base plate and stem with debris or obstacles that will facilitate collection of debris around anchor base.
- Maximum post height 3m and ultimate limit state wind speed not exceeding 50m/s unless noted otherwise.
- Local settlement, ground water and soil reactivity will cause isolated concrete footings to 'TILT' and therefore induce bending into the post stirrup stem. Isolated footing should be restricted to stable soil, i.e. Class A and S foundation classification to AS2870.

IMPORTANT:

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

INSTALLATION

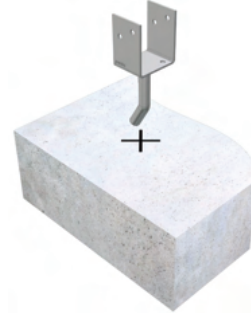
It is essential that the concrete design with selected solid stem length embedment exceeds the expected uplift load. Anchor to foundation design to be determined by consulting project Engineer to suit design application, foundation type, and deemed fit for purpose. The design Engineer should ensure the structural elements can support the intended design loads.

STEP 1



- Pour concrete as per concrete design by consulting project Engineer's details.
- Mark centre location of post position.
- Ensure adequate concrete edge distance set back.
- Concrete foundation support to be level horizontally.
- Seek advise from your consulting project Engineer.

STEP 2



- While concrete is wet, orientate selected anchor as required over mark and firmly insert solid stem into concrete.
- Embed selected anchor to required depth design by consulting project Engineer.
- Vibrate concrete ad required to ensure air pockets around stem are absent and concrete compacts to required density.

STEP 3



- Ensure anchor is vertically plumb.
- Leave anchor until recommended concrete curing time has lapsed.

STEP 4



- Place timber post centrally into Post Anchor stirrup for direct bearing on stirrup base.
- Ensure both Post Anchor and post are vertically plumb.

STEP 5



- Drill through post using saddle holes. Ensure drill through holes are horizontally level 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 TIP

FOUNDATION SLOPE

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

BOLT LENGTH

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

POST FASTENERS

- Buildex offer a 40mm 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



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/m ²)
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.

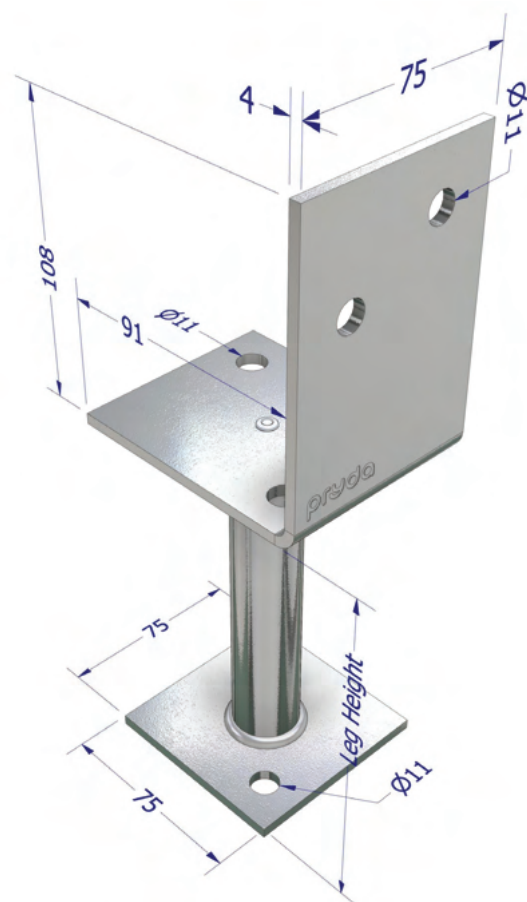
Can be bolted to existing concrete or set into concrete. Recommend maximum post size 90mm. Timber post to be installed central to the Post Anchor. It is the responsibility of the Project Engineer / Architect / Building practitioner / Trade person and end user to ensure the product is verified to be "Fit 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
PSHS65/6	G250 Steel, Hot Dip Galvanised (500 g/m²)	65	90	M10	6
PSHS65/12/6				M12	
PSHS130/6		130		M10	
PSHS130/12/6				M12	
PSHS200/6		200		M10	
PSHS200/12/6				M12	
PSHS300/4		300		M10	4
PSHS300/12/4				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 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/NZS1170.2 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.

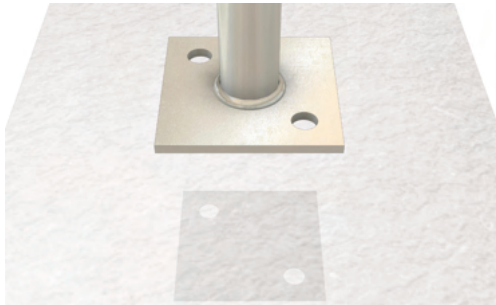
IMPORTANT:

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

INSTALLATION - FIXING TO DRY CONCRETE

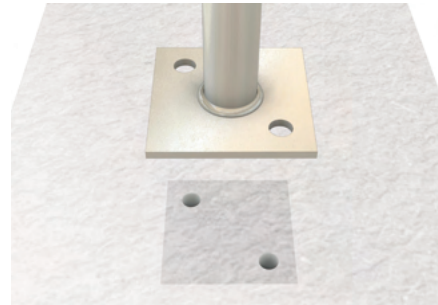
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer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

STEP 1



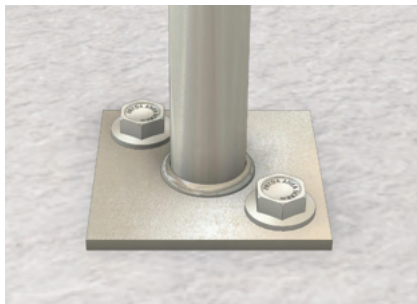
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



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

STEP 3



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

STEP 4



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

STEP 5



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

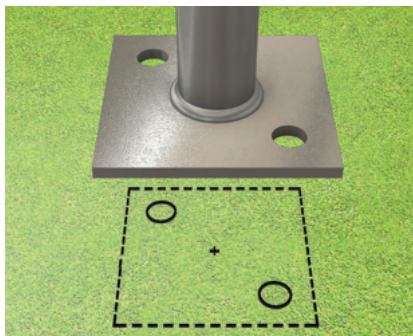
STEP 6



- 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 washer to timber interface only (30mm dia. x 3mm).
- Install nut and securely fasten .

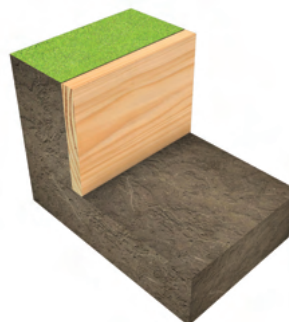
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



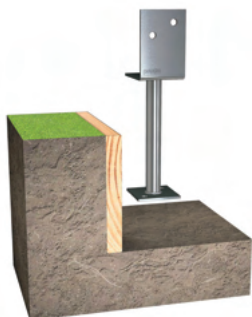
- Orientate anchor as required, measure and mark location of anchor positioning
- Isolated footing should be restricted to stable soil i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



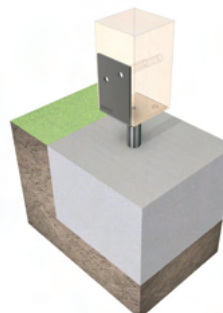
- Dig out ground and construct formwork to required depth as specified by your consulting Engineer.
- Allowance for 150mm stem embedment and 75mm clearance between underside of post to foundation surface.

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

STEP 5



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

STEP 6

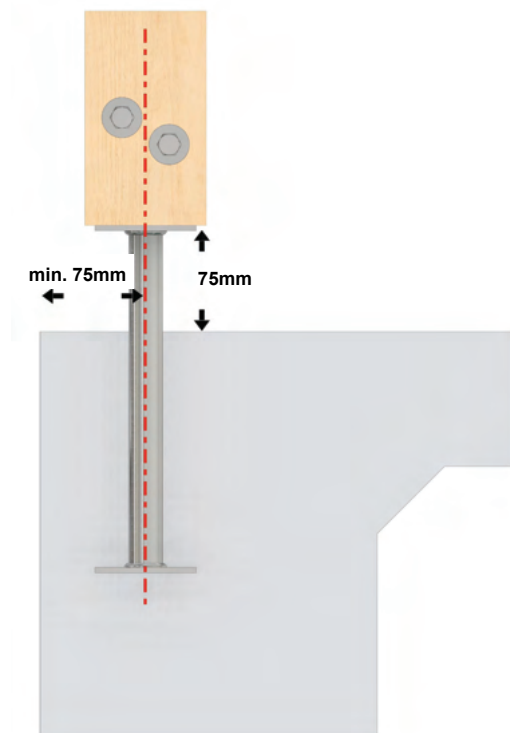


- Insert bolt through saddle and passing through timber post. A minimum of 2x thread pitch should extend beyond the outward surface of the nut.
- Install washer to timber interface only (30mm dia. x 3mm).
- Install nut and securely fasten.

INSTALLATION TIPS

FOUNDATION SLOPE

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

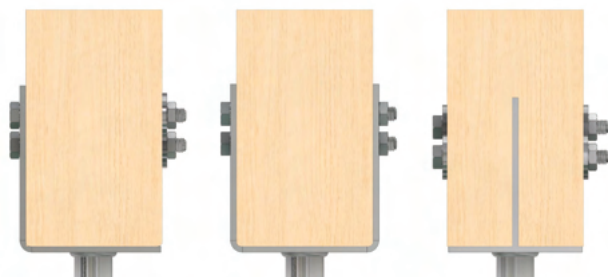


TERMITE & BUSHFIRE MANAGEMENT

- To meet the requirements of AS3660.1-2014, 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 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.



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

HALF STIRRUP POST ANCHOR WITH SOLID STEM

FEATURES AND BENEFITS

ECONOMICAL: Light weight design with cranked solid stem to better resist uplift.

EASY: Simply embed stem into wet concrete with full U stirrup post support using 2 x M10 bolts.

STRONG: Hot dip galvanised coating after manufacture and made from 4mm steel. Full CFW solid stem to saddle.

SPECIFICATIONS

STEEL	G250
STIRRUP THICKNESS	4mm
CORROSION RESISTANCE	HDG500 Hot dip galvanised (500 g/m ²)
STEM SIZES	150mm
POST SIZES	90mm

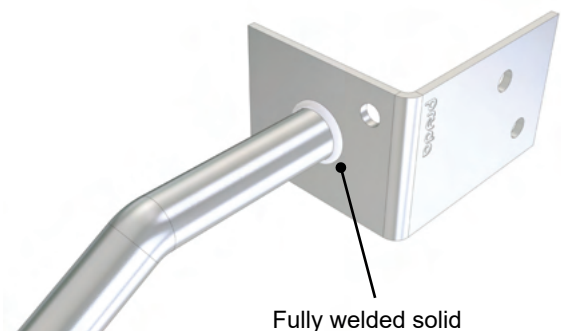
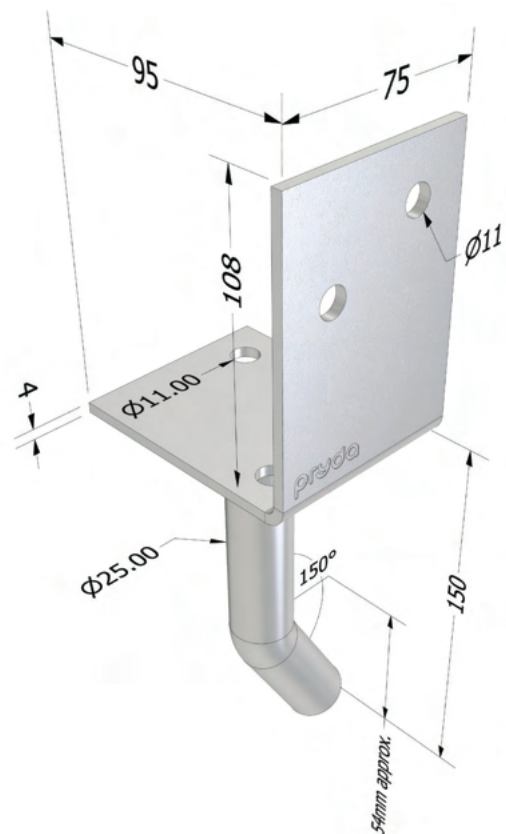
FASTENERS REQUIRED

POST STIRRUP TO TIMBER POST	M10 4.6 grade galvanised Hex Head Bolts M10 x 50mm 4.6 grade galvanised coach screws
POST BASE TO CONCRETE	Nil - Set into wet concrete



**AS1684, AS1720
& AS4055 COMPLIANT**

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



Fully welded solid stem to saddle.

RANGE

PRODUCT CODE	MATERIAL	STEM HEIGHT (mm)	POST SIZE (mm)	BOLT HOLE SIZE	QTY
PSHW150/6	G250 Steel, Hot Dip Galvanised (500 g/m ²)	150	90	M10	6

DURABILITY

Pryda Post Anchors are hot dipped galvanised to standard AS/NZS4680.
Routine inspection and clearing any debris around anchor are an integral part of ongoing care and maintenance.

STORAGE AND HANDLING

Prior to use, the Pryda products shall be stored in a weatherproof environment and protected from moisture. Care must be taken to avoid any damage to the surface of the product protective galvanised coating and profile that may impact performance.

APPLICATION AND SCOPE OF USE

Typical application for all Pryda Post Anchors is for attached open verandah or similar structures for dwellings.
All other usage must be verified/designed by consulting structural Engineer.

DESIGN CAPACITIES

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

FIXINGS	POST (mm)	UPLIFT CAPACITIES FOR VARYING JOINT GROUPS		
		JD5	JD4	JD3
2 x M10 bolts	90	5.3 ⁽⁴⁾	5.3 ⁽⁴⁾	5.3 ⁽⁴⁾
4 x M10 x 50mm coach screws		5.3 ⁽⁴⁾	5.3 ⁽⁴⁾	5.3 ⁽⁴⁾

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 90 x 90mm section UNO. (c) All anchors must be installed plumb. (d) For all bolt down anchors, support foundation must be flat, level, and supporting base plate fully.
- Select design capacity according to the standard used for determining the design loads.
- Specified capacities are for concentric vertical load transfer only. Refer to each Post Anchor notes for recommended capacities for eccentrically loaded conditions with selected Post Anchors only.
- The base concrete and fixings to the concrete must provide sufficient resistance to the uplift forces and dead + live loads. Uplift loads stated in this document are stated for steel and timber post ONLY, these capacities may be limited by anchoring methods to the supporting foundation, i.e. fastener type, wet concrete embedment depth and concrete design. This should be verified by the project Engineer or designer prior to installation.**
- Wind uplift capacities are based on the AS/NZS1170.2 wind code.
- 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.
- Post Anchors are not intended to be used for cantilever posts, balustrades and, free standing structures, carports and gazebo, unless designed and approved by a consulting structural Engineer.
- Post must be laterally restrained at top, installed centrally to anchor, and deemed to be "fit for purpose" by the project Engineer.
- It is recommended to slope the foundation away from the anchor to prevent water pooling at the base.
- Do not cover exposed base plate and stem with debris or obstacles that will facilitate collection of debris around anchor base.
- Do not cover exposed base plate and stem with debris or obstacles that will facilitate collection of debris around anchor base.
- Maximum post height 3m and ultimate limit state wind speed not exceeding 50m/s unless noted otherwise.
- Local settlement, ground water and soil reactivity will cause isolated concrete footings to 'TILT' and therefore induce bending into the post stirrup stem. Isolated footing should be restricted to stable soil, i.e. Class A and S foundation classification to AS2870.

IMPORTANT:

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

INSTALLATION

It is essential that the concrete design with selected solid stem length embedment exceeds the expected uplift load. Anchor to foundation design to be determined by consulting project Engineer to suit design application, foundation type, and deemed fit for purpose. The design Engineer should ensure the structural elements can support the intended design loads.

STEP 1



- Pour concrete as per concrete design by consulting project Engineer's details.
- Mark centre location of post position.
- Ensure adequate concrete edge distance set back.
- Concrete foundation support to be level horizontally.
- Seek advise from your consulting project Engineer.

STEP 2



- While concrete is wet, orientate selected anchor as required over mark and firmly insert solid stem into concrete.
- Embed selected anchor to required depth design by consulting project Engineer.
- Vibrate concrete ad required to ensure air pockets around stem are absent and concrete compacts to required density.

STEP 3



- Ensure anchor is vertically plumb.
- Leave anchor until recommended concrete curing time has lapsed.

STEP 4



- Place timber post centrally into Post Anchor stirrup for direct bearing on stirrup base.
- Ensure both Post Anchor and post are vertically plumb.

STEP 5



- Drill through post using saddle holes. Ensure drill through holes are horizontally level 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 TIP

FOUNDATION SLOPE

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

BOLT LENGTH

- When using Hex Head Bolts for fastening your post, it is recommended to use a length 20mm longer than the 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.



HEAVY DUTY BOLT DOWN ANCHOR (PSBT)

FEATURES AND BENEFITS

ECONOMICAL: Inexpensive solution for fixing posts to concrete.

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

VERSATILE: Range covers common post sizes.

SPECIFICATIONS

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

FASTENER REQUIRED

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

AS1720 & AS4055 COMPLIANT



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



RANGE

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

DESIGN CAPACITIES

Limit State Design capacities (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	75-100	12.0	12.0	12.0	12.0	12.0	12.0	12.0
4 x M10 x 50mm coach screws	75	6.3	10.1	12.0	6.7	10.6	12.0	12.0
	90	6.3	10.1	12.0	6.7	10.6	12.0	12.0
	100	6.1	9.6	12.0	6.5	10.3	12.0	12.0

Notes:

- 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/NZS1170.2 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.

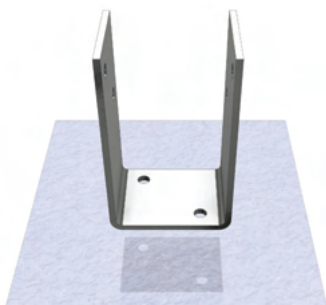
IMPORTANT:

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

INSTALLATION

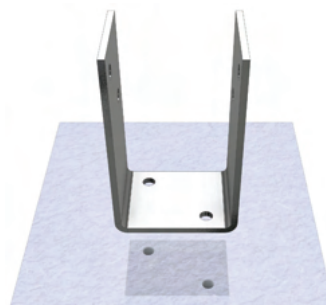
It is essential that the capacity of this fastener exceeds the expected uplift load. Fastener bolt selection connecting anchor to foundation to be determined by consulting project Engineer to suit design application and deemed fit for purpose. Consider the use of Ramset™ galvanised AnkaScrew™. Refer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

STEP 1



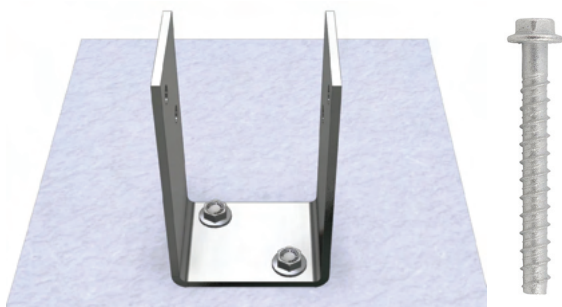
- Orientate anchor as required, measure and mark location of base holes using selected anchor base as stencil.
- Ensure adequate concrete edge distance set back.
- Concrete support assumed level.
- Seek advice from your consulting project Engineer.

STEP 2



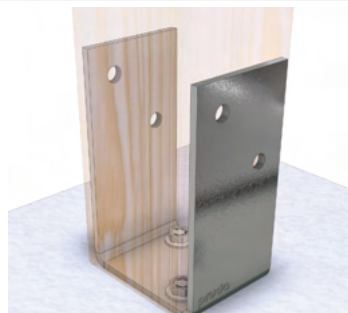
- Drill two holes at marked location to required depth for selected hold-down bolt. Refer to bolt manufacturer guidelines for recommended pre-drill hole size and depth. Suggested minimum screw embedment depth 100mm or greater (section detail shown above).

STEP 3



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

STEP 4



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

STEP 5



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

STEP 6

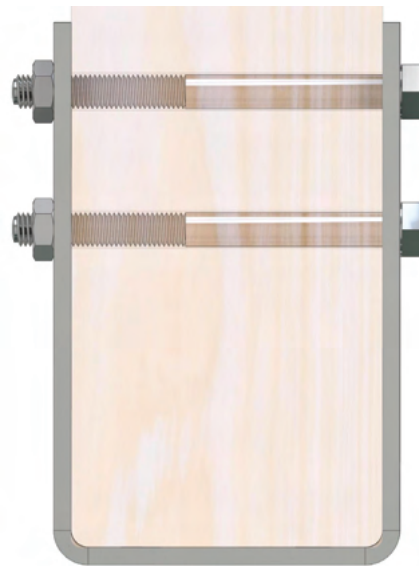


- Insert bolt through saddle and passing through timber post. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.
- Install nut and securely fasten.

INSTALLATION TIPS

FOUNDATION SLOPE

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



BOLT LENGTH

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

POST FASTENERS

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



CONCRETE FASTENERS

- For fixing to existing concrete, Pryda recommend the use of M10 Hex Head Ramset™ 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

HIGH WIND POST ANCHOR (PSQ)

FEATURES AND BENEFITS

EASY: 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, 600mm
POST SIZES	75, 90, 100, 125, 150mm

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.

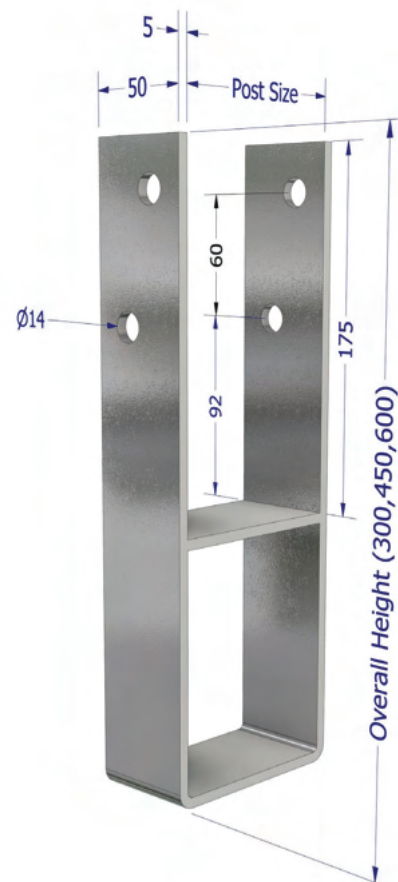
See AS1684:2010 Part 3 - Table 9.20 (j) reinforcing rod install over anchor end.

To be installed central to post and deemed 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:

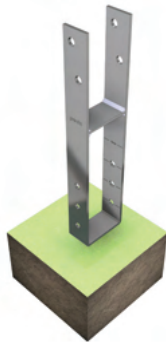
- The maximum downward loading is limited to 25kN at a height of 75mm from base of post to foundation.
- The design loads tabulated above require that:
 - The timber post must bear on the Post Anchor base and
 - All posts must be a minimum of 75 x 75mm section.
- Select design capacity according to the 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/NZS1170.2 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.

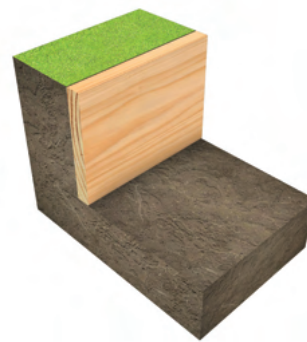
INSTALLATION - FIXING TO WET CONCRETE

STEP 1



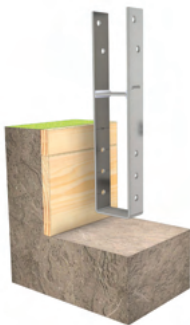
- Orientate anchor as required, measure and mark location of anchor positioning.
- Isolated footing should be restricted to stable soil, i.e. Class A and S foundation classification to AS2870.
- Ground assumed level.
- Seek advice from your consulting project Engineer.

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

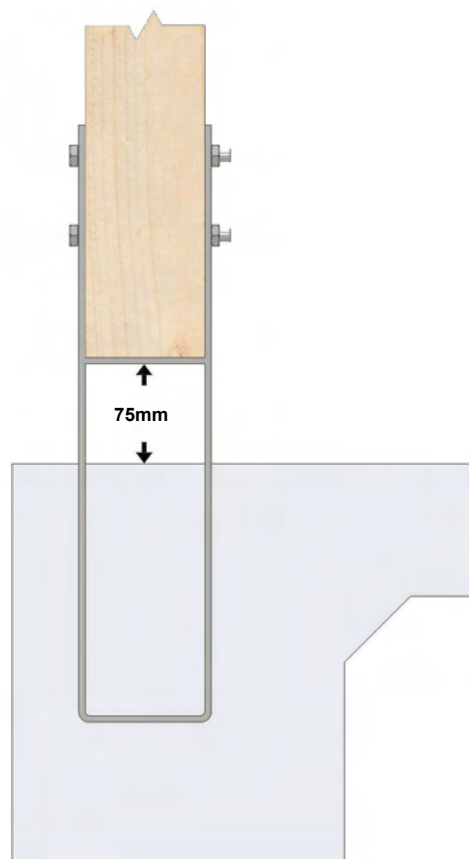
INSTALLATION TIPS

FOUNDATION SLOPE

- It is recommended to slope foundations away from the base of the Post Anchor all around.
- Avoid water pooling and buildup of debris around anchor base 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.
- Tiling or paving around anchor is not recommended as this may result in a recess space around the anchor that may facilitate water pooling and debris buildup.

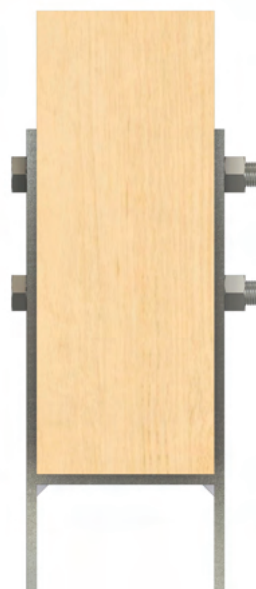
TERMITE & BUSHFIRE MANAGEMENT

- To meet the requirements of AS3660.1-2014, 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.



T-BLADE CENTRE FIX POST ANCHOR (PSCFB)

FEATURES AND BENEFITS

CONCEALED: The central blade allows for a hidden appearance after installation.

EASY: Simply locate anchor on flat and level base and fasten with required bolts for a reliable and robust post anchor.

STRONG: Manufactured from 8mm steel. Structural continuous fillet weld on both faces of centre flange to base.

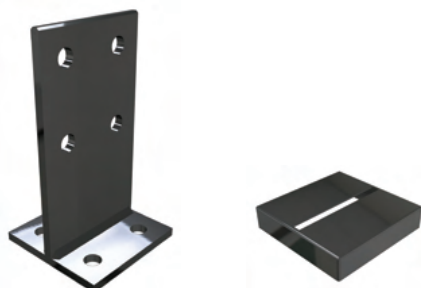
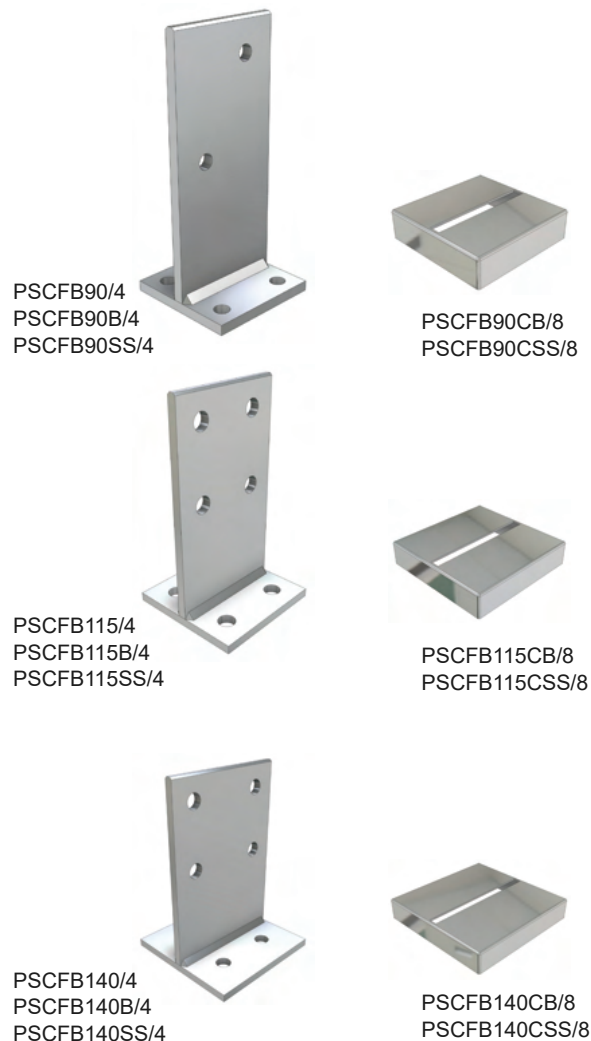
SPECIFICATIONS

STEEL	G300
THICKNESS	8mm
CORROSION RESISTANCE	Hot Dipped Galvanised (500g/m ²) Or Black Powder Coated over Zinc coating Or Stainless Steel Grade 316
POST SIZE	90mm, 115mm, 140mm
POST STIRRUP TO TIMBER POST FASTENER	90mm T-Blade M12 4.6 grade Bolts. 115mm and 140mm T-Blade M16 4.6 grade Bolts.
ANCHOR BASE TO FOUNDATION FASTENER	90mm T-Blade M12 anchor bolts/threaded rod 115mm and 140mm T-Blade M16 anchor bolts/threaded rod



AS1684, AS1720 & AS4055 COMPLIANT

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



Black powder coated series are available in all sizes

RANGE

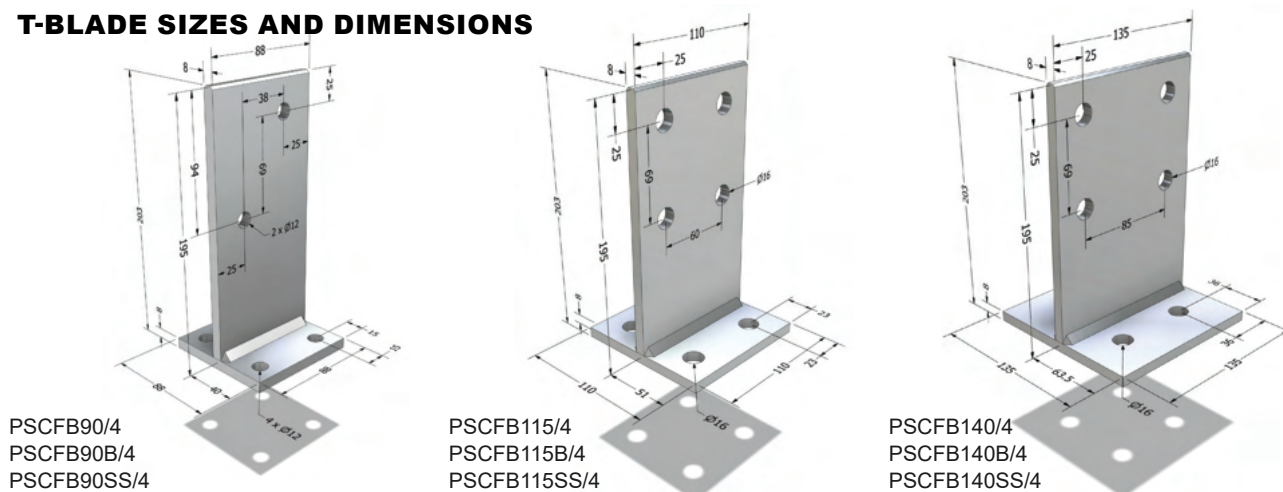
PRODUCT CODE	PRODUCT	MATERIAL FINISH	POST SIZE (mm)	REQUIRED BOLTS POST	REQUIRED BOLTS BASE	BOLT HOLE SIZE	QTY
PSCFB90/4	T-BLADE ANCHOR	G300 Steel Hot Dip Galvanised (500g/m²)	90	2 ⁽¹⁾	4 ⁽¹⁾	M12 ⁽²⁾	4
PSCFB115/4			115	4 ⁽¹⁾	4 ⁽¹⁾	M16 ⁽²⁾	4
PSCFB140/4			140	4 ⁽¹⁾	4 ⁽¹⁾	M16 ⁽²⁾	4
PSCFB90B/4		G300 Steel ⁽⁴⁾ Black Powder Coated over Hot Dip Galvanised (500g/m²)	90 ⁽⁴⁾	2 ⁽¹⁾	4 ⁽¹⁾	M12 ⁽²⁾	4
PSCFB115B/4			115 ⁽⁴⁾	4 ⁽¹⁾	4 ⁽¹⁾	M16 ⁽²⁾	4
PSCFB140B/4			140 ⁽⁴⁾	4 ⁽¹⁾	4 ⁽¹⁾	M16 ⁽²⁾	4
PSCFB90CB/8	CAPPING	G300 Steel ⁽⁴⁾ Black Powder Coated over Z60 Zinc Coating	90 ⁽³⁾ (4)	2 ⁽¹⁾	4 ⁽¹⁾	-	8
PSCFB115CB/8			115 ⁽³⁾ (4)	4 ⁽¹⁾	4 ⁽¹⁾	-	8
PSCFB140CB/8			140 ⁽³⁾ (4)	4 ⁽¹⁾	4 ⁽¹⁾	-	8
PSCFB90SS/4	T-BLADE ANCHOR	Stainless Steel Grade 316	90	2 ⁽¹⁾	4 ⁽¹⁾	M12 ⁽²⁾	4
PSCFB115SS/4			115	4 ⁽¹⁾	4 ⁽¹⁾	M16 ⁽²⁾	4
PSCFB140SS/4			140	4 ⁽¹⁾	4 ⁽¹⁾	M16 ⁽²⁾	4
PSCFB90CSS/8	CAPPING		90 ⁽³⁾	2 ⁽¹⁾	4 ⁽¹⁾	-	8
PSCFB115CSS/8			115 ⁽³⁾	4 ⁽¹⁾	4 ⁽¹⁾	-	8
PSCFB140CSS/8			140 ⁽³⁾	4 ⁽¹⁾	4 ⁽¹⁾	-	8

NOTES:

- Selected bolts and associated assembly components material to be compatible with T-Blade finish, i.e. Galvanised bolts with HDG anchor, stainless steel bolts with SS anchors.
- All bolts to be minimum structural Grade 4.6.
- Match same size T-Blade anchor.
- Powder Coating over zinc plating for 2mm thick steel capping is suitable for external applications. Expected service life of the powder coating for typical inland residential areas is approximately 8 years and then maintenance may be required depending on exposure conditions/environment. For coastal or similar areas, the expected lifespan can be much less. It is important to consult the project owner/designer to ensure the selected material finish is deemed fit for purpose and meets the owner capacity to maintain product. Before installation of powder coated capping for external applications, inspect the capping closely and ensure the powder coating is not damaged exposing the zinc layer or steel. If damage is found immediate repair using an approved external coating should be applied rectifying the damage before use. Seek advice from paint/coating specialist for approved external coating suitable for the application. Any damage to the powder coating after installation should also be repaired immediately.

Routine inspection and maintenance are recommended to upkeep and prolong service life of the product. Wash regularly every 6 months (dependent on installed environment) with mild pH-neutral soap. Rinse well and ensure no water pooling around anchor. Repair any scratches or chips that may compromise the coating with an approved exterior grade touch up paint to prevent rust from creeping under the coating.

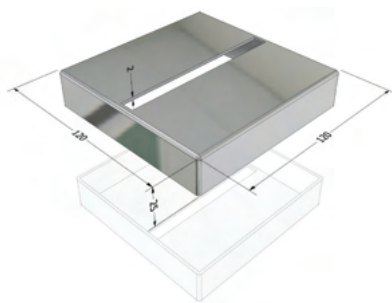
T-BLADE SIZES AND DIMENSIONS



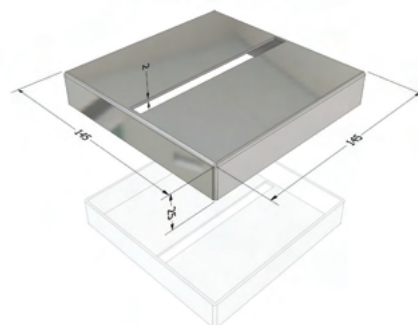
CAPPING SIZES AND DIMENSIONS



PSCFB90CB/8
PSCFB90CSS/8



PSCFB115CB/8
PSCFB115CSS/8



PSCFB140CB/8
PSCFB140CSS/8

DURABILITY

Pryda post anchors are Hot Dip Galvanised to standard AS/NZS4680.

Routine inspection and clearing any debris around anchors are an integral part of the ongoing care and maintenance.

Due to shallow base design, post anchors are recommended to be installed on suitable foundation above natural ground, i.e. not level with garden beds, lawn, and areas prone to accumulate ground debris or potential ponding areas. If in doubt seek advice from your consulting project Engineer for suitability before use. Only use anchor if deemed fit for purpose by project designer.

Refer to 'Installation Tips for more information.

STORAGE AND HANDLING

Prior to use, the Pryda products shall be stored in a weatherproof environment and protected from moisture. Care must be taken to avoid any damage to the surface of the product protective galvanised coating and profile that may impact performance.

APPLICATION AND SCOPE OF USE

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

All other usage not specifically mentioned within this product description sheet must be verified/designed by consulting Structural Engineer.



T-Blade direct post support



T-Blade with base cap post support

DESIGN CAPACITIES

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

	PTSB90				PTSB115				PTSB140			
	JD5	JD4	JD3	JD2	JD5	JD4	JD3	JD2	JD5	JD4	JD3	JD2
1.35G	31.8	36.7	43.2	49.8	62	71.5	95.8	120.1	86.8	100.1	108.4	116.7
1.2G + 1.5 Q floor	38.5	44.4	52.4	60.3	75.1	86.5	116	145.4	105.1	121.2	131.2	141.2
1.2G + 1.5 Q roof	43	49.6	58.4	67.3	83.8	96.6	129.4	162.2	117.3	135.2	146.4	157.6
0.9G + Wup	44.5	51.3	56.2	61.1	60.5	69.8	108.1	146.4	81.6	94.1	119.8	145.4

NOTES:

- The design loads tabulated above require that:
 - Design capacities in the tables are for steel, post and bolts to timber ONLY.
 - The timber post must bear on the Post Anchor base.
 - All post sizes to be minimum size matching selected T-Blade anchor, i.e. 90 x 90mm (PSCFB90), 115 x 115mm (PSCFB115), 140 x 140mm (PSCFB140).
 - Tie-down anchors, T-Blade, and timber post installed plumb.
 - Support foundation must be flat, level, and supporting base plate fully.
 - Fully fixed using all required bolt holes. Refer to Product Range table for required bolts for each anchor.
 - Bolts and all assembly components used are structural Grade 4.6 minimum.
 - Selected timber post itself should be of suitable design capacity to achieve the values stated for tension and compression.
- Select design capacity according to the governing load case for determining the design loads.
- Specified capacities are for concentric vertical load transfer only. Refer to each Post Anchor notes for recommended capacities for eccentrically loaded conditions with selected post anchors only.
- 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 steel and timber post ONLY, these capacities may be limited by anchoring methods to the supporting foundation, i.e. fastener type, wet concrete embedment depth, and concrete design. This should be designed and verified by the Project Engineer or designer prior to installation.**
- Wind uplift capacities are based on the AS/NZS1170.2 wind code.
- 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.
- Post Anchors are not Intended to be used for cantilever posts, and free-standing structures, i.e. Carports and Gazebo, unless designed and approved by a consulting structural Engineer.
- Post must be laterally restrained at top, installed centrally to anchor, and deemed to be "fit for purpose" by the project Engineer.
- It is recommended to slope the foundation away from the anchor to prevent water pooling at the base.
- Do not cover exposed base plate and stem with debris or obstacles that will facilitate collection of debris around anchor base.
- Maximum post height 3m and ultimate limit state wind speed not exceeding 50m/s unless noted otherwise.
- Local settlement, ground water, and soil reactivity will cause isolated concrete footings to 'TILT' and therefore induce bending into the post stirrup stem. Isolated footing should be restricted to stable soil, i.e. Class A and S foundation classification to AS2870.

IMPORTANT:

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

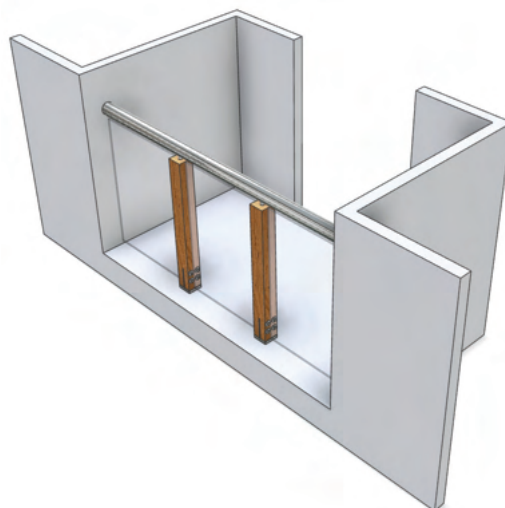
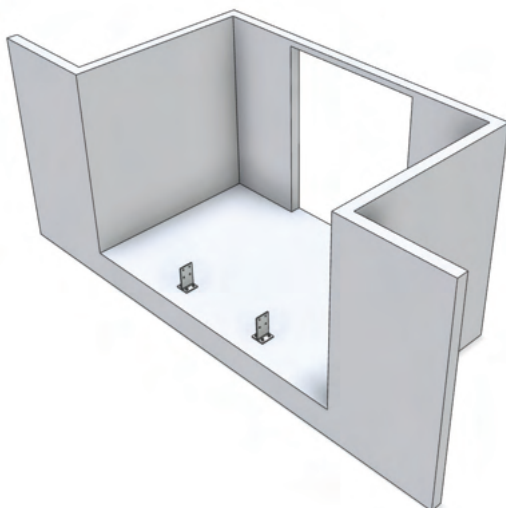
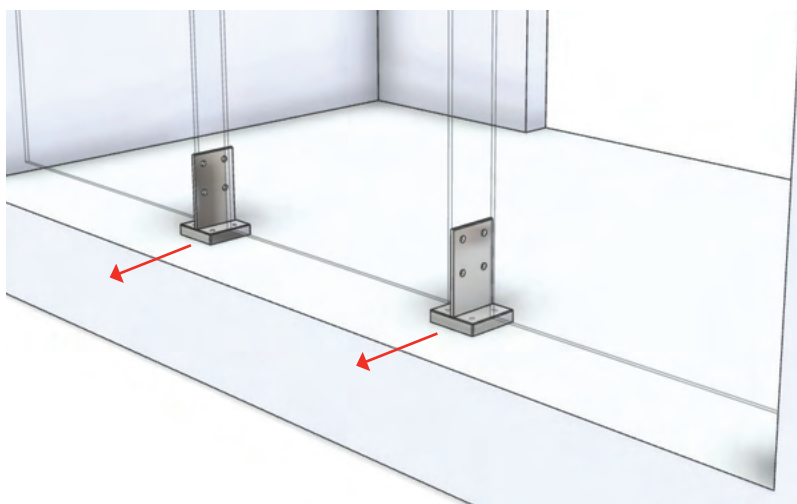
BALUSTRADE APPLICATION – LIMITED TO PSCFB115 AND PSCFB140 ONLY

Pryda T-Blade (115mm and 140mm only) can be used to securely mount timber posts to concrete, steel, or timber beams. The preferred choice for balustrade support is using the stainless steel series. It is important that the connection of the balustrade anchor to substrate (supporting foundation) **MUST** be carefully designed and certified by the builder's consulting Engineer or balustrade designer at each anchor location. It is the sole responsibility of the consulting Engineer/Designer/Builder/End-user for the substrate design and selected base tie-down method as anchoring the balustrade plays a critical role for the stability, safety, and longevity of the balustrade. Because of this, the tie-down choice used must be compatible and fully complement the substrate construction methods set out by the project design Engineer/balustrade designer and connection details made available in the structural drawings, otherwise seek further Engineering advice from your balustrade designer.

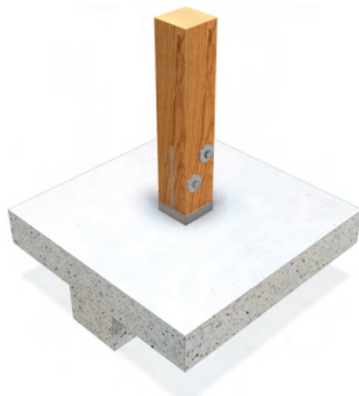
Routine maintenance and inspection of each anchor point must be carried out on a regular basis to ensure continued performance. Balustrade ends must be terminated to a rigid and braced element such as a wall or braced return and not free-standing. Pryda T-Blade (approved series only) are only suitable for balustrade design in accordance with loadings in AS/NZS1170.1 Table 3.3 Section C3. The maximum height of the balustrade should be 1.5m unless approved by the project Engineer.

The T-Blade orientation at intermittent support should have the narrow edge facing the open space/void. End support anchors are not as critical as they are required to be secured to a braced element such as a wall or return that has been approved to resist the balustrade lateral loads.

The orientation of the T-Blade for balustrade application is important. Face the arrow edge towards the open space/void, external side.

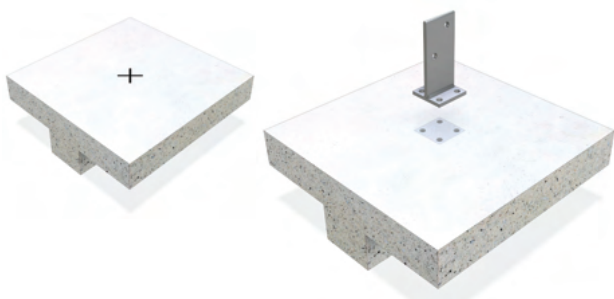


INSTALLATION – WITH BASE COVER ON 90mm POST



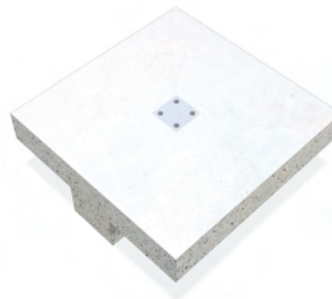
It is essential that the concrete design with selected concrete anchor embedment / type exceeds the expected uplift load. Anchor to foundation design to be determined by consulting project Engineer to suit design application, foundation type, and deemed fit for purpose. The design engineer should ensure the structural element can support 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 foundation support to be level horizontally.
- Seek advice from your consulting project Engineer.

STEP 2



- Drill four 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

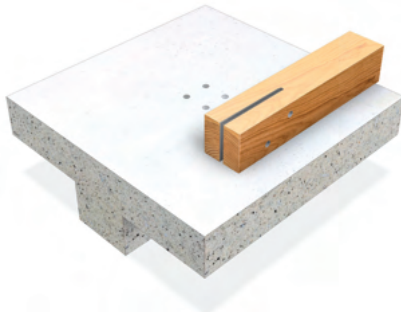


- Use selected T-Blade and base cap as template to mark bolt holes on to post.
- Ensure the capping is installed correctly, flushed with anchor base and T-Blade is located central to post.
- Drill through post with matching drill bit with selected anchor bolt hole size. Refer to anchor specifications for size.

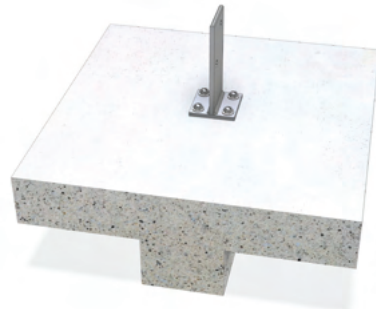
STEP 4



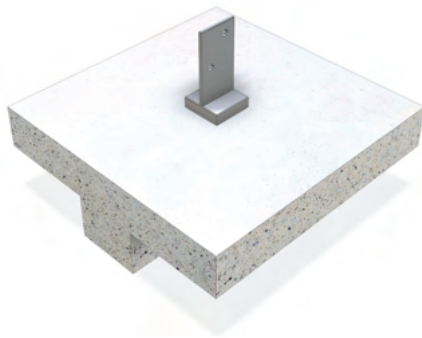
- Flip the post 90 degrees and again using the T-Blade assembly as a template. Mark the slot position on to post, ensuring the slot is central to the post.
- Begin by drilling a 9mm pilot hole at the very top position of the marked T-Blade.

STEP 5

- Cut slot using a jig saw or hand saw for a snug fit.

STEP 6

- Install T-Blade into position using 4 approved concrete anchors.
- Ensure the selected anchors exceed the uplift requirements of the post design.
- Ensure sufficient concrete depth. When installing near concrete edge, ensure sufficient edge distance and consideration for cone failure.

STEP 7

- Install the matching capping over T-Blade.

STEP 8

- Install post onto T-Blade and ensure the bolt through holes are correctly aligned.
- Insert bolt with washer through both holes.

STEP 9

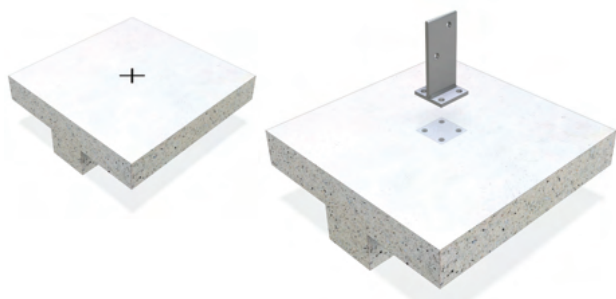
- Install washer and nut to bolt ends and hand tighten.
- Check post to ensure it is vertically plumb.
- Tighten all bolted assemblies.

INSTALLATION – WITHOUT BASE COVER ON 90mm POST



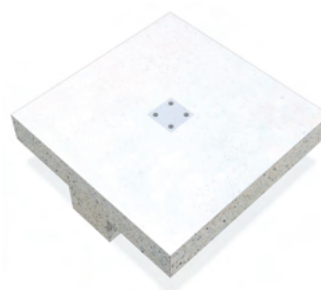
It is essential that the concrete design with selected concrete anchor embedment / type exceeds the expected uplift load. Anchor to foundation design to be determined by consulting project Engineer to suit design application, foundation type, and deemed fit for purpose. The design engineer should ensure the structural element can support 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 foundation support to be level horizontally.
- Seek advice from your consulting project Engineer.

STEP 2



- Drill four 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

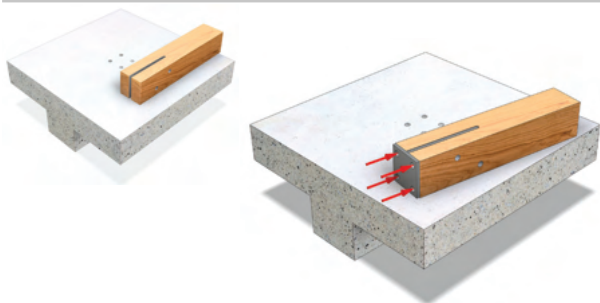


- Use selected T-Blade as template to mark bolt holes on to post.
- Ensure the T-Blade is installed correctly by locating the post end directly against anchor base and T-Blade is located central to post.
- Drill through post with matching drill bit with selected anchor bolt hole size. Refer to anchor specifications for size.

STEP 4



- Flip the post 90 degrees and again using the T-Blade as a template. Mark the slot position on to post, ensuring the slot is central to the post.
- Begin by drilling a 9mm pilot hole at the very top position of the marked T-Blade.

STEP 5

- Cut slot using a jig saw or hand saw for a snug fit.
- Insert T-Blade into slot, align bolt holes on T-Blade to post. This can be temporarily secured by inserting bolts through all the pre-drilled bolt holes.
- Mark the 4 bolt holes to base of post using T-Blade as template.
- Route out the 4 holes to match the depth and diameter of the intended bolt head used to anchor the T-Blade onto foundation. This will allow the post to sit over the bolts heads and directly bear on to base plate.

STEP 6

- Trim the base slot edge with 6mm chamfer making allowance for the weld joints.
- Optional: depending on the installation application, the post end cut end with routed sections, and slot cut can be sealed using an approved sealant before installation. Seek advice from post designer or coating specialist for best practices. It is important the style of anchor support is fit for purpose.

STEP 7

- Install T-Blade into position using 4 approved tie-down anchors.
- Ensure the selected tie-down anchors exceed the uplift requirements of the post design.
- Ensure sufficient concrete depth. When installing near concrete edge, ensure sufficient edge distance and consideration for cone failure.

STEP 8

- Install post onto T-Blade and ensure the bolt through holes are correctly aligned.
- Insert bolt with washer through both holes.

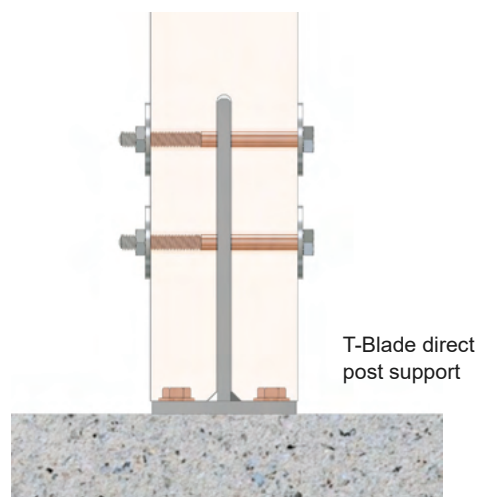
STEP 9

- Install washer and nut to bolt ends and hand tighten.
- Check post to ensure it is vertically plumb.
- Tighten all bolted assemblies.

INSTALLATION TIPS

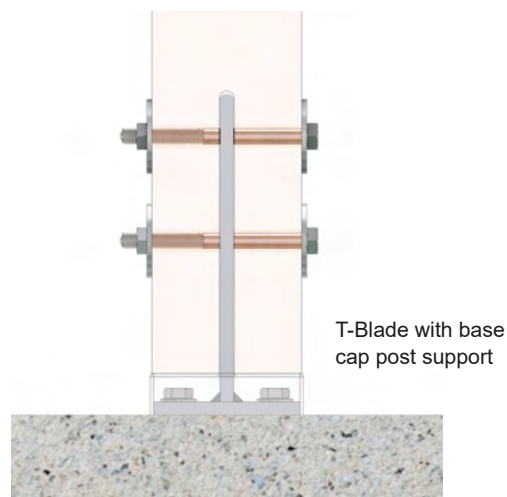
FOUNDATION SLOPE

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



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.



CONCRETE FASTENERS

- For fixing to existing concrete, Pryda recommend the use of M10 Hex Head Ramset™ WERCS™ AnkaScrews™. AS10100WGM50 screw in anchor. Having a 100mm minimum length or longer dependent of application.
- 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.
- Stainless Steel options:
M12: T12110SSX - TruBolt™ Xtrem 12mm x 110mm Stainless steel
- M16: T16120SSX - TruBolt™ Xtrem 16mm x 120mm Stainless steel

For detailed instructions on installation and design properties for fasteners and chemical anchoring, visit the Ramset™ website www.ramset.com.au

The suggested fasteners are only indicative only. Select the correct fasteners based on compatibility with anchor finish, anchor hole size, application, connection substrate and ensure capacity exceeds the required design capacity of the selected post anchor. Seek verification as required from the consulting design Engineer for each project.

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