

Full Stirrup

GALVANISED & SS316

Application

The Bremick® Full Stirrup is used for locating posts onto existing concrete or decks or setting into concrete. Accommodates square timber posts in 90mm, 100mm, 115mm, 125mm and 135mm dimensions. Typically used, during the construction of pergolas, carports, or verandahs.

Advantages

The Bremick® Full Stirrup provides numerous benefits including:

- Hot dipped Galvanised coating or marine grade 316 stainless steel for long term protection against corrosion.
- 4mm thickness in the saddle for extra strength.
- Designed and engineered to Australian National Construction Code (NCC).
- Product design conforms to Australian Standards.
- AS3660.1 – 2014, Protection of Buildings from Termites.
- AS1397 -2021 for Steel Grade 250
- The stems are sealed to prevent the unseen entry of the termites to the post.
- Welded construction for strength.
- Wide range of post anchors with saddle sizes to accommodate common square post sizes from 90mm up to 135mm and leg lengths from 65mm up to 600mm.
- Options available to use either M10 or M12 bolts, nuts, and washers.

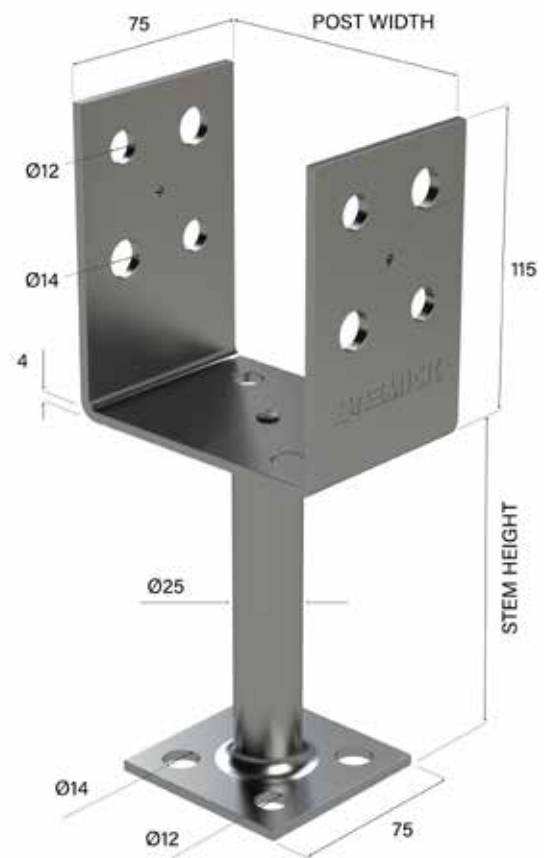
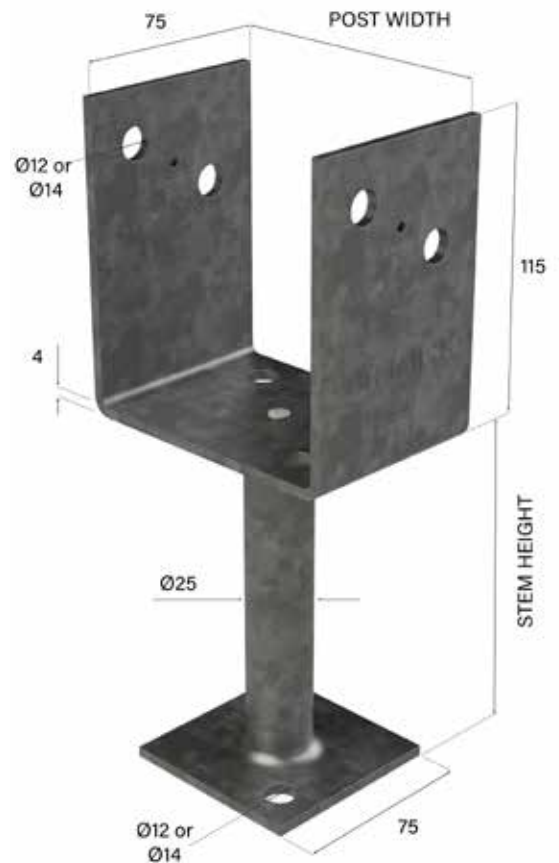
Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG) Stainless Steel (SS316)
Thickness	4mm
Stirrup Blade Height	115mm
Stirrup Blade Width	75mm
Post Height	65mm, 75mm, 130mm, 200mm, 250mm, 300mm, 375mm, 450mm, 600mm
Post Diameter	25mm
Fasteners	M10 & M12 Bolts, Nuts and Washers
Posts	90mm, 100mm, 115mm, 125mm, 135mm



Bremick® Ranging

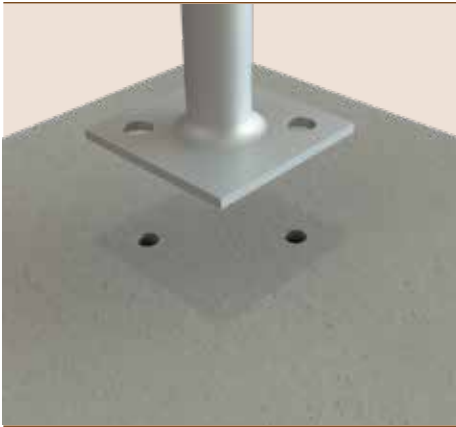
Product Code	Suits Post	Coating	Pack Qty
PF0G065090404	65mm x 90mm (Suits M10 bolts)	HDG	6
PF0G065100404	65mm x 100mm (Suits M10 bolts)	HDG	6
PF0G075090404	75mm x 90mm (Suits M10 bolts)	HDG	6
PF0G075100404	75mm x 100mm (Suits M10 bolts)	HDG	6
PF0G130090404	130mm x 90mm (Suits M10 bolts)	HDG	6
PF0G130100404	130mm x 100mm (Suits M10 bolts)	HDG	6
PF0G130115404	130mm x 115mm (Suits M10 bolts)	HDG	6
PF0G130125404	130mm x 125mm (Suits M10 bolts)	HDG	6
PF0G200090404	200mm x 90mm (Suits M10 bolts)	HDG	6
PF0G200100404	200mm x 100mm (Suits M10 bolts)	HDG	6
PF0G250090404	250mm x 90mm (Suits M10 bolts)	HDG	6
PF0G250100404	250mm x 100mm (Suits M10 bolts)	HDG	6
PF0G300090404	300mm x 90mm (Suits M10 bolts)	HDG	6
PF0G300100404	300mm x 100mm (Suits M10 bolts)	HDG	6
PF0G300115404	300mm x 115mm (Suits M10 bolts)	HDG	6
PF0G300125404	300mm x 125mm (Suits M10 bolts)	HDG	6
PF0G375090404	375mm x 90mm (Suits M10 bolts)	HDG	6
PF0G450090404	450mm x 90mm (Suits M10 bolts)	HDG	6
PF0G450100404	450mm x 100mm (Suits M10 bolts)	HDG	6
PF0G450115404	450mm x 115mm (Suits M10 bolts)	HDG	6
PF0G450125404	450mm x 125mm (Suits M10 bolts)	HDG	6
PF0G600090404	600mm x 90mm (Suits M10 bolts)	HDG	6
PF0G600100404	600mm x 100mm (Suits M10 bolts)	HDG	6
PF2G200090404	200mm x 90mm (Suits M12 bolts)	HDG	6
PF2G200100404	200mm x 100mm (Suits M12 bolts)	HDG	6
PF2G300075404	300mm x 75mm (Suits M12 bolts)	HDG	6
PF2G300090404	300mm x 90mm (Suits M12 bolts)	HDG	6
PF2G300100404	300mm x 100mm (Suits M12 bolts)	HDG	6
PF2G300115404	300mm x 115mm (Suits M12 bolts)	HDG	6
PF2G300125404	350mm x 125mm (Suits M12 bolts)	HDG	6
PF2G450090404	450mm x 90mm (Suits M12 bolts)	HDG	6
PF2G450100404	450mm x 100mm (Suits M12 bolts)	HDG	6
PF2G600090404	600mm x 90mm (Suits M12 bolts)	HDG	6
PF2G600100404	600mm x 100mm (Suits M12 bolts)	HDG	6
PF06130090404	130mm x 90mm (Suits M10 & M12 Bolts)	SS316	4
PF06130115404	130mm x 115mm (Suits M10 & M12 Bolts)	SS316	4
PF06130125404	130mm x 125mm (Suits M10 & M12 Bolts)	SS316	4
PF06130135404	130mm x 135mm (Suits M10 & M12 Bolts)	SS316	4
PF06200090404	200mm x 90mm (Suits M10 & M12 Bolts)	SS316	4
PF06300090404	300mm x 90mm (Suits M10 & M12 Bolts)	SS316	4



Installation Instructions

Fixing to existing concrete slab or patio

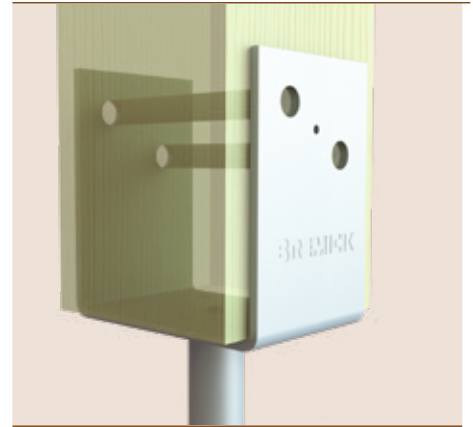
1



2



3



- Determine the centerline of the posts in both projection and width.
- Make sure the post anchor is square to both these directions and mark the hole locations of the post anchor via the bolt holes in the plate at the base of the stem.
- Remove the post anchor and drill the holes where the marks are. A hammer drill works well. Drill to the appropriate width and depth to accommodate the appropriate Bremick concrete screw-in anchor. Suggested minimum screw embedment depth is 100mm.

- Replace the post anchor over the drilled holes, ensure the holes within the base plate are over the top of the pre-drilled holes.
- With a spirit level make sure the post anchor is perpendicular to the patio or concrete slab. If not, washers can be used between the post anchor and concrete to level the post anchor.
- Place the concrete screw-in anchor through the holes in the post anchor base plate and into the pre-drilled holes.
- Tighten the screw-in anchor down onto the post anchor's base plate.

- Position the timber post into the post anchor saddle. Ensure the post bears onto the base of the bracket and is vertically plumb.
- Drill through the bolt holes located in the side of the post anchor to accommodate M10 or M12 bolts. Ensure the drilled holes are horizontally level and perpendicular to the saddle.

4



- Feed the 2 x M10/M12 bolts through the bolt holes and timber post. Locate washer and nuts onto the bolts and tighten. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.
- Alternatively install 18G x 45mm or 24G x 50mm construction screws through the bolt holes or M10/M12 coach screws.

Installation Instructions

Fixing to wet concrete

1



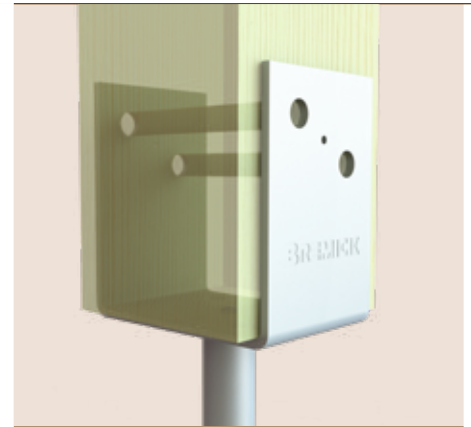
- Determine the centerline of the posts in both projection and width.
- Make sure the post anchor is square to both these directions and orientate it as required.
- Measure and mark the location of the post anchor positioning.
- Ensure the location of the footing is on level ground and set into stable soil. i.e. Class A and S foundation classification to AS2870.
- Dig out the ground and construct formwork to the required depth as specified by your consulting engineer.
- Ensure an allowance is made for the stem to be embedded at least 150mm and there is a 75mm clearance between underside of post to foundation surface.
- Create temporary framing over the dugout.

2



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

3



- Position the timber post into the post anchor saddle. Ensure the post bears onto the base of the bracket and is vertically plumb.
- Drill through the bolt holes located in the side of the post anchor to accommodate M10 or M12 bolts. Ensure the drilled holes are horizontally level and perpendicular to the saddle.

4



- Feed the 2 x M10/M12 bolts through the bolt holes and timber post. Locate washer and nuts onto the bolts and tighten. A minimum of 2 x thread pitch should extend beyond the outward surface of the nut.

5



- Alternatively install 18G x 45mm or 24G x 50mm construction screws through the bolt holes or M10/M12 coach screws.

Technical Data

FULL STIRRUP

LIMIT STATE UPLIFT CAPACITY (WIND LOAD) FOR 90X90mm POSTS

Table 1 CAPACITY: FOR 2 x M10 BOLTS

Product	Capacity (All joint groups) (kN)
POST SUPPORT FULL STIRRUP	11.8

Table.2 CAPACITY: FOR 4-M10 x 50mm LONG SHAFT COACH SCREWS USED

Product						
POST SUPPORT FULL STIRRUP						
JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	6.8	10.5	11.8	11.8	11.8	11.8
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	5.0	6.1	8.4	11.8	11.8	11.8

REMARKS

- Values for Category 1 (secondary members.) Values x 0.94 for Category 2 (primary members) and Category 3 Values x 0.88 for post disaster structures primary members
- Uplift values applicable when base bolted down tight to a hard level surface such as concrete or steel
- Uplift values may be limited by the capacity of the fixings to the base material. See appropriate Bremick fastener capacities.

LIMIT STATE COMPRESSION CAPACITY (ALL LOAD COMBINATIONS)

Table 3

Leg Height (mm)	1.2G+1.5Q (KN)	Leg Height (mm)	1.2G+1.5Q (KN)
65	20	250	15
75	20	300	13
130	19	375	10
200	17	450	8
		600	5

REMARKS

No multiplying factors for structure category or load combination are to be applied.

Downward values applicable when:

- The post stirrup is sitting on a level surface and secure fixed in place.
- The timber post is securely bolted/coach screwed.
- The post is centred in the post stirrup.
- The post is sitting down snug into in the post stirrup (no gap between stirrup and timber post.)

Technical Data

FULL STIRRUP GALVANISED

LIMIT STATE UPLIFT CAPACITY (WIND LOAD) FOR 90X90mm POSTS

Table 1 CAPACITY: FOR 2 x M12 BOLTS

Product	Capacity (All joint groups) (kN)
POST SUPPORT FULL STIRRUP	11.8

Table 2 4-M12 x 65mm COACH SCREWS USED

Product						
POST SUPPORT FULL STIRRUP						
JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	6.8	10.5	11.8	11.8	11.8	11.8
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	5.0	6.2	8.6	11.8	11.8	11.8

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- The post is sitting down snug into in the post stirrup (no gap between stirrup and timber post.)

Technical Data

POST SUPPORT FULL STIRRUP – STAINLESS STEEL 316

LIMIT STATE COMPRESSION CAPACITY (ALL LOAD COMBINATIONS)

Table 1

Leg Height (mm)	1.2G+1.5Q (KN)
130	16
200	14
300	11

REMARKS

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- The post is sitting down snug into in the post stirrup (no gap between stirrup and timber post).