

Full Stirrup Post Support

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.



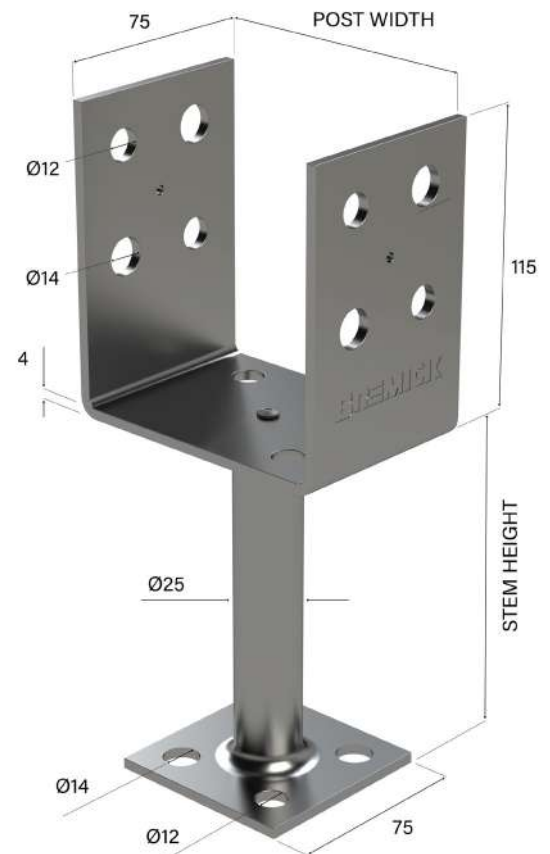
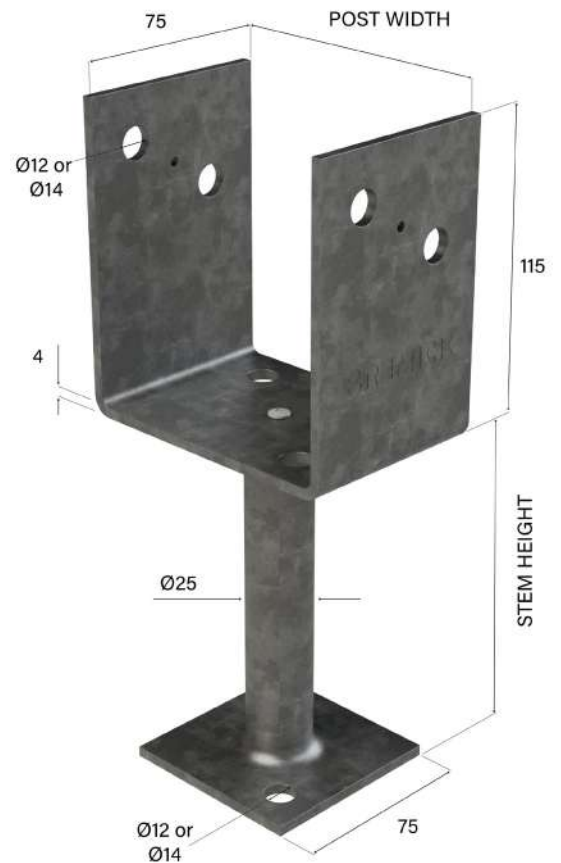
Specifications

| | |
|----------------------|--|
| 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

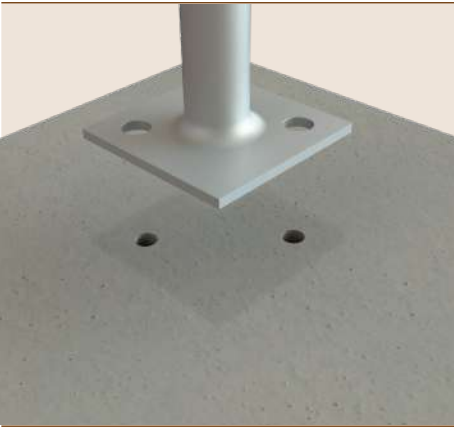
| Product Code | Suits Post | Coating | Pack Qty |
|---------------|---------------------------------------|---------|----------|
| PF0G065090404 | 65mm x 90mm (Suits M10 bolts) | HDG | 6 |
| PF0G065100404 | 65mm x 100mm (Suits M10 bolts) | HDG | 6 |
| PF0G075090404 | 75mm x 90mm (Suits M10 bolts) | 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

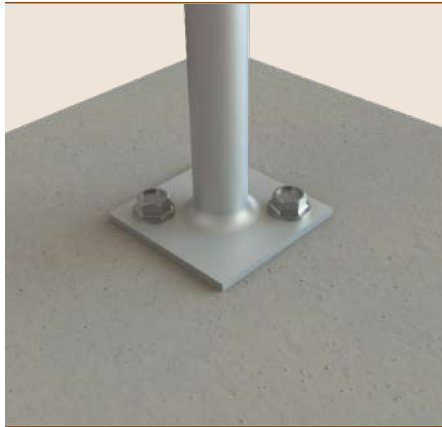
Fixing to existing concrete slab or patio

1



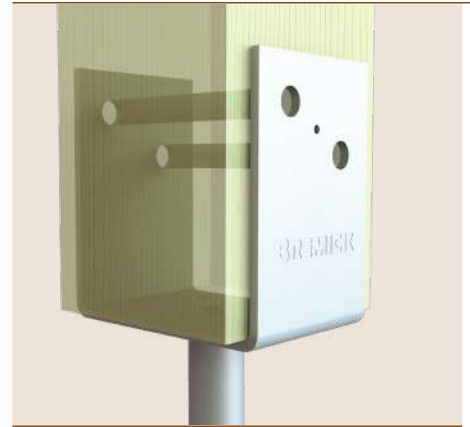
- Determine the centerline of the posts in both projection and width.
- Make sure the post anchor is square to both these directions and mark the hole locations of the post anchor via the bolt holes in the plate at the base of the stem.
- Remove the post anchor and drill the holes where the marks are. 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.

2



- 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.

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.
- 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

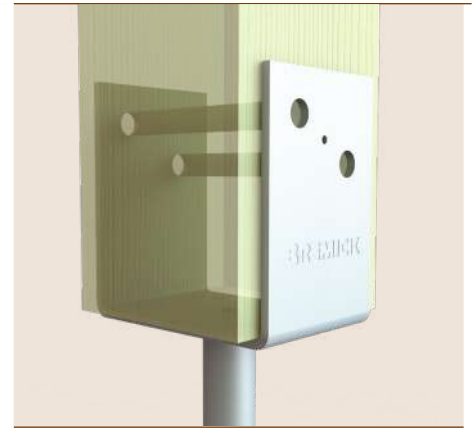
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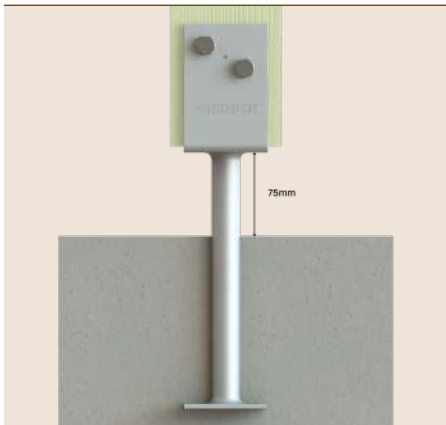


- Determine the centerline of the posts in both projection and width.
- Make sure the post anchor is square to both these directions and orientate it as required.
- Measure and mark the location of the post anchor positioning.
- Ensure the location of the footing is on level ground and set into stable 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.

- 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.

- 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



5



- 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.

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 |

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
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|-----------------|----------------|-----------------|----------------|
| 65 | 20 | 250 | 15 |
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| 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

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

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).