

Build it better with  
**BREMICK®**

**TIMBER CONNECTORS  
& POST SUPPORTS**

**BREMICK®**

Anzac Bridge  
Sydney

Harbour Bridge  
Auckland

Q1 Resort  
Gold Coast

Desalination Plant  
Melbourne

# About Bremick

Bremick products have been used across some of the largest construction & restoration projects across Australia & New Zealand.

## Bremick Story

Bremick has been an integral part of the construction fastener and hardware industry for almost 60 years. Bremick has a reputation for engineered quality, continual innovation and rigorous testing, and have applied these principles to the development of the Timber Connector and Post Support range.

Bremick has 15 distribution centres, including 3 manufacturing locations and 3 Quality Control laboratories, across Australia, New Zealand and Asia. Today, the vast majority of Australia's skyscrapers, bridges, major mining and critical infrastructure projects have been constructed using our products.

Bremick is spearheading greater use of cardboard in fastener and general hardware packaging verses plastic

Signatory to the Australian Packaging Covenant Organisation



For more information on recycling visit [www.arl.org.au](http://www.arl.org.au)



**APCO**

# Research, development & testing

## Compliance & Testing

Bremick product design, installation instructions and quoted design capacities are in accordance with the Building Code of Australia and the relevant Australian Standards, including AS1170, AS1684, AS1720, AS4055.

The design capacities in this manual are based on laboratory testing and/or engineering computations that are in accordance with the relevant Australian Standards. These tests have either been carried out by or for Bremick.

## Corrosion Protection

The majority of Bremick timber connectors are manufactured from Z275 – Galvanised light gauge steel. The 275 reflects the total weight of zinc coating, which makes this product suitable for internal applications. The zinc coating is 0.04mm in thickness.

For external applications, heavy industrial and high humidity environments, Bremick has product categories available in a hot dipped galvanised coating (e.g. post supports) and marine grade 316 stainless steel. Consult the product manual for products available in stainless steel.



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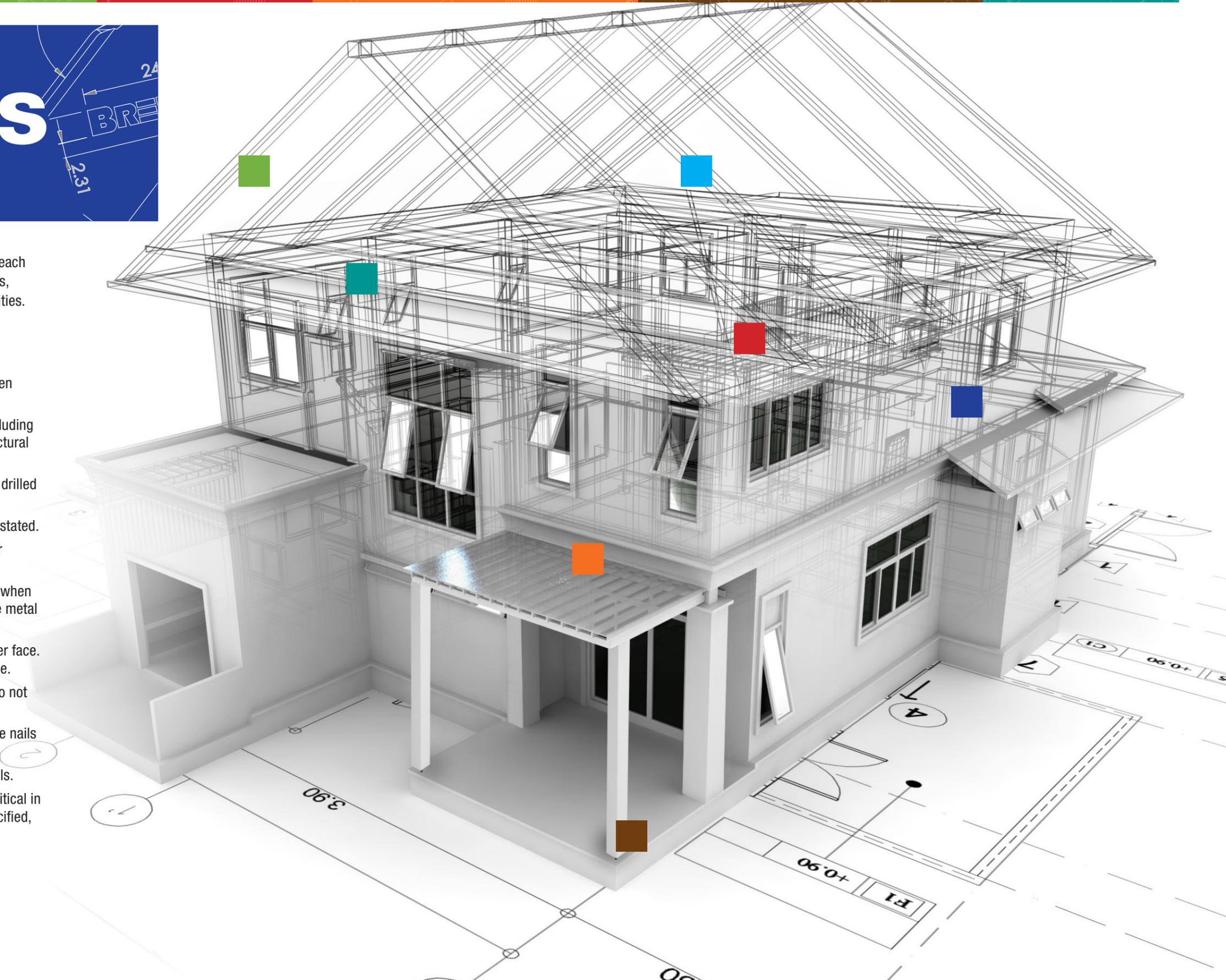
# Contents & Notes

The information in this product manual informs customers of Bremick's timber connector and post support range, including each individual product's specification, pack size, typical applications, product advantages, installation instructions and design capacities.

## Instructions for Installation

These notes are provided to ensure proper installation.

- Wear appropriate PPE, safety equipment and take care when installing timber connectors and post supports.
- Prior to installation ensure the timber is free of defects including decay and splits. Timber defects can compromise the structural integrity of the joint.
- If the timber splits during installation pilot holes should be drilled prior to fastener installation.
- Do not overload the joints or exceed the design capacities stated.
- Ensure gaps do not exceed 3mm between adjoining timber members.
- Use appropriately sized fasteners, screws, bolts, and nails when installing to timber. A tight fit between the fastener and the metal plate is desirable.
- Use appropriately sized washers when fastening to a timber face. Washers assist in spreading the load across the timber face.
- When fastening the connector using self-drilling screws, do not over-drive or over-tighten.
- When hammering nails into the pre-drilled holes ensure the nails are correctly embedded, do not under-drive nails.
- Do not use Clouts as a substitute for Timber Connector Nails.
- Correct fastener usage as per installation instructions is critical in reaching design capabilities. If a Bremick brand is not specified, the fastener(s) must be of equivalent performance.



# Timber Connectors General Notes

## Product Advantages:

- Bremick offers a comprehensive range of timber connectors designed to facilitate the jointing requirements for common residential framing and outdoor timber projects such as deck and pergola construction. Where appropriate, Bremick timber connectors are design and manufactured in accordance with relevant building codes and standards.
- Bremick products such as joist hangers are manufactured from 1.2mm thick Z275 – Galvanised sheet steel, offering additional strength and performance.
- Several timber connector products incorporate a Knock-In/Tap-In nail feature which makes for an easier and safer installation process. This feature also assists with product positioning and alignment.

## Installation Tips:

- **Genuine Bremick Fasteners:** When fastening timber connectors do not use clouts. Use genuine Bremick timber connector nails or Bremick connector screws to ensure the structural integrity of the connection.
- **Steel Framing:** Connectors such as bracing, triple grips, joist hangers can be fixed into steel frames and structures. In these applications use Bremick self-drilling drill point screws to fasten to the metal structure.
- **Marine grade 316 stainless steel:** When fastening stainless steel timber connectors use material compatible fasteners. Do not use galvanised fasteners with stainless steel timber connectors as this will result in galvanic corrosion, which is caused by contact between dissimilar metals.
- **Machine driven nails:** Care must be taken when fastening timber connectors with machine driven nails. The recommended dimensions are 32 x 2.5mm, screw shank, electro galvanised with a round head. Ensure the nails are not driven close to the edge of the timber connector, and an adequate number of nails are used to fasten the connector to timber.
- **Machine driven nails:** The rule of thumb is to use 20% more machine driven nails than the specified number of Bremick hand driven timber connector nails. In the state of Queensland machine drive nails cannot be used for the fastening of Bremick Multi grips or Triple grips.
- **Hand Hammered Nails:** Ensure Bremick hand hammered timber connector nails are embedded to the correct depth allowing the nail to seat firmly against the connector. Driving the nail too deep or shallow could compromise the connection.
- **Knock-In/Tap-In nail feature** is only for positioning purposes. Please ensure the timber connector is fixed utilising the correct number of fasteners.

### Tip 1

Use one-piece Bremick timber connector nails. Ensure timber connector nails are embedded to the correct depth allowing the nail to seat firmly against the connector.

### Tip 2

Do not use clouts for fastening timber connectors. The two-piece construction of clouts do not make them suitable for structural connections and therefore quoted design capacities will not be met.

### Tip 3

Quick product positioning via the Knock-In/Tap-In nail feature makes for an easier and safer installation process.



# Post Supports General Notes

Only fasten with 2 bolts either M10 or M12. Installing additional bolts may weaken the connection

## Product Advantages:

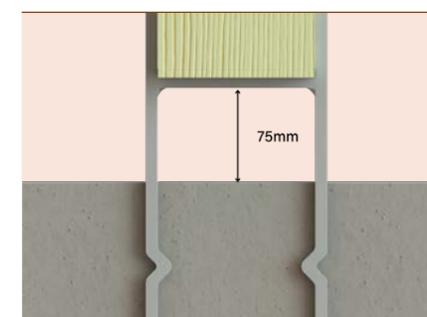
- Bremick offers an extensive range of post supports which are designed to suit common post widths – 90mm-150mm, are offered in various heights – 65mm-600mm and steel thickness – 3mm-6mm to meet specific project requirements. Additionally, Bremick offer a range of post supports that can either be anchored to existing dry concrete or embedded into wet concrete.
- Bremick post supports have been designed and engineered to make installation easier while meeting or exceeding the relevant building code requirements. Post support stems are sealed to ensure protection from termites.
- At a minimum, post supports are coated in hot dipped galvanising and are suitable for several external environments in accordance with the BCA. For highly corrosive environments Bremick offers an extensive range of marine grade Stainless Steel 316 in common post support designs.

## Installation Tips:

- **Slope the foundation away,** this will avoid water from building up around the base of the post support.
- **Termite management:** To comply with AS3660.1-2014 maintain a minimum clearance of 75mm between the underside of the post anchor and the ground surface.
- **Fixing post to stirrup:** Choose a hex head bolt that is approx. 20mm longer than the width of the stirrup. For example, for a 90mm post support stirrup ideally use a 110mm hex head bolt in either a 10mm or 12mm diameter. There should be at least 2 x threads exposed after locating the washer and fastening the nut.
- **Fixing base plate to concrete:** When fixing the base plate to concrete use Bremick expansion anchors or Bremick screw anchors. Maintain 75mm from the edge of the concrete edge. Ideally use a 100mm long fastener in either a 10mm or 12mm diameter.
- **Marine grade 316 stainless steel:** When fastening stainless steel post supports to concrete or timber posts use material compatible fasteners. Do not use galvanised fasteners with stainless steel post supports as this will result in galvanic corrosion, which is caused by contact between dissimilar metals.
- **Clear regularly:** Its best practice to clear any build-up of debris from the base plate of the post support regularly to reduce the risk of corrosion and termite entry.

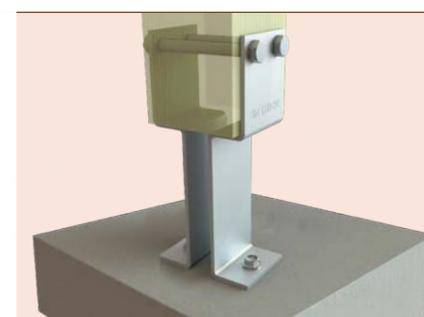
### Tip 1

When embedding in wet concrete ensure a minimum gap of 75mm between the underside of the post anchor and the ground surface.



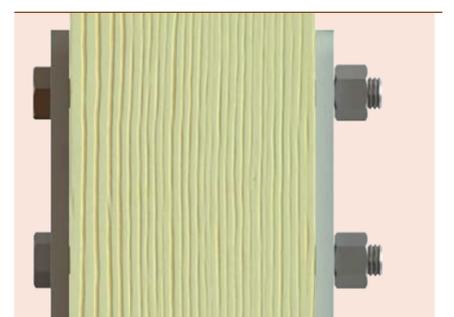
### Tip 2

Maintain 75mm from the edge of the concrete edge, Bremick recommends the use of screw anchors vs expansion anchors for close to edge applications.



### Tip 3

There should be at least 2 x threads exposed after locating the washer and fastening the nut.



# Bracing Systems

Bremick Bracing Systems (Strap Brace & Tensioners) are fully compliant to AS1684 and have been designed for structural bracing of residential timber and metal framed structures, while Bremick Hoop Iron is designed for use in general non-structural applications.

Strap Brace & Tensioners

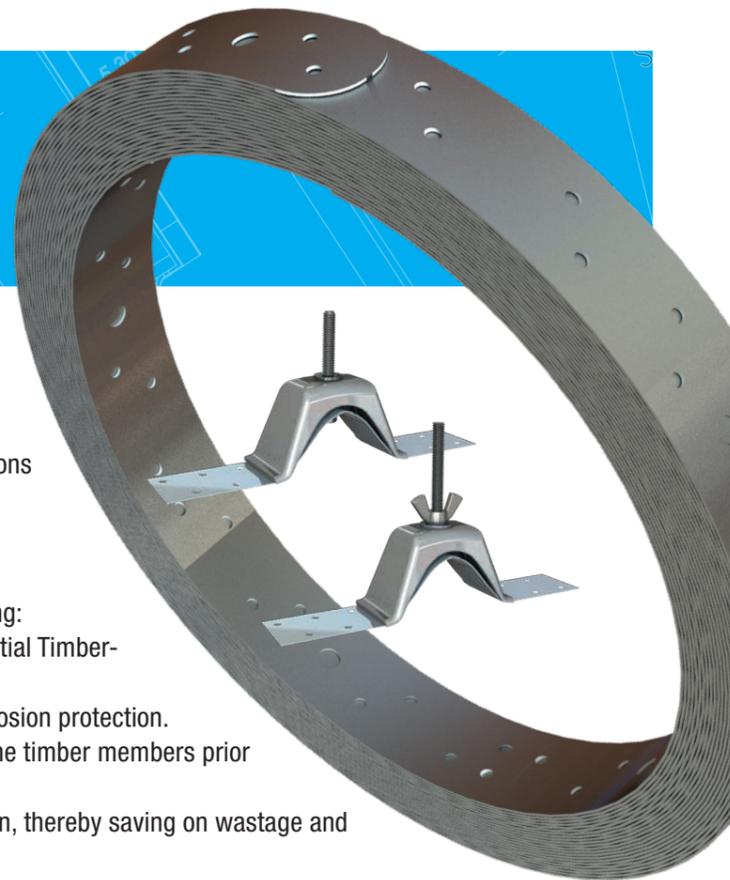
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Hoop Iron

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# Strap Brace & Tensioners

## GALVANISED & SS316



### Application

The Bremick® Strap Brace is galvanized steel pre-punched flat strap. When it is installed with a tensioner it is used to brace walls, roofs, ceilings, and floors. It is ideal for bracing applications where timber braces are not feasible.

### Advantages

The Bremick® Strap Brace provides numerous benefits including:

- Compliance with the wall bracing rules of AS1684 Residential Timber-Framed Construction.
- Genuine Galvanized coating that provides appropriate corrosion protection.
- Used in lieu of an angle brace, there is no need to check the timber members prior to fitting the brace.
- Wide range available to suit the specific bracing application, thereby saving on wastage and funds.
- Quickly and easily tensioned using your preferred method. Driving the heavy hex bolt, the nut-sert tensioner can be used, or alternatively the claw of the hammer can be used to tension the brace using the wing nut tensioner.

### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised & SS316
Thickness	0.8mm, 1.0mm, 1.2mm
Width	25mm, 30mm, 32mm
Length	6m, 15m, 30m, 50m
Configuration	Punched
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails



HEIGHT

### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TSBG015025084	0.8mm x 25mm x 15M	Z275 – Galvanised	1 coil
TSBG030025084	0.8mm x 25mm x 30M	Z275 – Galvanised	1 coil
TSBG006030084	0.8mm x 30mm x 6M	Z275 – Galvanised	1 coil
TSBG015030084	0.8mm x 30mm x 15M	Z275 – Galvanised	1 coil
TSBG030030084	0.8mm x 30mm x 30M	Z275 – Galvanised	1 coil
TSBG050030084	0.8mm x 30mm x 50M	Z275 – Galvanised	1 coil
TSBG006030104	1.0mm x 30mm x 6M	Z275 – Galvanised	1 coil
TSBG015030104	1.0mm x 30mm x 15M	Z275 – Galvanised	1 coil
TSBG030030104	1.0mm x 30mm x 30M	Z275 – Galvanised	1 coil
TSBG050030104	1.0mm x 30mm x 50M	Z275 – Galvanised	1 coil
TSBG015030124	1.2mm x 30mm x 15M	Z275 – Galvanised	1 coil
TSBG030030124	1.2mm x 30mm x 30M	Z275 – Galvanised	1 coil
TSBG050030124	1.2mm x 30mm x 50M	Z275 – Galvanised	1 coil
TSBG030032124	1.2mm x 32mm x 30M	Z275 – Galvanised	1 coil
TSB6015030084	0.8mm x 30mm x 15M	SS316	1 coil
TSB6030030084	0.8mm x 30mm x 30M	SS316	1 coil
TSB6015030104	1.0mm x 30mm x 15M	SS316	1 coil
TSB6030030104	1.0mm x 30mm x 30M	SS316	1 coil

### Strap Brace Tensioner Kits

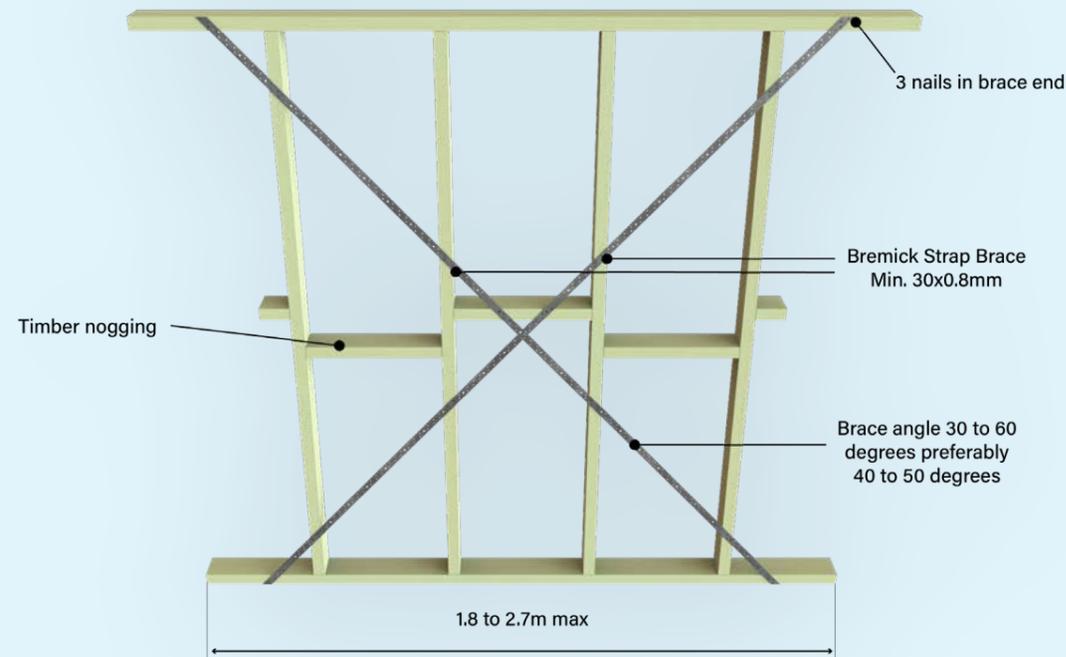
TSBTKITGBNW1C	Strap Brace Tensioner Kit (with wing nut, Flange bolt, and washer)	Z275 – Galvanised	6 per pack
TSBTKITGHHB1C	Strap Brace Tensioner Kit (with heavy hex bolt)	Z275 – Galvanised	6 per pack
TSBTKIT6BNW1C	Strap Brace Tensioner Kit (with wing nut, Flange bolt, and washer)	SS316	6 per pack



## Installation Instructions – Wall Frames

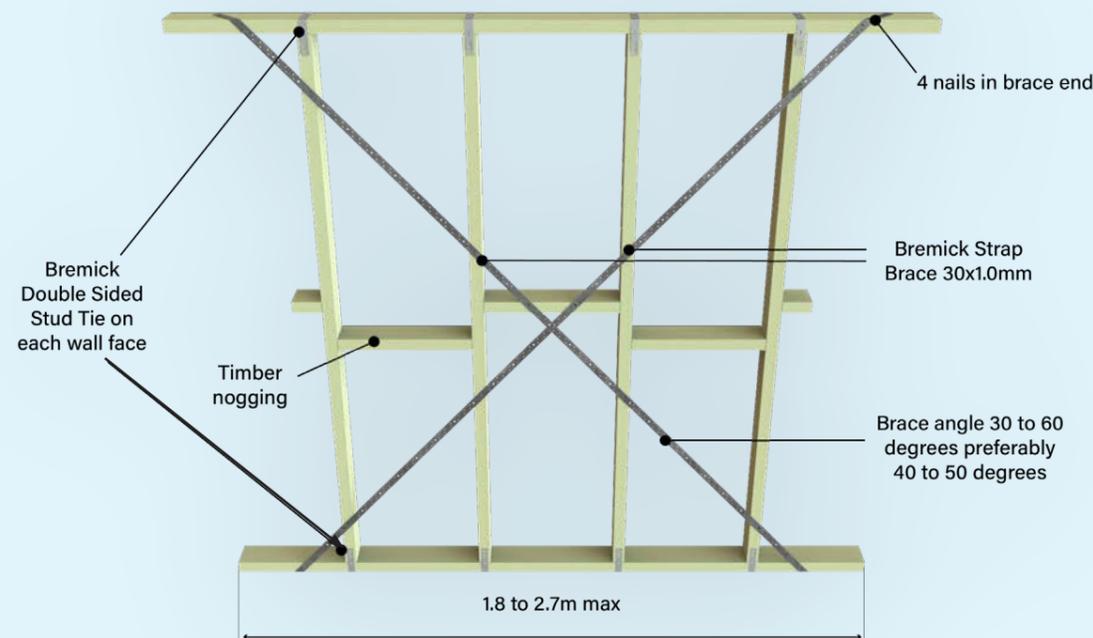
### Wall Frames – Type A Bracing Unit – 1.5kN/m bracing capacity using Strap Brace

This Type A bracing unit comprises one section of the wall, with cross-over braces of Bremick Strap Brace as shown below. The minimum recommended strap brace size is 30mm x 0.8mm. It fully complies with AS1684.2:2010 and AS1684.3:2010 specifications. Maximum wall height in AS1684 is 3.0 m (except at gable or skillion ends). Design capacity is 1.5 kN/m for wall heights up to 2.7 m and 1.35 kN/m for 3.0 m height.

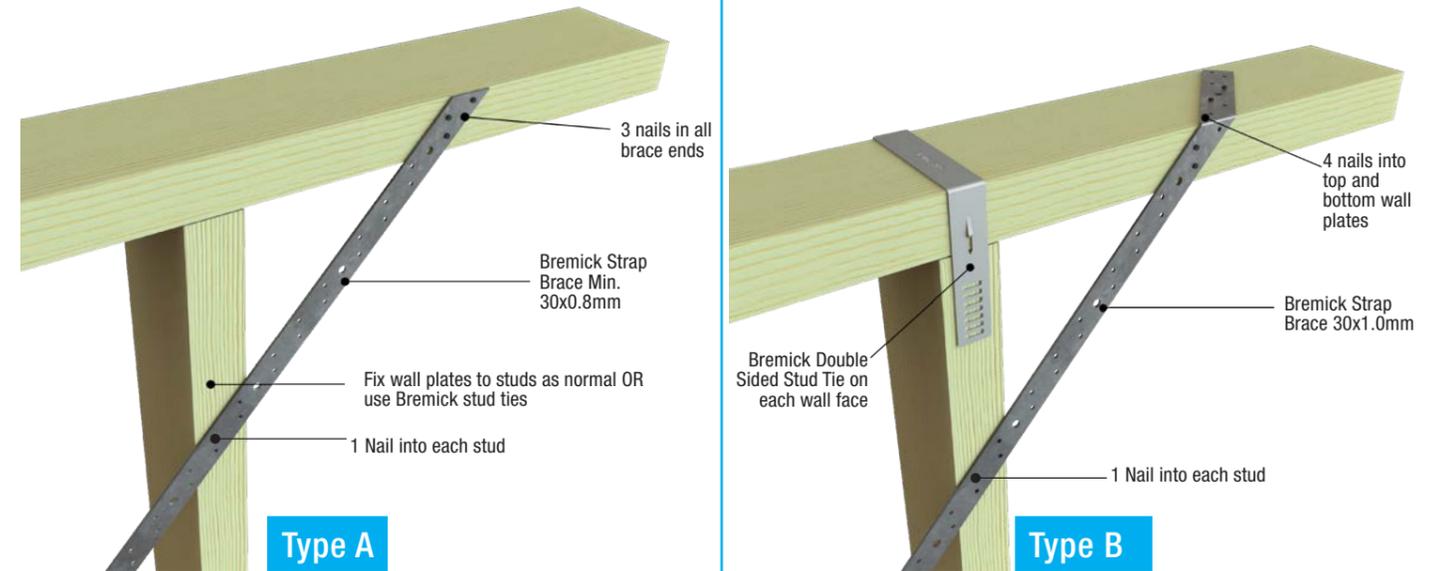


### Wall Frames – Type B Bracing Unit – 3.0kN/m bracing capacity using Strap Brace

This Type B bracing unit comprises one section of the wall, with cross-over braces of Bremick® Strap Brace as shown below. The recommended strap brace size is 30mm x 1.0mm. It fully complies with AS1684.2:2010 and AS1684.3:2010 specifications. Maximum wall height in AS1684 is 3.0m (except at gable or skillion ends). Design capacity is 3.0 kN/m for wall heights up to 2.7m and 2.7kN/m for 3.0m height.



## Installation Instructions – Wall Frames



**1**  
Square up the wall or temporary frame ready for bracing.

**2**  
Secure first end of one piece of bracing into position using Bremick® Timber Connector nails. For Type B wall frame units, wrap the brace over the top plate. Nail the end of the Strap Brace to the top plate within 150 mm of a stud using:

- 3 Bremick® Timber Connector Nails for Type A units or
- 4 Bremick® Timber Connector Nails for Type B units

**3**  
Stretch the strap bracing over the entire panel by pulling it down onto the bottom plate. It is to be braced at an angle of approximately 45°. Ensure the brace is taut.

**4**  
For Type B wall frame units, wrap the brace over the bottom plate. Fix the end of the Strap Brace to the plate within 150 mm of a stud using Bremick® Timber Connector Nails with:

- 2 Bremick® Timber Connector Nails for Type A units or
- 4 Bremick® Timber Connector Nails for Type B units

• Cut the strap brace to length.

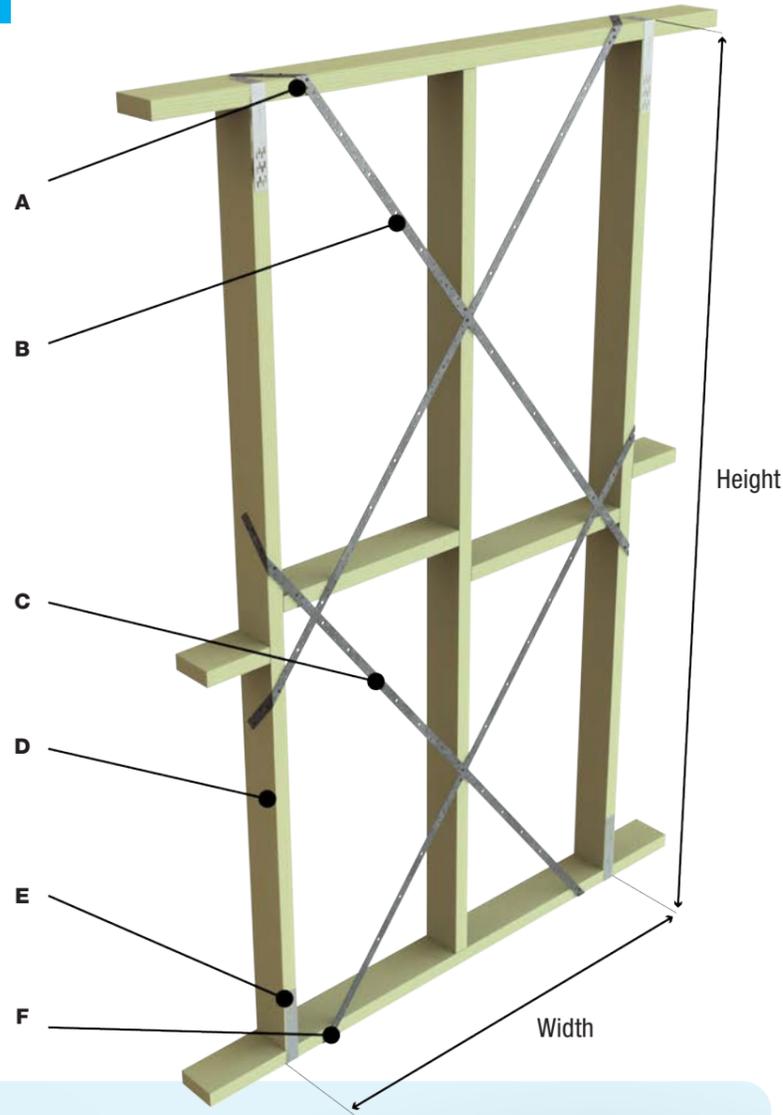
**5**  
Repeat this procedure for the second piece of flat tension bracing, ensuring an 'X' is formed.

- Fit and tighten the tensioners on both braces, with the tensioner facing into the frame. For the "nut-sert" tensioner, use a drill and bit. Alternatively, if using the "wing nut" tensioner, the claw of the hammer can be used to tension the brace. Adjust the tensioner as required or until the brace is taut.
- Note: Do not use Strap Brace to plumb the frame.

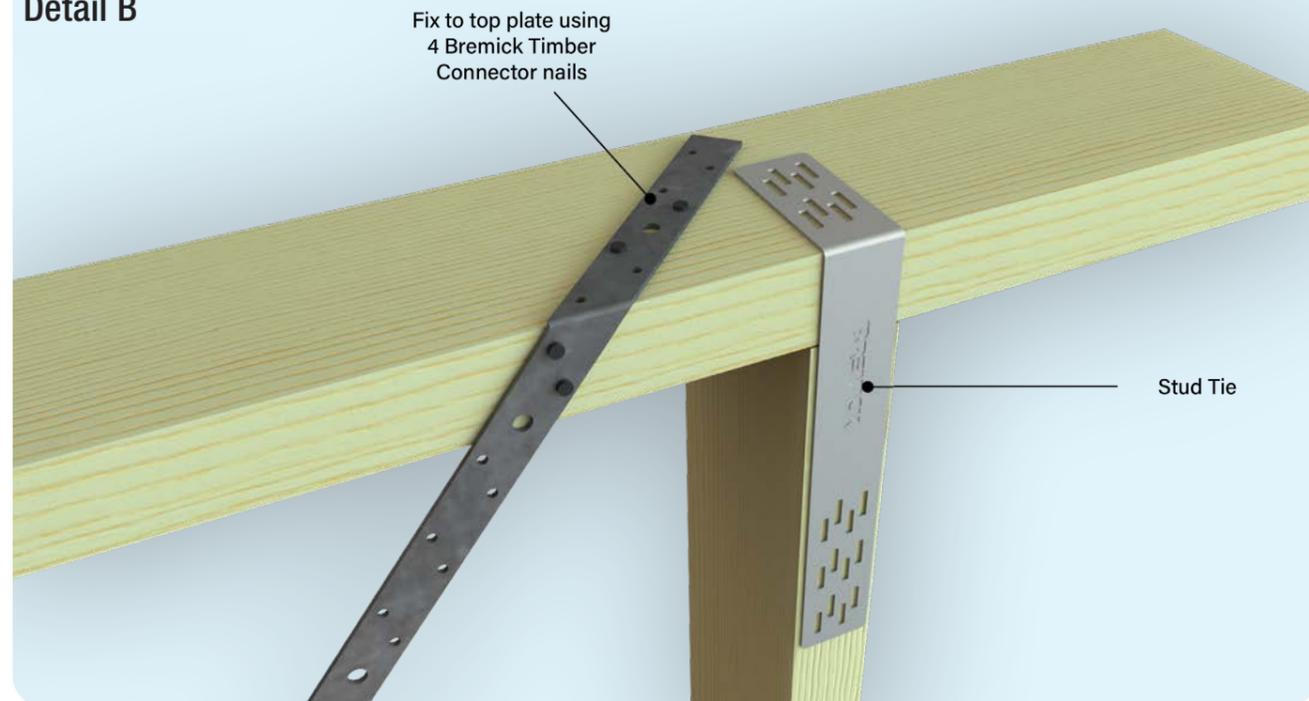
**6**  
Nail both braces to every stud crossed using 1 Bremick® Timber Connector Nail for both Type A and Type B wall frame units.

**Short Wall Bracing**

- A.** Wrap ends of Strap Brace around plate and fix with Bremick® Timber Connector nails (Refer Detail B)
- B.** Attach minimum 30 x 1.0 Strap Brace with 2 x Bremick® Timber Connector nails into each stud
- C.** Install Strap Brace Tensioner to each strap
- D.** Minimum 70 x 35-F5 Timber Wall Stud
- E.** Install Bremick® Stud Ties on both sides of the wall frame
- F.** Tie-down as per AS1684/minimum M10 Concrete Anchor Screw



**Short Wall Bracing Detail B**

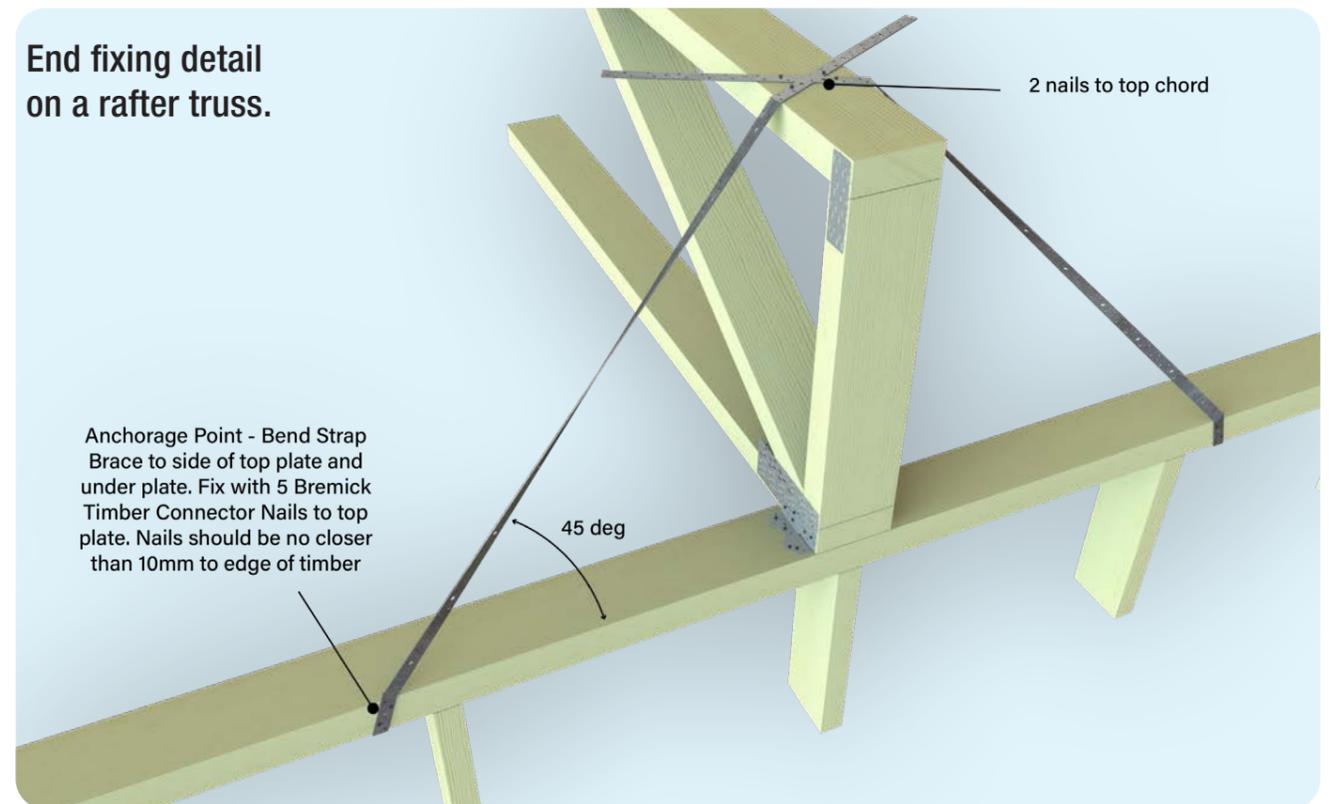


**Installation Instructions – Roof Trusses**

To brace standard trusses, rafters, or roof beams:

- |  |   |  |
|--|---|--|
| <b>1</b>   | <b>2</b>  | <b>3</b>   |
| <ul style="list-style-type: none"> <li>• If using strap brace to brace roof trusses, rafters, or beam, use only 32 x 1.2mm Bremick® Strap Brace.</li> <li>• Refer to AS4440-2004 to establish whether single or double Strap Brace is required based on roof span, pitch, and wind speed.</li> </ul> | <p>Lay out diagonal opposing lengths of Strap Brace on top of the roof framing at a maximum angle of 30 degrees (measured on plan) to the ridge line. Braces are required on both sides of the ridge line and at both ends of the roof.</p> | <p>Fix Strap Brace at both ends by wrapping one end around the top wall plate and the other end around the rafter, roof beam or top chord of a truss at the ridge, and by nailing each end using the required number of Bremick® Timber Connector Nails.</p> |
| <b>4</b>   | <b>5</b>  | <b>6</b>   |
| <p>Fit and tighten the tensioners on both braces, with the tensioner facing down into the roof space. Adjust the tensioner as required or until the brace is taut.</p>   | <p>Nail both braces to every truss or rafter crossed using 2 Bremick® Timber Connector Nails per crossing.</p>  | <p>For more details on bracing roof trusses using strap brace, refer to your truss supplier's installation guide or AS4400.</p>  |

**End fixing detail on a rafter truss.**



# Installation Instructions – Floor Bracing

To brace floor trusses, joists, or beams:  
 Bremick® Strap Brace, can be used as a herring-bone bracing for floor joists.  
 A tensioner is not required for this use.

**1**

**2**

Fix the ends of both lengths of Strap Brace to the top and bottom of the first joist with two Bremick® Timber Connector Nails per joint.

Pull each length of Strap Brace down from the top edge of the joist or up from the bottom onto the next joist. Use a screwdriver to tension the brace and then fix with one Bremick® Timber Connector Nail at each joist.

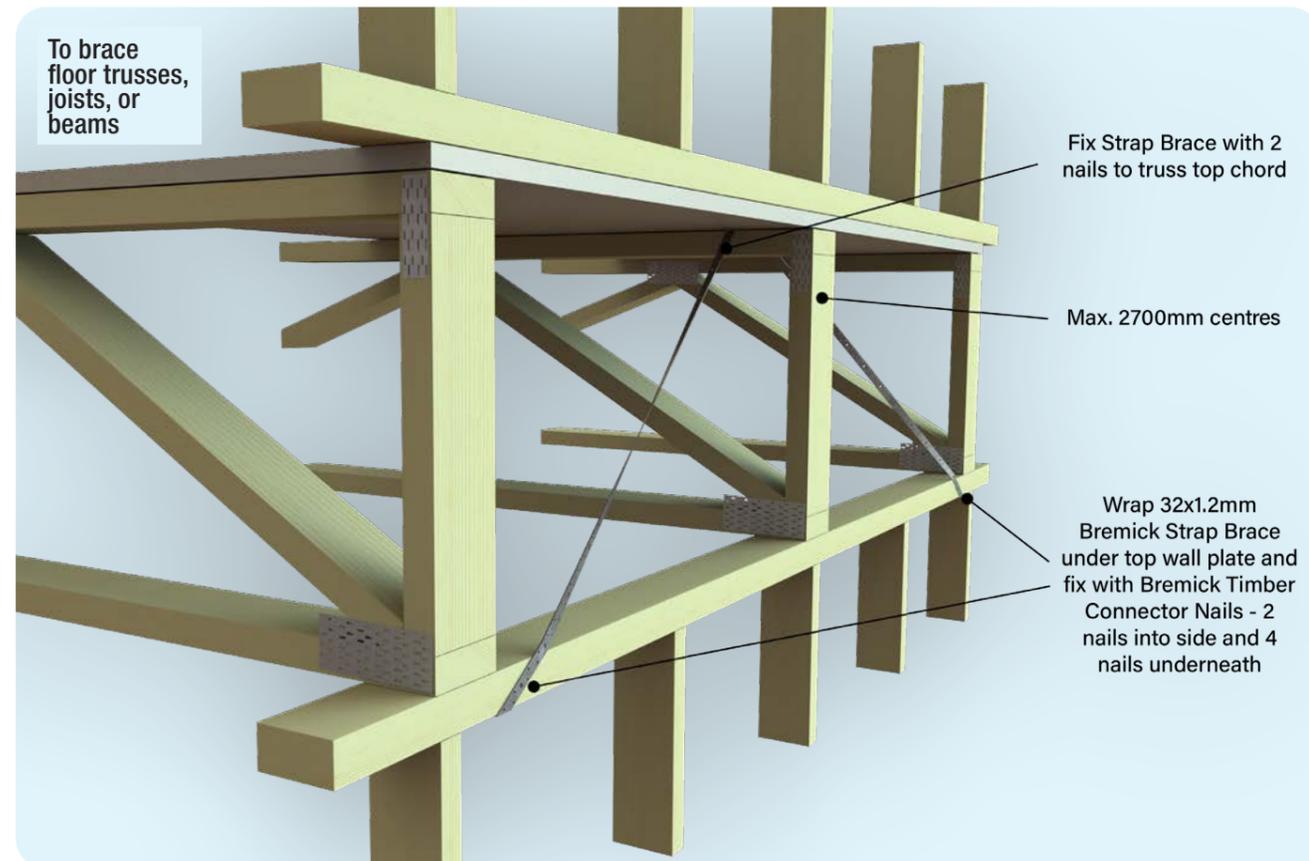
For floor systems with trusses, I-joists or deep beams, bracing is required for both:

**1**

**2**

Stability during construction and;

Wind resistance during the life of the building. The bracing can be Bremick® Strap Brace or Unpunched Strapping. It is to be fixed to the floor members and supporting structure with Bremick® Timber Connector Nails or power driven 2.5 mm or 2.87 mm nails.



# Technical Data

## STRAP BRACE (25mm X 0.8mm)

TSBG015025084 • TSBG030025084

### LIMIT STATE WIND LOAD TENSILE CAPACITY

**TABLE 1 UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	1.9	2.6	3.1	3.8	3.8	3.8
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.3	1.7	2.2	3.1	3.8	3.8

**TABLE 2 UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.7	3.7	3.8	3.8	3.8	3.8
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.7	2.3	2.9	3.8	3.8	3.8

**TABLE 3 UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.6	3.8	3.8	3.8	3.8	3.8
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.1	2.9	3.7	3.8	3.8	3.8

### 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
- Minimum nail length 35mm. Nails to be tight fit in holes.
- Capacity may be limited by tensioners when used – To be determined by test.

# Technical Data

## STRAP BRACE (30mm X 0.8mm)

TSBG006030084 • TSBG015030084 • TSBG030030084 • TSBG050030084

### LIMIT STATE WIND LOAD TENSILE CAPACITY

**TABLE 4** UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	1.9	2.6	3.1	4.4	4.9	4.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.3	1.7	2.2	3.1	4.4	4.9

**TABLE 5** UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.7	3.7	4.4	4.9	4.9	4.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.7	2.3	2.9	4.1	4.9	4.9

**TABLE 6** UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.6	4.8	4.9	4.9	4.9	4.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.1	2.9	3.7	4.9	4.9	4.9

### 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
- Minimum nail length 35mm. Nails to be tight fit in holes.
- Capacity may be limited by tensioners when used – To be determined by test.

# Technical Data

## STRAP BRACE (30mm X 1.0mm)

TSBG006030104 • TSBG015030104 • TSBG030030104 • TSBG050030104

### LIMIT STATE WIND LOAD TENSILE CAPACITY

**TABLE 7** UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.3	3.2	3.8	5.3	6.1	6.1
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.5	2.1	2.7	3.8	5.3	6.1

**TABLE 8** UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.3	4.4	5.3	6.1	6.1	6.1
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.0	2.7	3.5	5.0	6.1	6.1

**TABLE 9** UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	4.3	5.8	6.1	6.1	6.1	6.1
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.5	3.5	4.5	6.1	6.1	6.1

### 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
- Minimum nail length 35mm. Nails to be tight fit in holes.
- Capacity may be limited by tensioners when used – To be determined by test.

## Technical Data

### STRAP BRACE (30mm X 1.2mm)

TSBG015030124 • TSBG030030124 • TSBG050030124

#### LIMIT STATE WIND LOAD TENSILE CAPACITY

**TABLE 10** UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.3	3.2	3.8	5.3	6.7	7.3
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.5	2.1	2.7	3.8	5.3	6.7

**TABLE 11** UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.3	4.4	5.3	7.3	7.3	7.3
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.0	2.7	3.5	5.0	7.0	7.3

**TABLE 12** UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	4.3	5.8	6.9	7.3	7.3	7.3
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.5	3.5	4.5	6.3	7.3	7.3

#### 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
- Minimum nail length 35mm. Nails to be tight fit in holes.
- Capacity may be limited by tensioners when used – To be determined by test.

## Technical Data

### STAINLESS STEEL STRAP BRACE (30mm X 0.8mm)

TSB6015030084 • TSB6030030084

#### LIMIT STATE WIND LOAD TENSILE CAPACITY

**TABLE 13** UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	1.9	2.6	3.1	4.4	4.4	4.4
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.3	1.7	2.2	3.1	4.4	4.4

**TABLE 14** UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.7	3.7	4.4	4.4	4.4	4.4
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.7	2.3	2.9	4.1	4.4	4.4

**TABLE 15** UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.6	4.4	4.4	4.4	4.4	4.4
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.1	2.9	3.7	4.4	4.4	4.4

#### 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
- Minimum nail length 35mm. Nails to be tight fit in holes.
- Capacity may be limited by tensioners when used – To be determined by test.

# Technical Data

## STAINLESS STEEL STRAP BRACE (30mm X 1.0mm)

TSB6015030104 • TSB6030030104

### LIMIT STATE WIND LOAD TENSILE CAPACITY

**TABLE 16** UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.3	3.2	3.8	5.3	5.5	5.5
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	1.5	2.1	2.7	3.8	5.3	5.5

**TABLE 17** UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.3	4.4	5.3	5.5	5.5	5.5
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.0	2.7	3.5	5.0	5.5	5.5

**TABLE 18** UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	4.3	5.5	5.5	5.5	5.5	5.5
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.5	3.5	4.5	5.5	5.5	5.5

### 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
- Minimum nail length 35mm. Nails to be tight fit in holes.
- Capacity may be limited by tensioners when used – To be determined by test.

# Hoop Iron GALVANISED



### Application

The Bremick® Hoop Iron is for general use connection applications including, tying down items to timber in non-structural applications, bonding masonry, connecting downpipes to the external wall etc. Also, commonly used for bracing outdoor fences where there are no present heavy loads or wind uplifts. Note, the product dimensions dictate that it should not be used in structural applications.

### Advantages

The Bremick® Hoop Iron provides numerous benefits including:

- Genuine Galvanised coating that provides appropriate corrosion protection.
- Available in both punched and unpunched product lines, providing flexible functionality.
- Offered in 6, 15 or 30 metre lengths to suit the required applications, thereby saving on wastage and funds.

### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	0.6mm, 0.8mm, 1.2mm
Width	25mm, 30mm
Length	6m, 15m, 30m
Configuration	Punched & Unpunched
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails



### Bremick® Ranging

Product Code	Dimensions	Un/Punched	Coating	Pack Qty
THPG006025064	0.6mm x 25mm x 6M	Punched	Z275 – Galvanised	5 coils
THPG015025064	0.6mm x 25mm x 15M	Punched	Z275 – Galvanised	5 coils
THPG030025064	0.6mm x 25mm x 30M	Punched	Z275 – Galvanised	1 coil
THUG030025064	0.6mm x 25mm x 30M	Unpunched	Z275 – Galvanised	1 coil
THUG030030084	0.8mm x 30mm x 30M	Unpunched	Z275 – Galvanised	1 coil
THUG030030124	1.2mm x 30mm x 30M	Unpunched	Z275 – Galvanised	1 coil



# Technical Data

## HOOP IRON (25mm X 0.6mm)

THPG006025064 • THPG015025064 • THPG030025064 • THUG030025064

### LOOPED HOOP IRON LIMIT STATE WIND LOAD CAPACITY

**TABLE 1 UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.9	5.3	5.9	5.9	5.9	5.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.5	3.4	4.5	5.9	5.9	5.9

**TABLE 2 UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	5.4	5.9	5.9	5.9	5.9	5.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	3.3	4.6	5.9	5.9	5.9	5.9

**TABLE 3 UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	5.9	5.9	5.9	5.9	5.9	5.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	4.2	5.8	5.9	5.9	5.9	5.9

### 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
- Values for a hoop iron strap looped over a member that is to be held down, the ends brought parallel and fastened each end with the number of nails indicated.
- Minimum nail length 35mm. Nails to be tight fit in holes.
- See appendix for nail layout to achieve capacity. Only every second pair of holes can be filled.
- When used as a single strap (not looped) half the published value may be used.

# Technical Data

## HOOP IRON (30mm X 0.8mm)

THUG030030084

### LOOPED HOOP IRON LIMIT STATE WIND LOAD CAPACITY

**TABLE 4 UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.9	5.3	6.3	8.8	9.9	9.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.5	3.4	4.5	6.3	8.8	9.9

**TABLE 5 UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	5.4	7.4	8.8	9.9	9.9	9.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	3.3	4.6	5.9	8.3	9.9	9.9

**TABLE 6 UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	7.1	9.7	9.9	9.9	9.9	9.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	4.2	5.8	7.5	9.9	9.9	9.9

### 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
- Values for a hoop iron strap looped over a member that is to be held down, the ends brought parallel and fastened each end with the number of nails indicated.
- Minimum nail length 35mm. Nails to be tight fit in holes.
- See appendix for nail layout to achieve capacity. Only every second pair of holes can be filled.
- When used as a single strap (not looped) half the published value may be used.

# Technical Data

## HOOP IRON (30mm X 1.2mm)

THUG030030124

### LOOPED HOOP IRON LIMIT STATE WIND LOAD CAPACITY

**TABLE 7 UPLIFT CAPACITY: 4 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP – NAILS TIGHT**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	4.7	6.3	7.5	10.6	13.4	15.4
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	3.0	4.1	5.3	7.5	10.6	13.4

**TABLE 8 UPLIFT CAPACITY: 6 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	6.5	8.8	10.5	14.8	15.4	15.4
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	4.0	5.5	7.1	9.9	13.9	15.4

**TABLE 9 UPLIFT CAPACITY: 8 - 3.15mm DIAMETER NAILS USED @ EACH END OF STRAP**

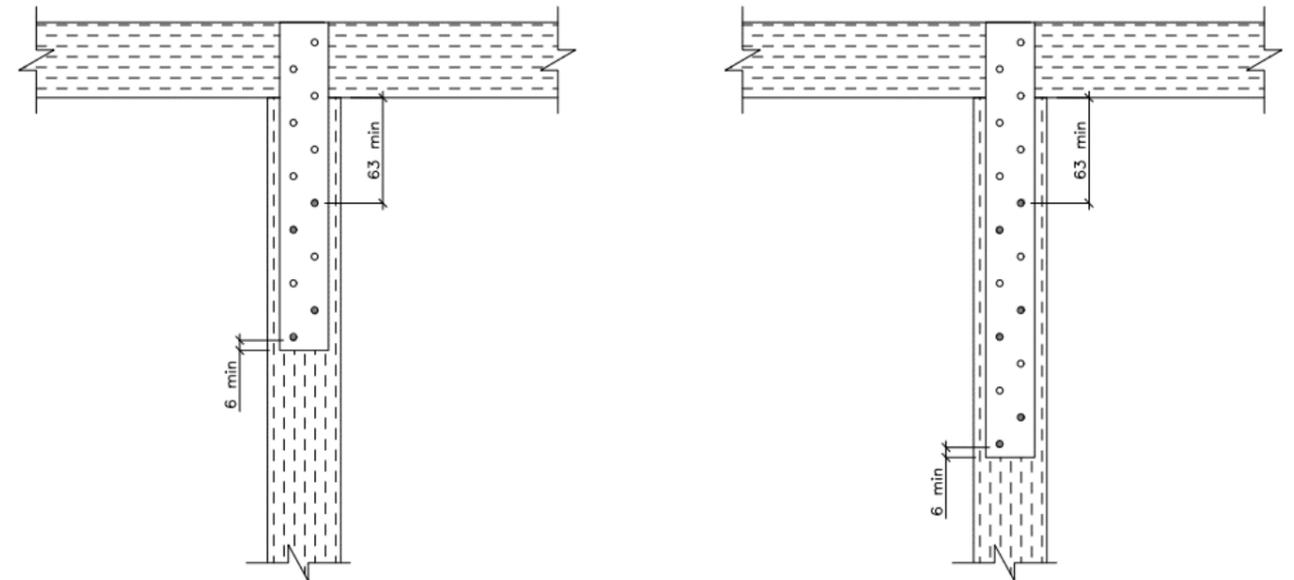
JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	8.5	11.6	13.8	15.4	15.4	15.4
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	5.1	7.0	9.0	12.7	15.4	15.4

### 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
- Values for a hoop iron strap looped over a member that is to be held down, the ends brought parallel and fastened each end with the number of nails indicated.
- Minimum nail length 35mm. Nails to be tight fit in holes.
- See appendix for nail layout to achieve capacity. Only every second pair of holes can be filled.
- When used as a single strap (not looped) half the published value may be used.

# Appendix

Figure N.1 Minimum Edge and End Distances.



# Installation Instructions

1

Secure first end of one piece of Hoop Iron into position using Bremick® Timber Connector nails.

2

Stretch the Hoop Iron over the entire item to be tied down. Ensure the Hoop Iron is taut.

3

Fasten the second end of the Hoop Iron into position using Bremick® Timber Connector nails.

4

Cut the strap brace to length.

# Brackets & Fixes

Bremick Brackets & Fixes are a range of versatile and multi-purpose reinforcing and fixing options that can be used to facilitate numerous connections.

Heavy Duty Angle Bracket **32**

Pergola Angle **35**

Foil Tacks **37**

Foil Insulation Fix Fasteners **39**

Shade Cloth Fix **41**

# Heavy Duty Angle Bracket

## GALVANISED

### Application

The Bremick® Heavy Duty Angle Bracket can be used in a variety of applications including framing staircases, internal and external corner supports and constructing shelving units.

### Advantages

Bremick® Heavy Duty Angle Bracket provides numerous benefits including:

- 2.0mm thickness and a 90° bend facilitates multiple right angle timber connections.
- Bracket length and flange depth makes this bracket perfect for staircase and shelf construction.
- Its versatile design enables it to be used in left or right hand and internal or external applications.
- Pre-drilled holes to enable easy fastening.
- Eliminates the need for time consuming conventional notching in staircase construction

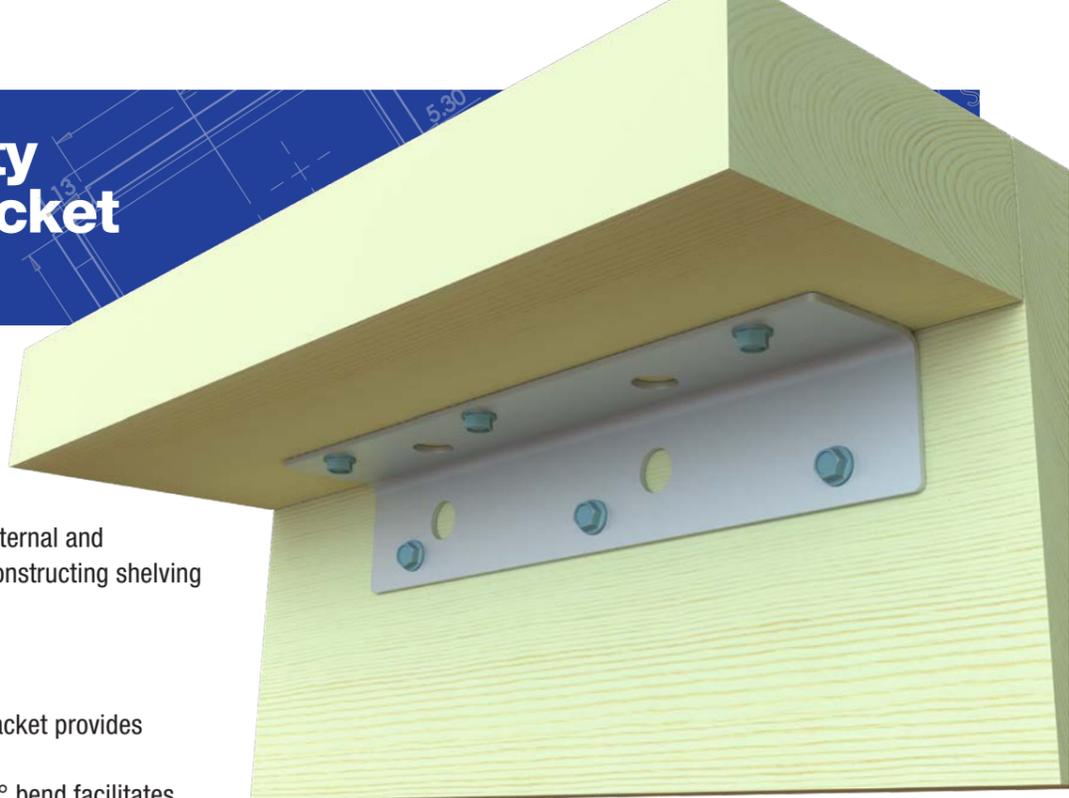
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	2.0mm
Length	230mm
Right Angle	40mm x 40mm
Fasteners	Bremick® Type 17, 12g x 35mm / 65mm screws



### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TBHG230040204	230mm x 40mm x 40mm x 2.0mm	Z275 – Galvanised	20



## Installation Instructions

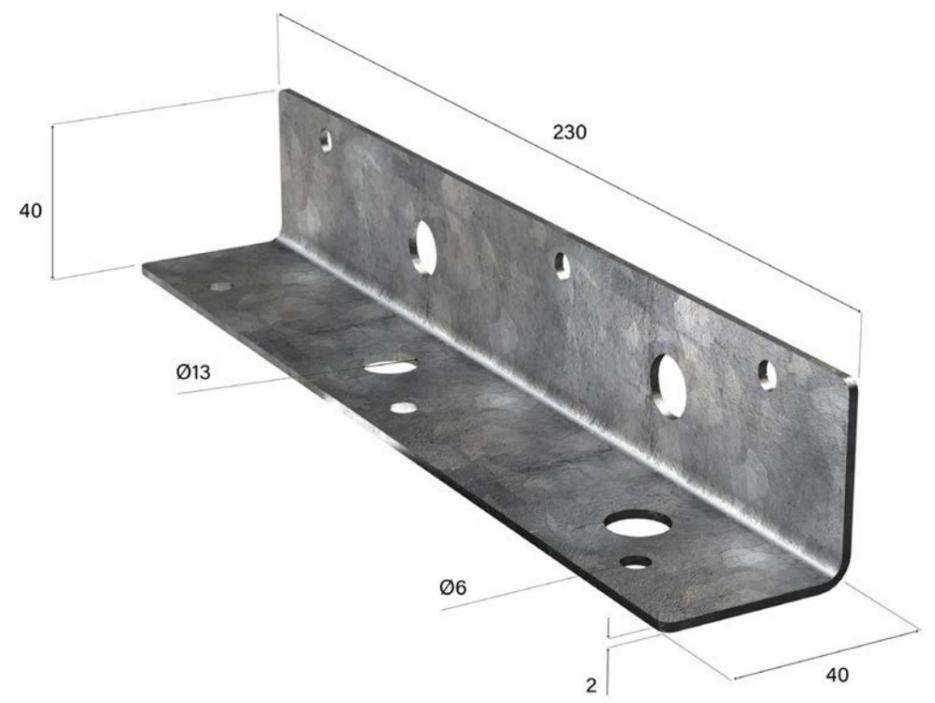


**1** **2**

Fasten the flange of the Bremick® Heavy Duty Angle Bracket to the first timber member in the desired location and angle, by drilling Type 17, 12g x 35mm or 65mm timber screws through the 3 available screw holes.

Once the bracket is secured into the first timber member, repeat the previous step into the second timber member, that is running at right angles.

Note: The specification of the 35mm or 65mm screw is dependent on the thickness of the timber member.



# Technical Data

## HEAVY DUTY ANGLE BRACKET

TBHG230040204

### LIMIT STATE DOWNWARDS LOAD CAPACITY (1.2G+1.5Q)

TABLE 1 CAPACITY: FOR 3-12ga x 35mm SCREWS USED @ EACH FACE.

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.9	5.3	7.4	10.5	13.3	17.7
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.5	3.9	5.3	7.4	10.5	13.3

TABLE 2 CAPACITY: FOR 3-12ga x 45mm SCREWS USED @ EACH FACE.

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	4.6	6.2	8.8	12.5	15.8	20.9
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.9	4.6	6.2	8.8	12.5	15.8

### 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

\* "Downwards" capacity means when loaded downwards in the application shown in the diagram on the previous page.  
For example, a stair tread connector to a stringer

## Pergola Angle GALVANISED & SS316

### Application

The Bremick® Pergola Angle is a heavy-duty bracket that can be used in numerous timber connector applications. Its primary purpose is to connect the rafter to the beam and the beam to the column during pergola construction.

### Advantages

Bremick® Pergola Angle bracket provides numerous benefits including:

- 1.6mm thickness and a 90° bend facilitates multiple right angle timber connections.
- Bracket dimensions ensure it fits within standard timber members used in pergola construction.
- Pre-drilled holes to enable easy fastening using nails or screws.
- Available in 316 Stainless Steel for harsh outdoor conditions.

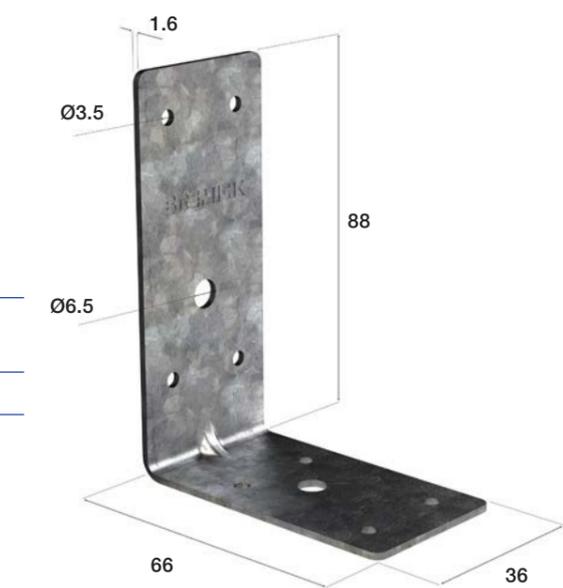
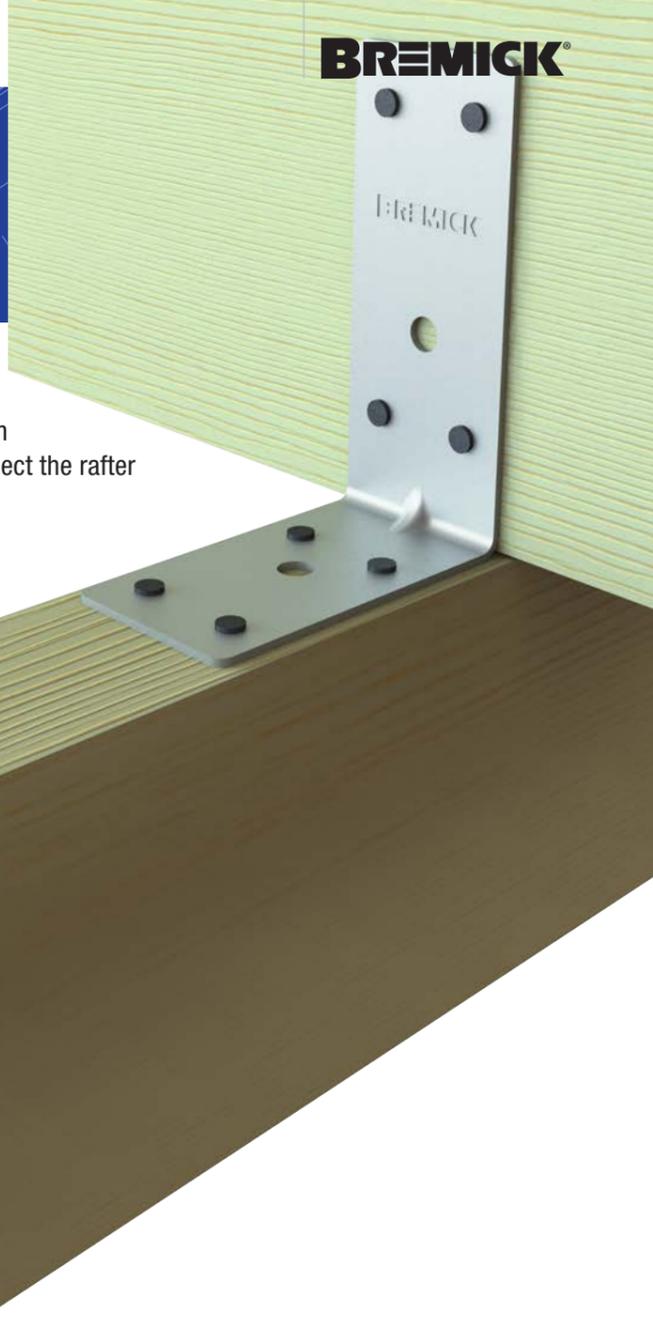
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised: Stainless Steel 316
Thickness	1.6mm
Width	36mm
Length A	88mm
Length B	66mm
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails
	Bremick® Type 17, 12g x 35mm / 65mm screws



### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TPAG088066164	88mm x 66mm x 36mm x 1.6mm	Z275 – Galvanised	50
TPA6088066164	88mm x 66mm x 36mm x 1.6mm	<b>SS316</b>	20



# Installation Instructions

## Fixing Pergola Beam to Rafter



1

2

3

Locate the Bremick® Pergola Angle bracket, so the longest flange sits flush against the timber rafter face and the shortest flange runs along the top of the timber beam and is centrally located.

Whilst ensuring the bracket remains in position, fasten the shortest flange into the timber beam by drilling Type 17, 12g x 35mm or 65mm timber screws through the 5 available pre-drilled holes. Or hammer Bremick® Timber Connectors nails through the 4 outer pre-drilled holes and then screw a Type 17, 12g x 35mm or 65mm timber screw into the remaining central pre-drilled hole.

Once the bracket is secured into the beam, repeat the above step into the timber rafter, that is running at right angles.

Note: The specification of the 35mm or 65mm screw is dependent on the thickness of the timber member.

# Foil Tacks GALVANISED

## Application

The Bremick® Foil Tacks are for fixing insulation foil to timber framing.

## Advantages

Bremick® Foil Tacks provide numerous benefits including:

- **Multi-use:** Can be used to fix foil insulation to both wall and roof frames
- **Withdrawal strength:** The twisted nail profile ensures an excellent holding power. When fixed to standard pine framing timber, the withdrawal resistance is greater than that of the foil.
- **Tear resistant design:** The rounded, coined edges and a wide surface area (25mm) significantly reduces the potential for the foil to tear in windy conditions
- **Easy to apply:** Supplied in convenient twist-off sticks of 10 that allows for quick application of each foil fix



## Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	0.6mm
Length A	25mm
Length B	25mm

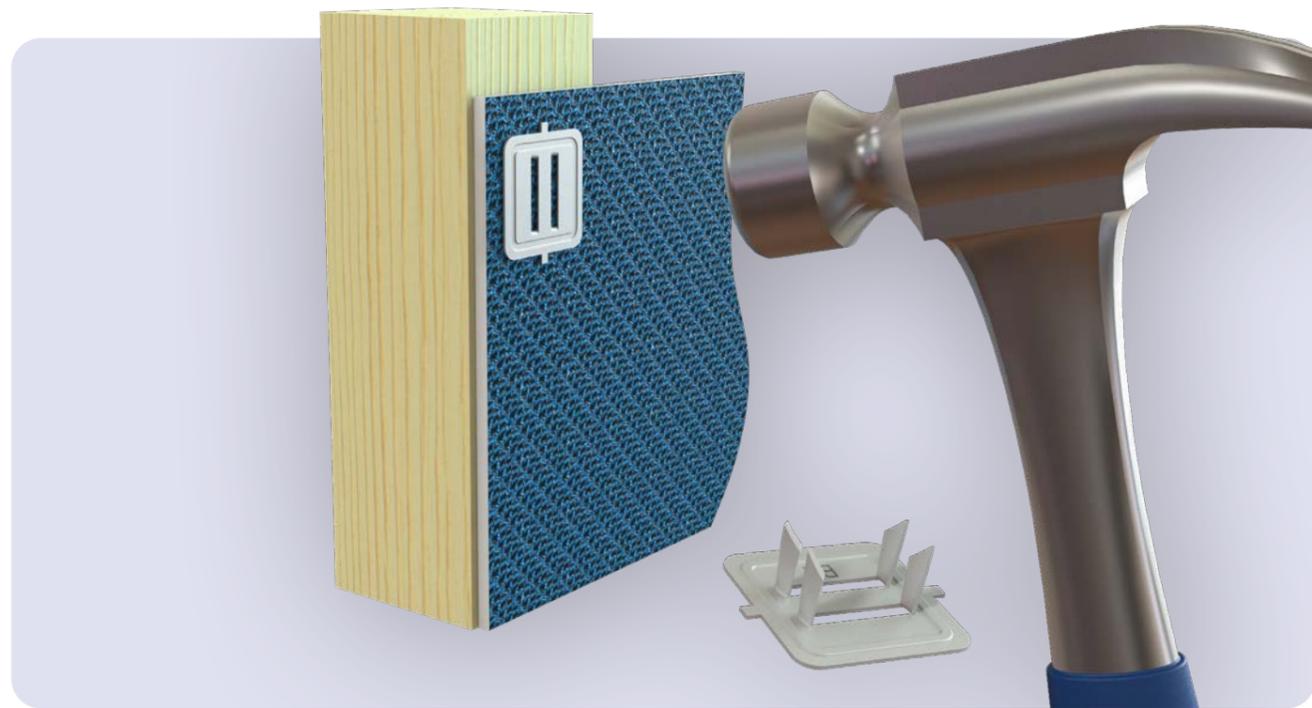


## Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TFTZ025025104	25mm x 25mm x 0.6mm	Z275 – Galvanised	500 (50 strips of 10)



# Installation Instructions



1

2

3

- Put on gloves to avoid cutting hands when handling foil tack strips.
- Locate foil insulation into position.

Take stick of 10 and locate last foil tack on stick into position over foil insulation. Hammer the foil tack into position – until the nail penetrates the insulation and the timber frame and the face of the foil tack is flush against the insulation.

Twist the stick of foil tacks away from the applied foil fix in readiness to apply the next foil tack on the stick.

# Foil Insulation Fix Fasteners

## GALVANISED

### Application

The Bremick® Foil Insulation Fix Fasteners are for fixing insulation foil to timber framing.

### Advantages

Bremick® Foil Insulation Fix Fasteners provide numerous benefits including:

- **Multi-use:** Can be used to fix foil insulation to both wall and roof frames
- **Withdrawal strength:** When fixed using the Bremick Timber Connector Nail it ensures an excellent holding power. When fixed to standard pine framing timber, the withdrawal resistance is greater than that of the foil.
- **Tear resistant design:** The rounded, coined edges and a wide surface area (30mm) significantly reduces the potential for the foil to tear in windy conditions

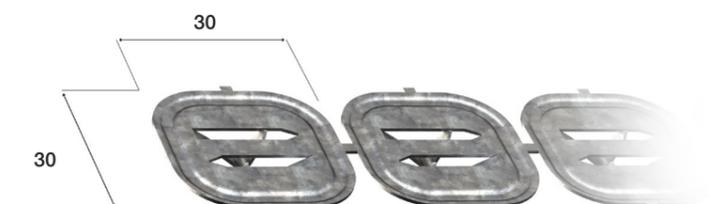
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	0.6mm
Length A	30mm
Length B	30mm

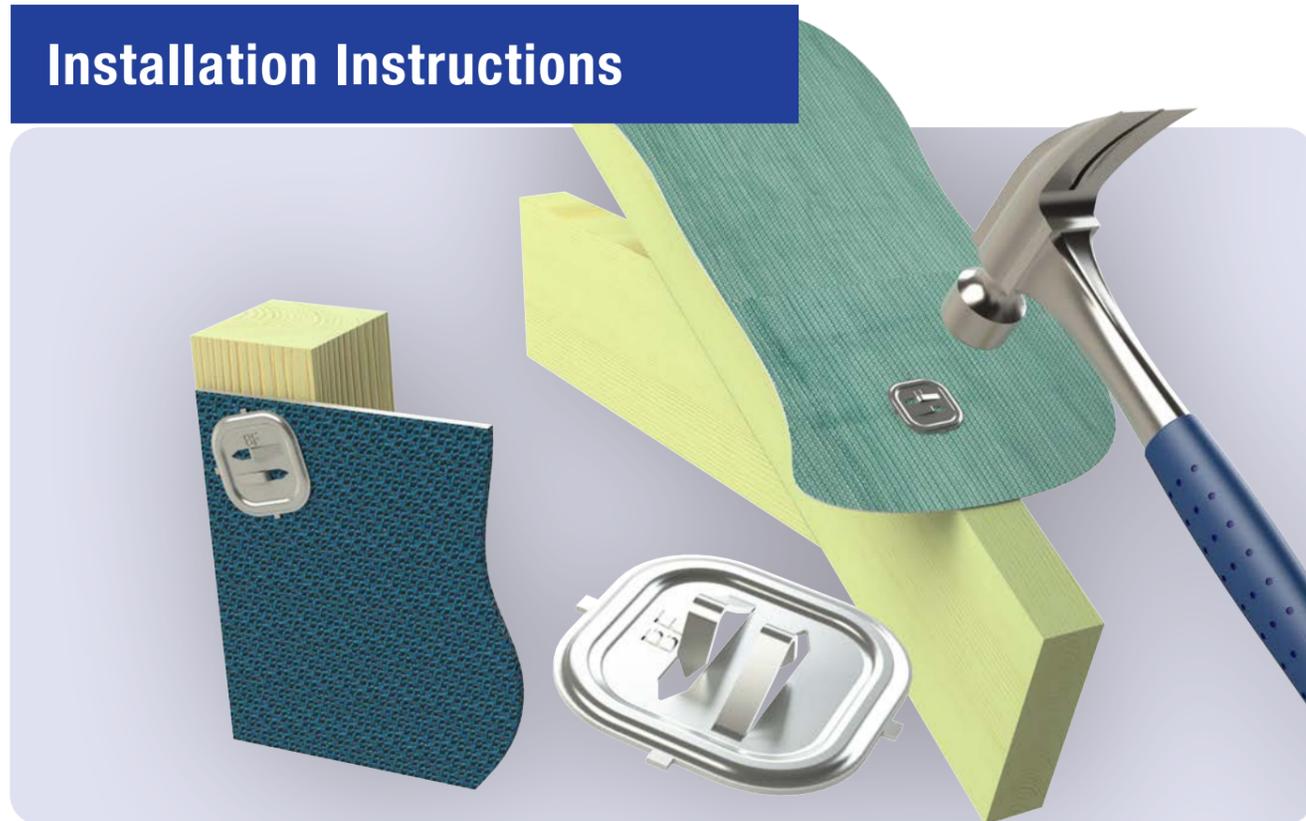


### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TFFZ030030104	30mm x 30mm x 0.6mm	Z275 – Galvanised	500 (50 strips of 10)
TFFZ03003010C	30mm x 30mm x 0.6mm	Z275 – Galvanised	Carded - 50



## Installation Instructions



**1**

Place foil insulation into position.

**2**

Take a single foil fastener and locate it over the foil insulation in the desired position.

**3**

Drive in with hammer and twist to separate from the stick.

## Shade Cloth Fix ZINC & POWDER COATED

### Application

The Bremick® Shade Cloth Fix are for fixing woven and knitted shade cloth to timber framing.

### Advantages

Bremick® Shade Cloth Fix provide numerous benefits including:

- **Rounded coined edge:** Designed to prevent the shade cloth tearing on the Shade Fix's edges. The product design also enables the cloth to be firmly held in position against the timber when the pre-punched nails are driven home.
- **Twisted nail profile:** ensures the Shade Fix can be used with the hardest timbers, while resisting pull-out in high wind conditions.
- **Packaged in a 5-piece easy snap-off stick:** for speed and safety during installation
- **Range of colours:** to match most popular shade cloth

### Specifications

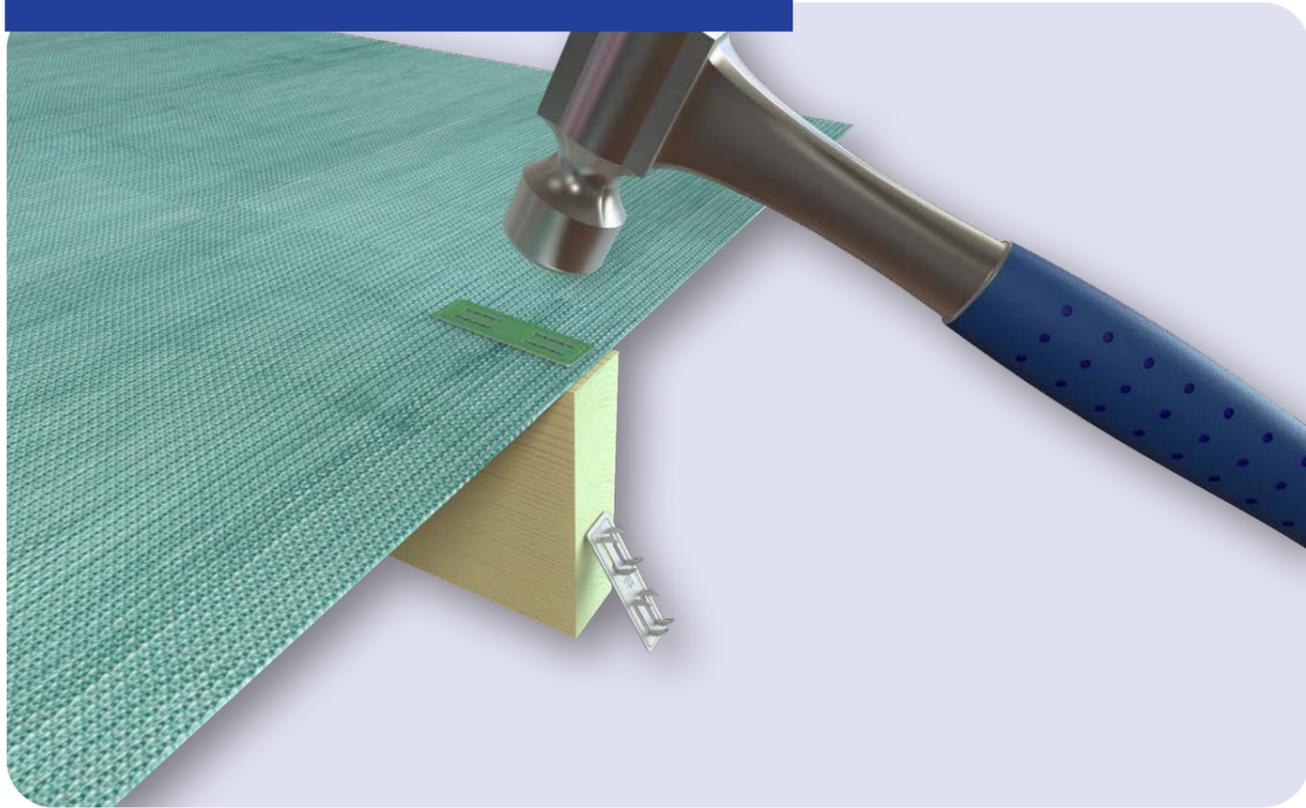
Steel Grade	G300
Coating	Zinc / Powder coated
Thickness	0.6mm
Length A	50mm
Length B	13mm



### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TSCG05001310C	50mm x 13mm x 0.6mm	Green	Carded - 50
TSCB05001310C	50mm x 13mm x 0.6mm	Black	Carded - 50
TSCE05001310C	50mm x 13mm x 0.6mm	Beige	Carded - 50
TSCZ05001310C	50mm x 13mm x 0.6mm	Zinc	Carded - 50

# Installation Instructions



**1**

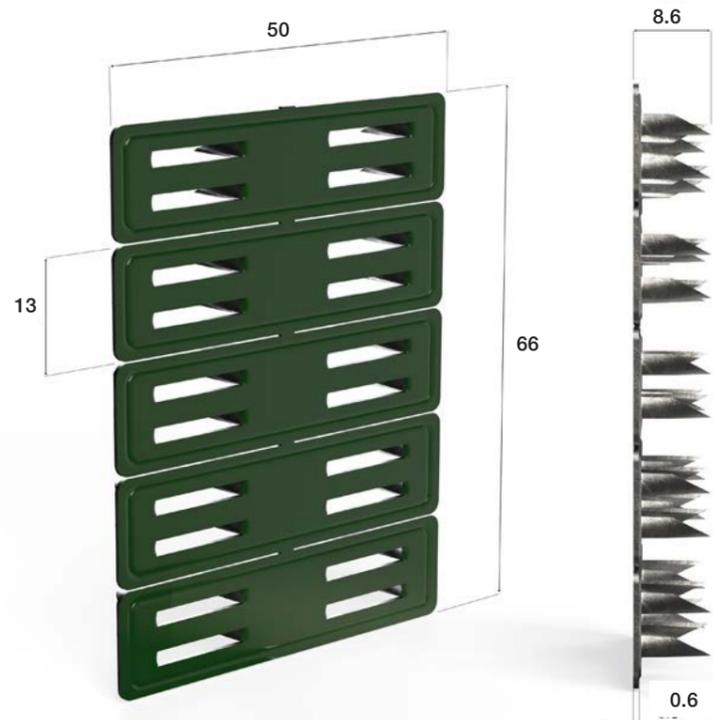
Place the Shade Fix approximately 5mm from the edge of the fabric or centrally on the timber batten.

**2**

Drive in with a hammer.

**3**

For maximum grip use Shade Fix at 300mm to 600mm intervals.

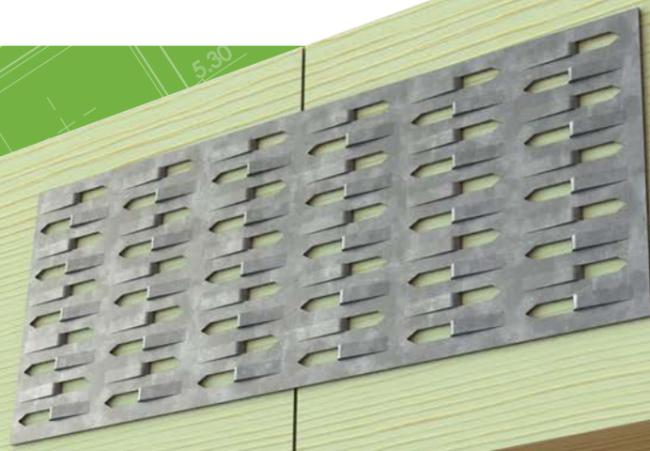


# Nail Plates

Bremick Nail Plates are ideal for joining timber in both structural and non-structural applications. Tap-In Nail Plates, Mini Nails and Strap Nails are designed with pre-punched nails, while Nail-On Plates are designed with pre-punched fastening holes for use with nails or screws.

Tap-In Plate	46
Nail-On Plate	50
Mini Nail	54
Strap Nail	56
Corner Plate	58

# Tap-In Nail Plate GALVANISED



### Application

The Bremick® Tap-In Nail Plates are used in various structural and non-structural applications, including the jointing of timber, spreading concentrated loads, and preventing the splitting of timber beams.

**Timber joining applications** include the joining of wall frames, splicing of timber beams, truss manufacture, box manufacture and various DIY uses.

**Spreading concentrated loads applications** are typically fixing a Bremick® Tap-In Plate next to a bolted truss-to-truss connection.

**Preventing timber splitting applications** include applying a Bremick® Tap-In Plate to the ends of timber beams where forces are continually applied. E.g. Bearers in a timber pallet.

### Advantages

The Bremick® Tap-In Plate provides numerous benefits including:

- **Convenient and strong:** Pre-punched nails are designed so that they skew into the timber for the greatest holding power.
- **Efficient:** An efficient and easy method of jointing timber. Only tool that is required is a hammer.
- **Anti-Splitting:** Fix the Bremick® Tap-In Plate and the ends of timber to prevent it from splitting.
- **Protects timber from damage:** Locate Bremick® Tap-In plate into timber where it is subject to impact loads to prevent damage. e.g. Protect timber bearer in a pallet from being damaged from forklift tyres.
- **Distributes loads:** Spreads the load over wider areas, typically in bolted truss-to-truss connections.

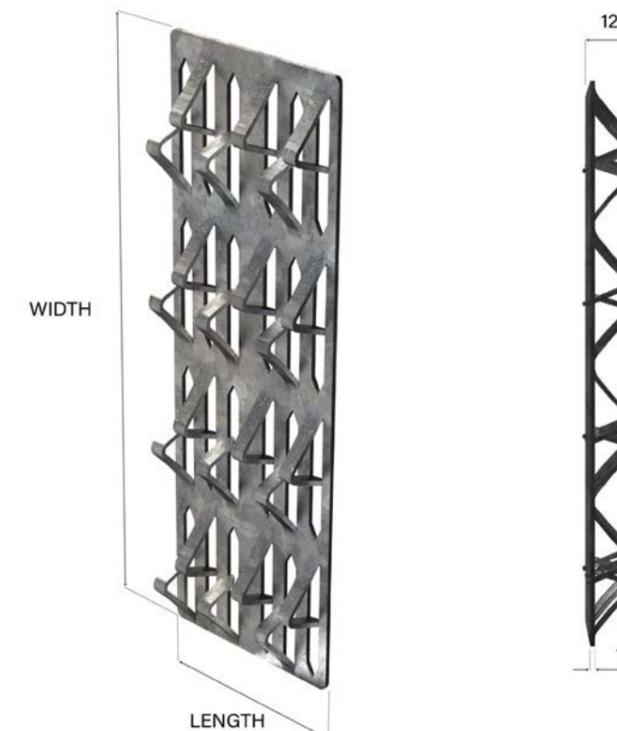
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.0mm
Width	32mm; 40mm; 48mm; 62mm; 72mm; 75mm; 90mm
Length	65mm; 98mm; 130mm; 163mm; 195mm; 260mm; 325mm



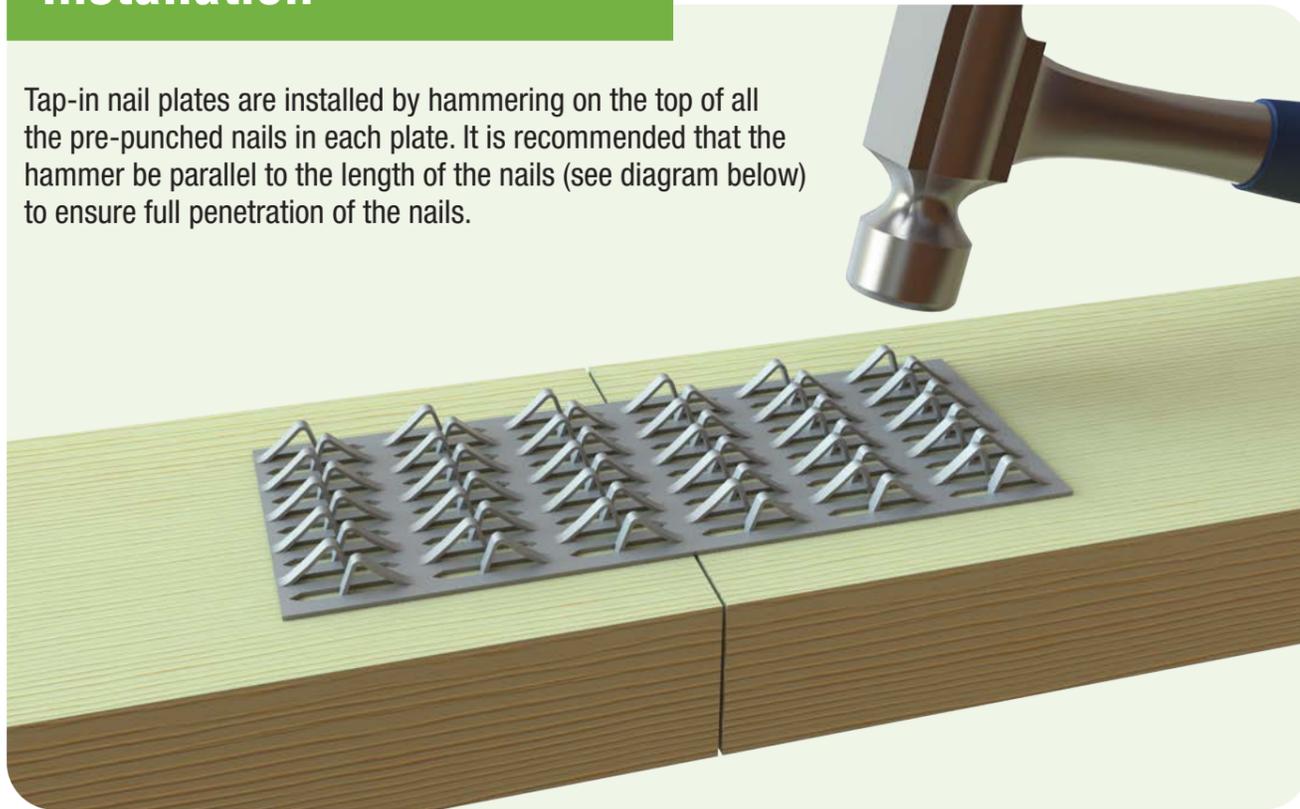
### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TTPG03213004	32mm x 130 x 1.0mm	Z275 – Galvanised	100
TTPG040130104	40mm x 130 x 1.0mm	Z275 – Galvanised	80
TTPG040195104	40mm x 195 x 1.0mm	Z275 – Galvanised	70
TTPG048130104	48mm x 130 x 1.0mm	Z275 – Galvanised	80
TTPG048195104	48mm x 195 x 1.0mm	Z275 – Galvanised	70
TTPG048260104	48mm x 260 x 1.0mm	Z275 – Galvanised	40
TTPG062130104	62mm x 130 x 1.0mm	Z275 – Galvanised	70
TTPG062195104	62mm x 195 x 1.0mm	Z275 – Galvanised	40
TTPG062260104	62mm x 260 x 1.0mm	Z275 – Galvanised	30
TTPG072098104	72mm x 98 x 1.0mm	Z275 – Galvanised	75
TTPG072163104	72mm x 163 x 1.0mm	Z275 – Galvanised	50
TTPG072325104	72mm x 325 x 1.0mm	Z275 – Galvanised	30
TTPG075065104	75mm x 65 x 1.0mm	Z275 – Galvanised	80
TTPG075130104	75mm x 130 x 1.0mm	Z275 – Galvanised	50
TTPG075195104	75mm x 195 x 1.0mm	Z275 – Galvanised	30
TTPG075260104	75mm x 260 x 1.0mm	Z275 – Galvanised	30
TTPG090130104	90mm x 130 x 1.0mm	Z275 – Galvanised	50
TTPG090195104	90mm x 195 x 1.0mm	Z275 – Galvanised	25
TTPG090260104	90mm x 260 x 1.0mm	Z275 – Galvanised	20
TTPG090325104	90mm x 325 x 1.0mm	Z275 – Galvanised	20



# Installation

Tap-in nail plates are installed by hammering on the top of all the pre-punched nails in each plate. It is recommended that the hammer be parallel to the length of the nails (see diagram below) to ensure full penetration of the nails.

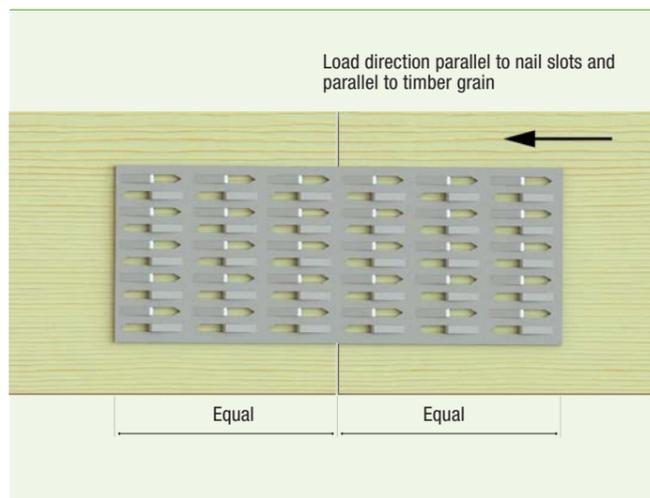


The nail plate design ensures that the pre-punched nails will skew as they penetrate the timber. This provides positive resistance to nail withdrawal.

To ensure the highest possible design capacity the nail plate should be installed in parallel. This is where the load is applied in parallel with the nail slots within the nail plate, as well as being in parallel with the timber grain.

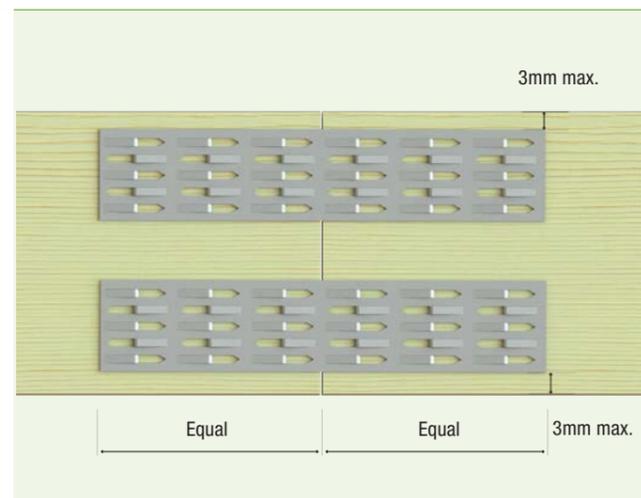
When considering timber design capacities, note that nails within 12mm of the ends and 6mm of the edge are regarded as ineffective. As the nail rows in the Bremick® Tap-In Nail plate are 32mm apart, all nails, fixed symmetrically over the joint are considered effective.

## Single Plate Butt Joining



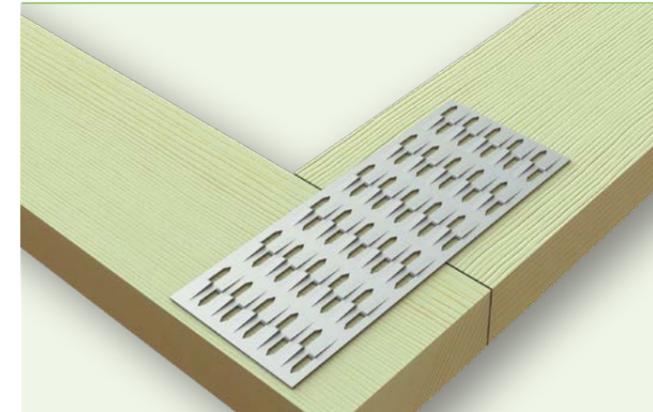
Bremick® Tap-In Nail plates are installed with an equal length on each side of the joint.

## Double Plate Butt Joining

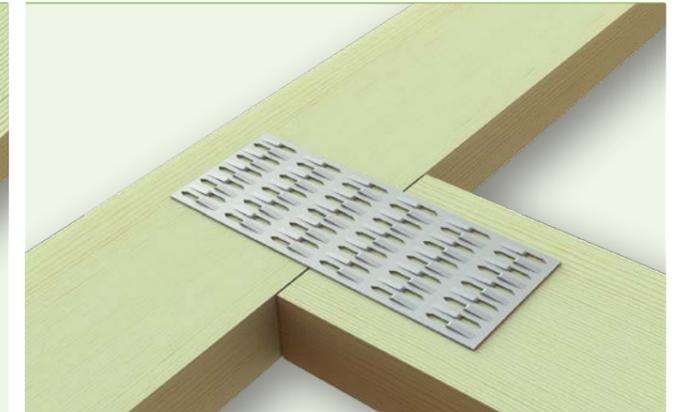


For timber up to 150mm wide, one nail plate is fixed onto each face. For wider timber, two plates are used, fixed at 3mm maximum from each edge.

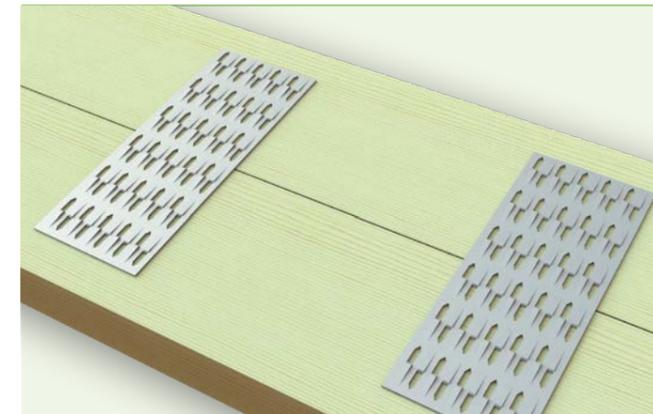
Right angled L-Junction



Right angled T-Junction



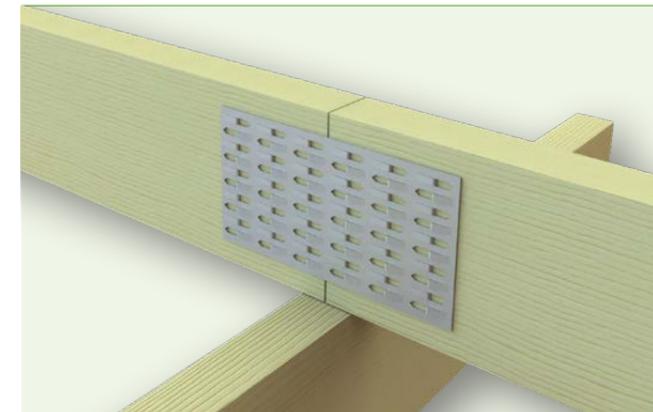
Vertically laminated members



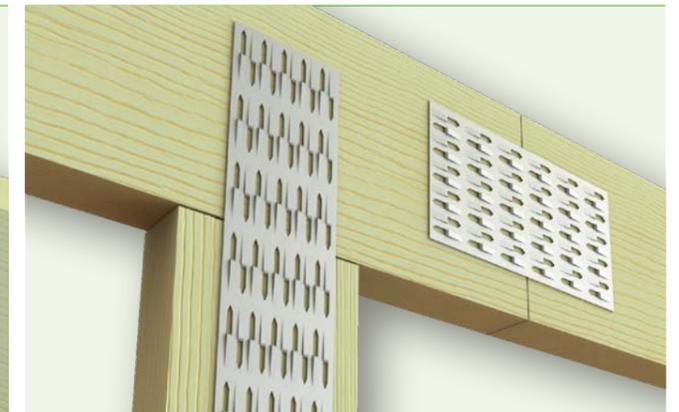
Joining Top Plates



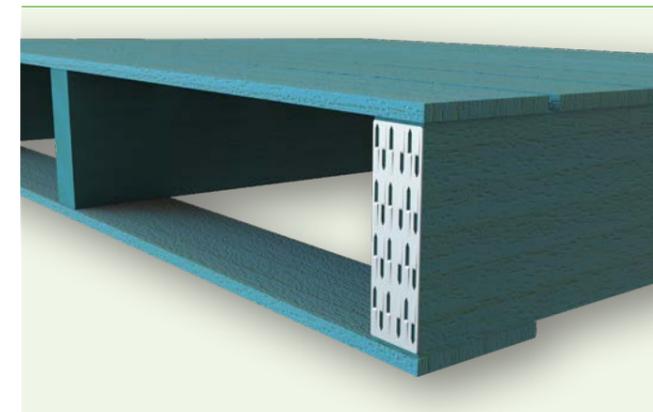
Purlin, Joist Splice or Truss Splice



End Jointing or Truss Joints



Pallet Fixing



Note: These connectors should not be used to connect a beam within the span without a special engineering design.

# Nail-On Plate

## GALVANISED & SS316



### Application

The Bremick® Nail-On Plates are nail-fixed to timber to form numerous medium to high-capacity timber jointing applications. They are ideally suited for on-site applications. Typical tasks include:

- Butt jointing timber
- Joining timber side by side
- Joining wall frames at the top plate
- Repair work over existing connections
- Joining oversized prefabricated timber trusses on site, that have been made in modules
- In lieu of a Tap-In Nail plate where the required capacities cannot be achieved
- Formwork construction

### Advantages

The Bremick® Tap-In Plate provides numerous benefits including:

- **Large Design Capacities:** Where the connection demands a medium to large design capacity, the nail-on plate is the ideal solution
- **Perfect for Onsite Repairs:** Product design ensures the nail-on plate can be easily applied onsite with Bremick® Timber Connector nails or Bremick® timber fixing screws while achieving the required design capacities
- **Nail or Screw Fixing Option:** Can be fastened with either the Bremick® Timber Connector nail or Bremick® timber fixing screw. When using screws, at least half the number, compared to nails is required.
- **Z275 – Galvanised or Stainless Steel:** Available in 2 coating options. Stainless steel is suitable when building outdoor structures such as pergolas and decks

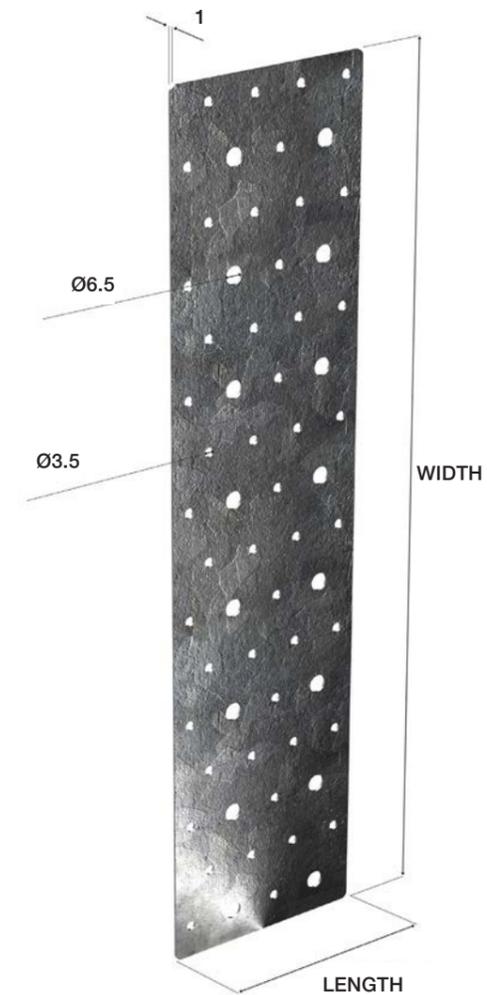
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised & SS316
Thickness	1.0mm
Width	75mm, 80mm, 100mm
Length	120mm, 125mm, 180mm, 190mm, 240mm, 250mm, 300mm, 320mm, 380mm



### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TNPG075125104	75mm x 125mm x 1.0mm	Z275 – Galvanised	60
TNPG075190104	75mm x 190mm x 1.0mm	Z275 – Galvanised	40
TNPG075250104	75mm x 250mm x 1.0mm	Z275 – Galvanised	30
TNPG075320104	75mm x 320mm x 1.0mm	Z275 – Galvanised	25
TNPG075380104	75mm x 380mm x 1.0mm	Z275 – Galvanised	20
TNPG100190104	100mm x 190mm x 1.0mm	Z275 – Galvanised	30
TNP6080120104	80mm x 120mm x 1.0mm	SS316	10
TNP6080180104	80mm x 180mm x 1.0mm	SS316	10
TNP6080240104	80mm x 240mm x 1.0mm	SS316	10
TNP6080300104	80mm x 300mm x 1.0mm	SS316	10



# Installation Instructions

**1**

Locate the Bremick® Tap-In Nail-On Plate into position. For butt joining, ensure an equal length on both sides of the joint.

**2**

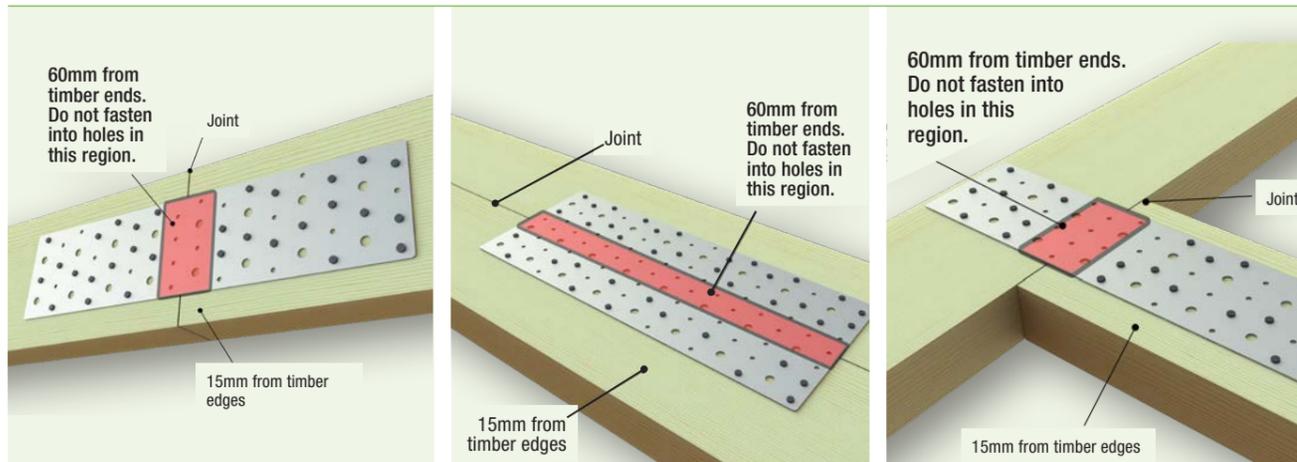
Fasten the Nail-On Plate with either Bremick® Timber Connector nails or Bremick® timber fixing screws. Note, stainless steel fasteners must be used when fixing the stainless steel nail-on plate.

**3**

Fasteners must fill all holes of the Nail-On Plate to achieve the design capacities.

**4**

Do not fasten into the holes within 60mm of the timber ends and 15mm of the timber edges as there is a risk of splitting the timber.



# Technical Data

## NAIL-ON PLATE

### LIMIT STATE TENSILE CAPACITY (1.2G+1.5Q<sub>R</sub>) TENSION CAPACITY FOR PLATE LENGTH

**Table 1** CAPACITY: FOR 3.15mm DIAMETER NAILS IN ALL HOLES MORE THAN 50MM FROM THE JOINT

PLATE WIDTH (MM)	MINIMUM TIMBER WIDTH (MM)	DESIGN CAPACITY $\phi$ NJ (KN) FOR A PAIR OF PLATES IN JD4 TIMBER - CATEGORY 1											
		PLATE LENGTH (mm)										Steel Capacities	
		120	125	180	190	240	250	300	320	380	Max Tension	Max Shear	
75	90	NS		5.1		12.7		20.3		24.9		26.8	16.7
80 *	100	NS		5.1		12.7		17.8				29.5	12.5
100	120			5.1								39.8	24.8

**Table 2** CAPACITY: FOR 12g SCREWS USED IN ALL HOLES MORE THAN 50MM FROM THE JOINT

PLATE WIDTH (MM)	MINIMUM TIMBER WIDTH (MM)	DESIGN CAPACITY $\phi$ NJ (KN) FOR A PAIR OF PLATES IN JD4 TIMBER - CATEGORY 1											
		PLATE LENGTH (mm)										Steel Capacities	
		120	125	180	190	240	250	300	320	380	Max Tension	Max Shear	
75	90	NS		5.5		5.5		11.0		16.5		26.8	16.7
80 *	100	NS		5.5		5.5		11.0				29.5	12.5
100	120			5.5								39.8	24.8

### REMARKS

- \* Stainless products.
- Plates are placed central on the joint. All nail or screw holes 50mm or more from the joint are filled
- These design capacities apply directly for Category 1 joints as described in Table 2.2 of AS1720.1:2010. For Category 2 and Category 3 joints, multiply these capacities by 0.94 and 0.88 respectively.
- The design capacities tabulated above apply directly to joints on JD4 timber for 1.2G+1.5QR load case using  $k_1 = 0.77$ . For other load cases and timber joint groups, multiply these capacities by the load factors given below. The resultant capacity must not exceed the maximum Steel Tension and Steel Shear values tabulated above.
- The use of this product may be limited by splitting of the timber. The user should ensure that the load, fastener spacing, and timber are compatible.

	Load factor			
Load Case	1.35G	1.2G+1.5QF	1.2G+1.5QR	1.2G+WD or 0.9G - Wu
Factor	0.74	0.9	1	1.48

	Nails - Multiplier for timber joint groups											
Joint Group	J6	J5	J4	J3	J2	J1	JD6	JD5	JD4	JD3	JD2	JD1
Multiplier	0.40	0.55	0.71	1.00	1.40	1.78	0.62	0.84	1.00	1.40	1.78	2.37

	Load factor											
Joint Group	J6	J5	J4	J3	J2	J1	JD6	JD5	JD4	JD3	JD2	JD1
Multiplier	0.33	0.52	0.71	1.00	1.41	1.79	0.52	0.71	1.00	1.41	1.79	2.37

# Mini Nail GALVANISED

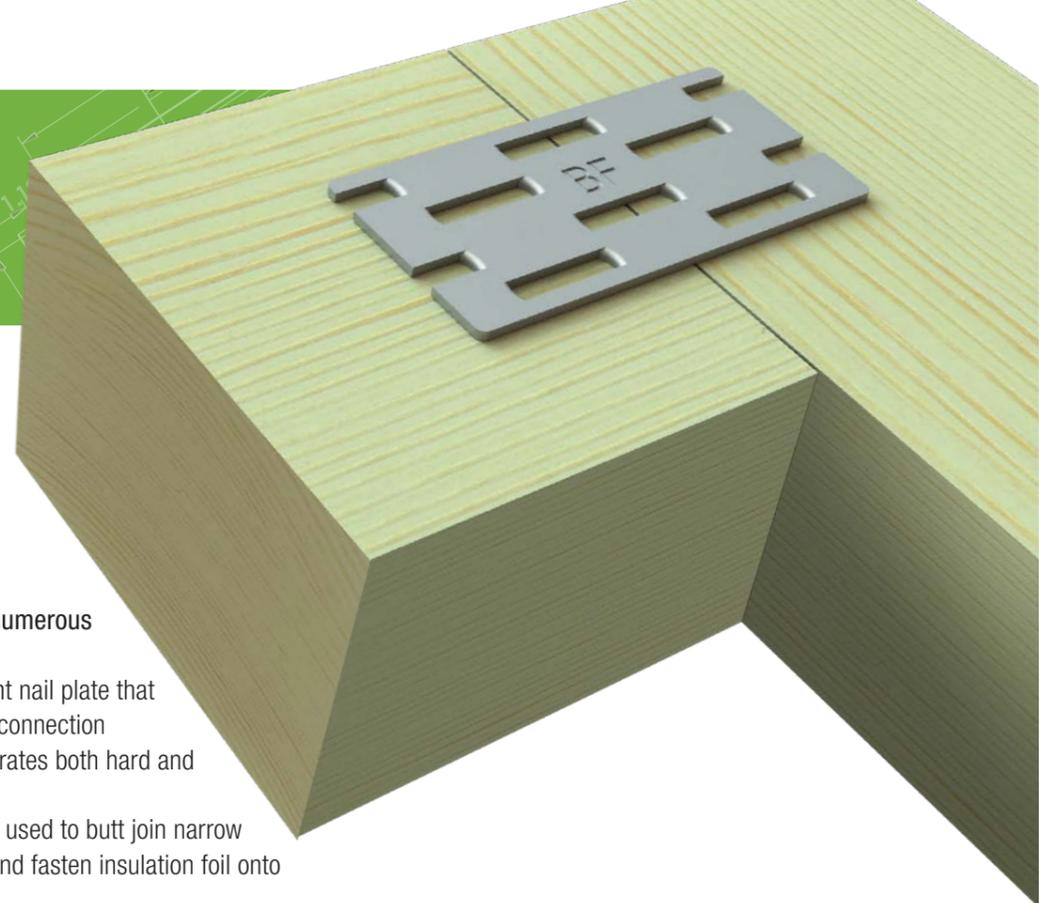
## Application

The Bremick® Mini Nails are a small nail plate with pre-punched teeth that are used for minor timber connections.

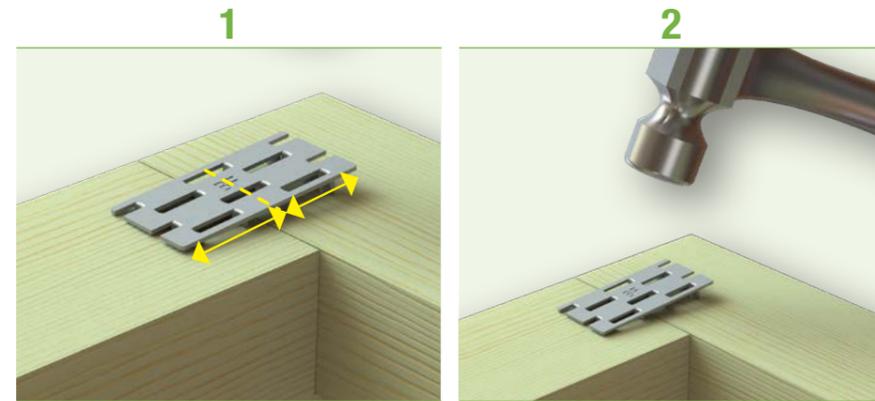
## Advantages

The Bremick® Mini Nail provides numerous benefits including:

- **Pre-Punched Nails:** Convenient nail plate that is easily fixed to form a timber connection
- **Sharp Nail Tooth:** Easily penetrates both hard and softwoods.
- **Multiple Applications:** Can be used to butt join narrow timber, furniture manufacture and fasten insulation foil onto timber frame.



## Installation Instructions



1  
Locate the Bremick® Mini Nail into position. For butt joining, ensure an equal length on both sides of the joint.

2  
Install the Mini Nail by hammering on the top of the nail plate and ensure the plate is flush against the timber.

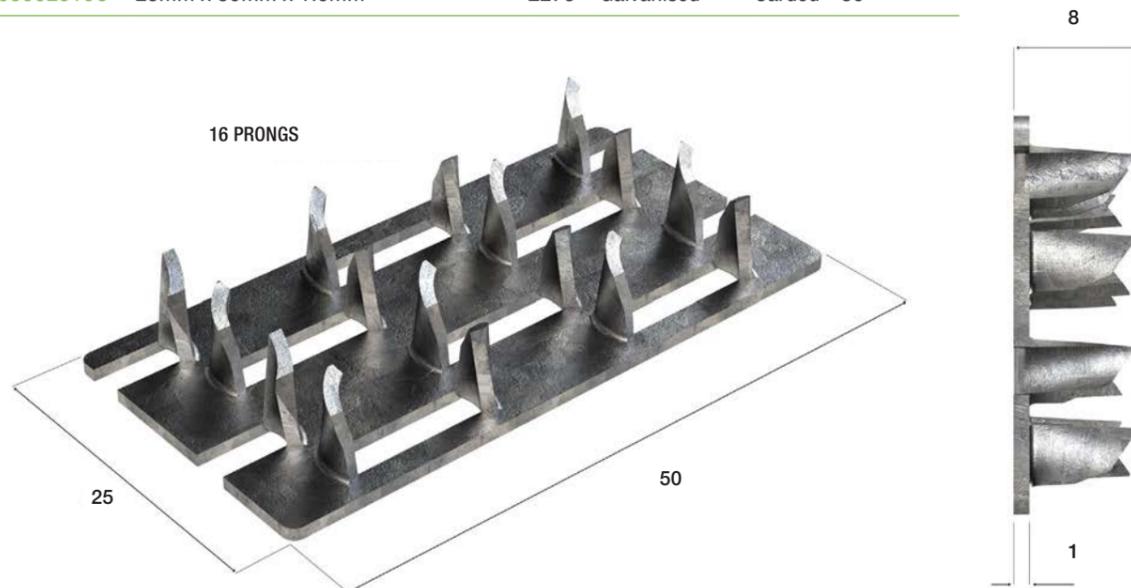
## Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.0mm
Width	25mm
Length	50mm



## Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TMNG05002510C	25mm x 50mm x 1.0mm	Z275 – Galvanised	Carded - 30



# Strap Nail GALVANISED

## Application

The Bremick® Strap Nails are a nail plate with pre-punched nails that are used in connecting timber wall frame units.

## Advantages

The Bremick® Strap Nail provides numerous benefits including:

- **Quick & Easy Wall Frame Construction:** Used to quickly join constructed wall frame units together
- **Prevents Timber Splitting:** The product design spaces the pre-punched nails towards the end of the nail plate, this prevents the timber being split when connecting wall frame units
- **Pre-Punched Nails:** The twisted pre-punched nail design ensures that it easily fixed to form a timber connection that resists nail withdrawal
- **Sharp Nail Tooth:** Easily penetrates both hard and softwoods

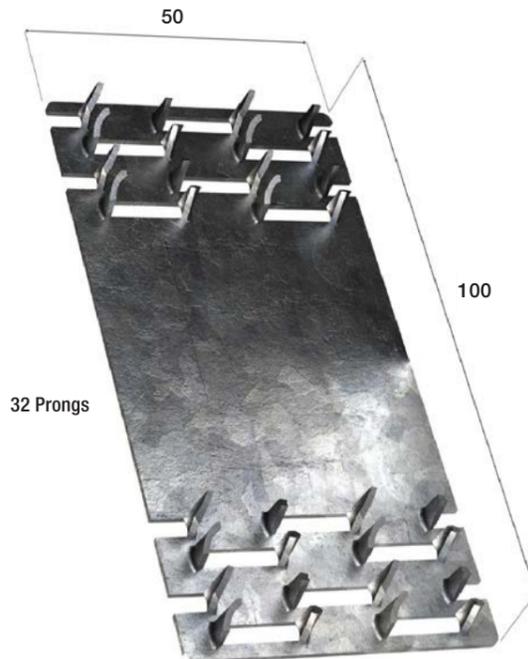
## Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.0mm
Width	50mm
Length	100mm

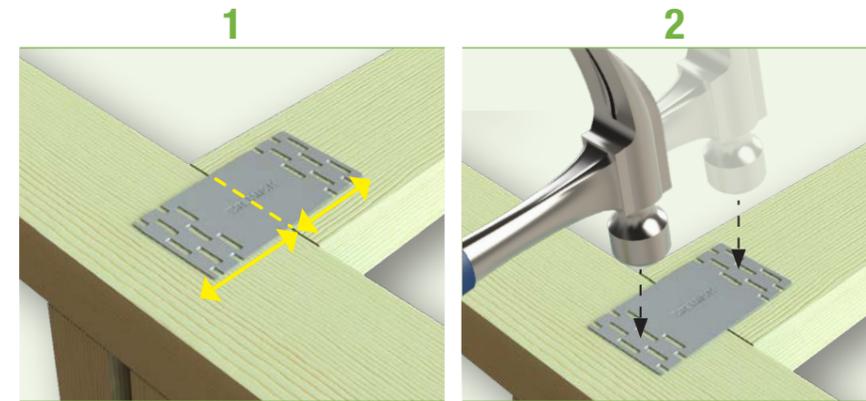


## Bremick® Ranging

Product Code	Dimensions
TSNG050100104	50mm x 100mm x 1.0mm
Coating	Pack Qty
Z275 – Galvanised	75



# Installation Instructions



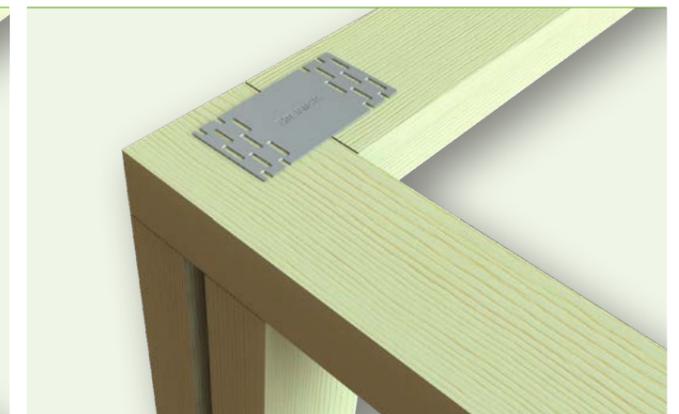
1 Locate the Bremick® Strap Nail into position. For butt joining, ensure an equal length on both sides of the joint.

2 Install the Strap Nail by hammering on the top of the nail plate, focusing on the pre-punched nails, and ensure the plate is flush against the timber.

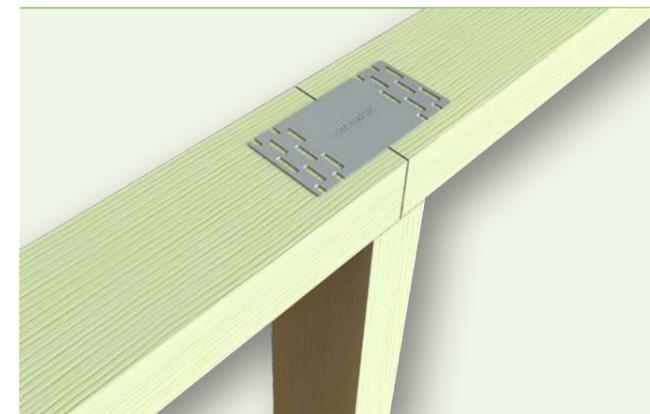
Intersection of Top Plates



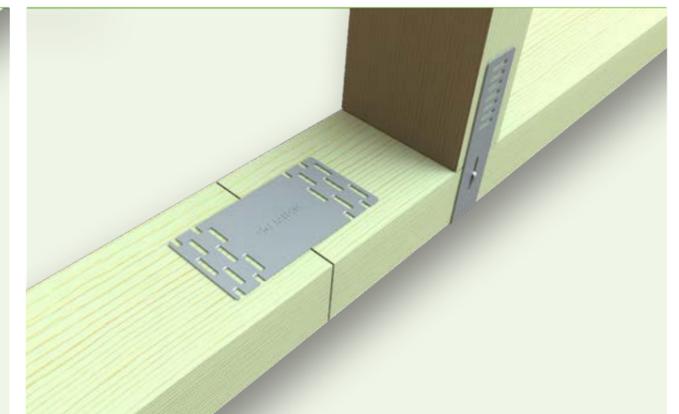
Top Plate Corner Connection



Top Plate Butt Joint



Bottom Plate Butt Joint



# Corner Plate

## GALVANISED



### Application

The Bremick® Corner Plate is specifically designed for connecting timber in framing corner applications including wall frames, tops of pergola beams, furniture, and gate frame construction, plus a wide range of other uses. The Corner Plate is suitable for use as either left or right hand and either the vertical or horizontal position.

### Advantages

Bremick® Corner Plate provides numerous benefits including:

- 1.6mm thickness and a 90° bend facilitates multiple timber corner connections
- Suitable for use as either left or right hand and either the vertical or horizontal position
- Pre-drilled holes to enable easy fastening using nails or screws

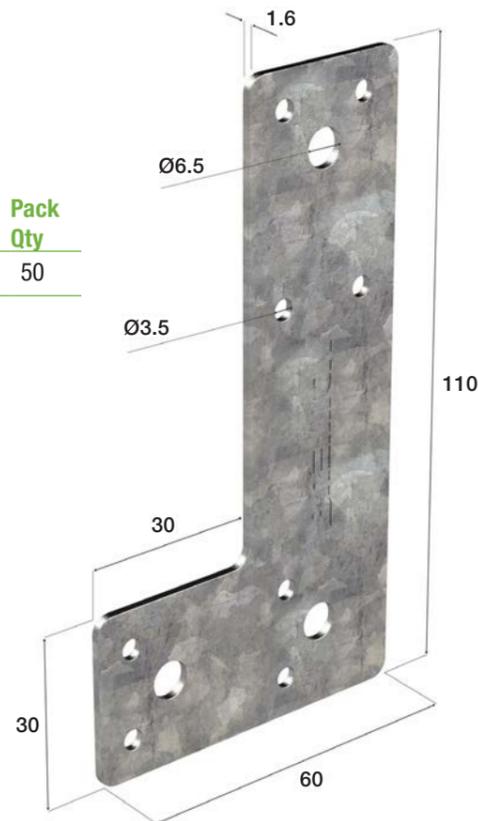
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.6mm
Width	30mm
Length A	110mm
Length B	60mm
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails



### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TCOG110060164	110mm x 60mm x 30mm x 1.6mm	Z275 – Galvanised	50



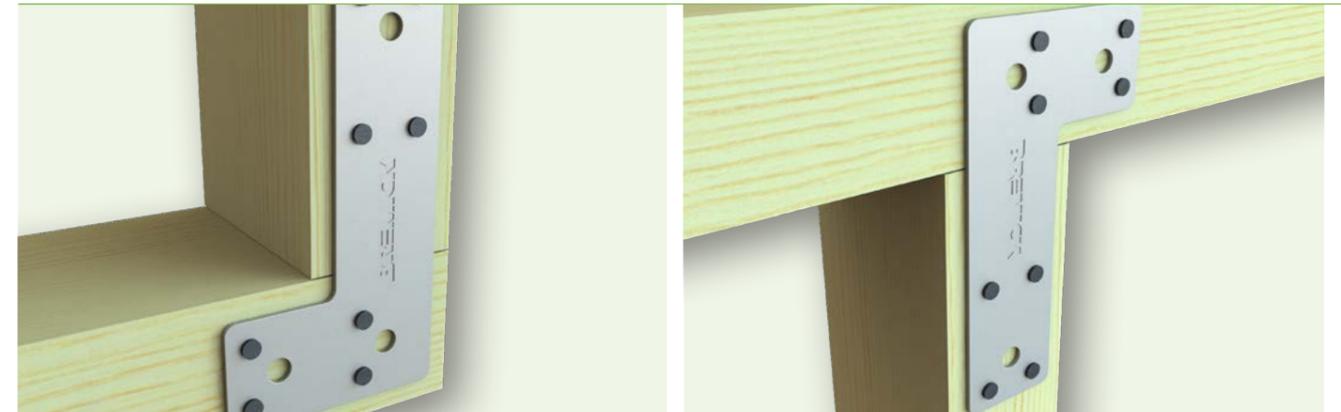
## Installation Instructions

1

Fasten the first angle of the Bremick® Corner Plate to the first timber member in the desired location, by hammering Bremick® Timber Connector Nails through the 4 available pre-drilled holes.

2

Once the bracket is secured into the first timber member, repeat the above step into the second timber member.



# Technical Data

## CORNER PLATE

TCOG110060164

### LIMIT STATE CORNER SINGLE PLATE CAPACITY LOAD DIRECTION A

**Table 1** DEAD + LIVE LOAD (ROOF SYSTEMS) CAPACITY: 4 - 3.15mm DIAMETER NAILS USED ON CRITICAL FACE

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	0.7	1.0	1.2	1.6	2.1	2.7

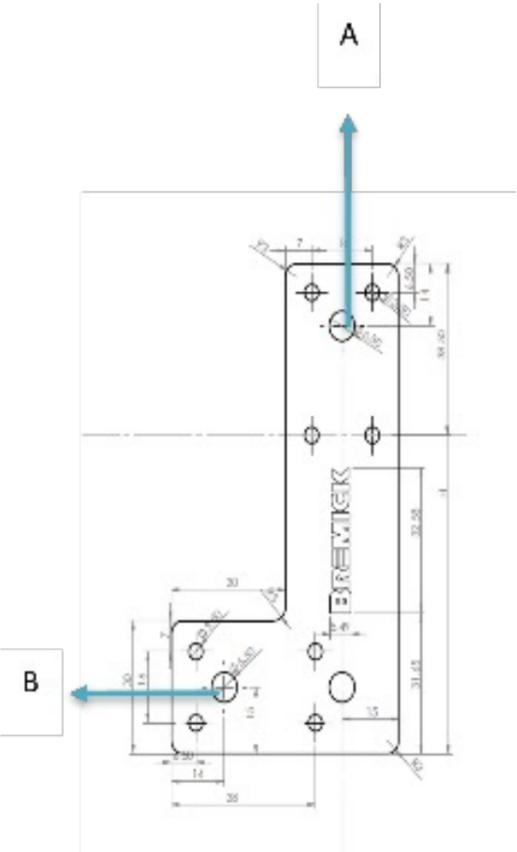
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	0.5	0.6	0.8	1.2	1.6	2.1

### REMARKS

- These design capacities apply directly for Category 1 joints as described in Table 2.2 of AS1720.1:2010. For Category 2 and Category 3 joints, multiply these capacities by 0.94 and 0.88 respectively.
- The design capacities tabulated above apply directly for 1.2G+1.5QR load case using  $k_1 = 0.77$ . For other load cases, multiply these capacities by the load factors given below.

	Load factor			
Load Case	1.35G	1.2G+1.5QF	1.2G+1.5QR	1.2G+WD or 0.9G - Wu
Factor	0.74	0.9	1	1.48

For Loads in Direction B, multiply capacity by a factor 0.6 (60%).



# Connectors & Tie Downs

Bremick Connectors & Tiedowns are designed and manufactured in accordance with AS1684 and have several unique features that deliver enhanced performance and ease of installation.

Cyclone Strap	64
Hitch (Internal Wall Bracket)	68
Hold Down Bracket	70
Joist Strap	74
Mini Grip	77
Multi Grip	80
Triple Grip	84
Truss Tie	88
Unitie	90
Easy-Fix Stud Tie	96
Stud Tie- Single Sided	98
Stud Tie- Double Sided	102

# Cyclone Strap GALVANISED

## Application

The Bremick® Cyclone Straps are designed for tying down roof purlins to trusses and roof trusses to wall frames in high wind zones. The straps can be applied by tying down the truss to the face of a large beam/lintel or wrapping underneath the top plate.

## Advantages

The Bremick® Cyclone Strap provides numerous benefits including:

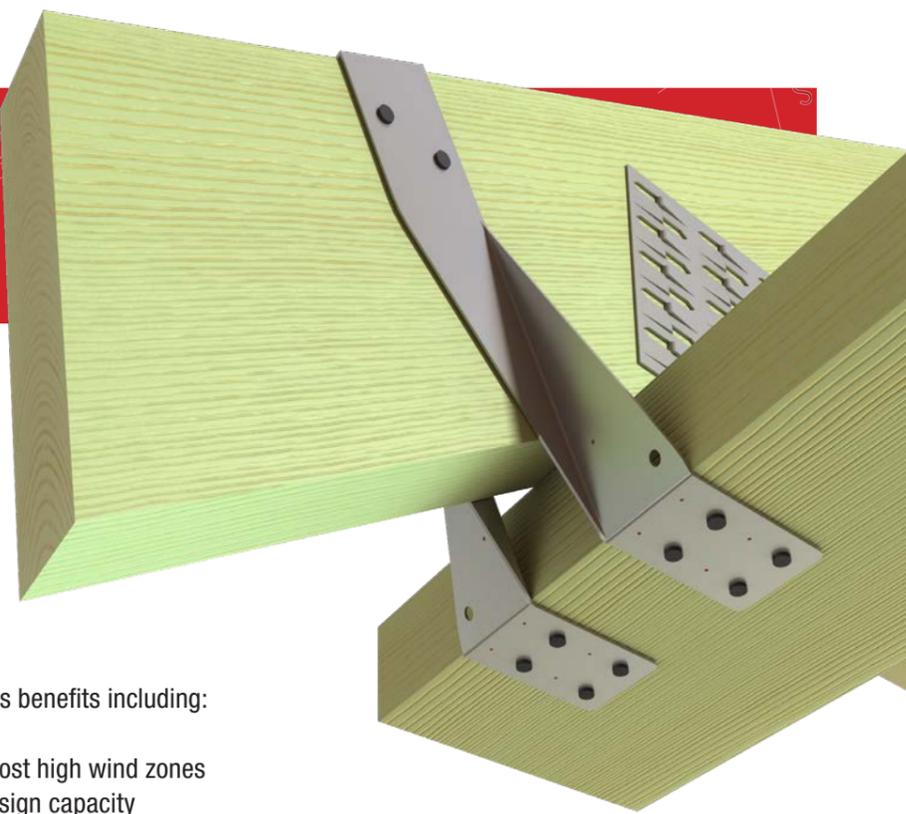
- Quick and easy to install
- Provides sufficient tie down capacity for most high wind zones
- Can be doubled up to achieve twice the design capacity
- When the strap is wrapped under the timber top plate and fastened with at least nails the capacity increases significantly
- Available in 3 lengths to suit most applications
- Unpunched product available to suit when strap is being installed with machine driven nails

## Specifications

Steel Grade	G300	
Coating	Z275 – Galvanised	
Thickness	1.0mm, 1.2mm	
Width	32mm	
Length	400mm, 600mm & 900mm	
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails 32 x 2.5mm Screw Shank Machine Fastened Nails Bremick® Type 17, 12g x 35mm Screws	

## Bremick® Ranging

Product Code	Dimensions	Un/Punched	Coating	Pack Qty
TCPG400032104	1.0mm x 32mm x 400mm	Punched	Z275 – Galvanised	50
TCPG600032104	1.0mm x 32mm x 600mm	Punched	Z275 – Galvanised	50
TCUG600032104	1.0mm x 32mm x 600mm	Unpunched	Z275 – Galvanised	50
TCPG900032104	1.0mm x 32mm x 900mm	Punched	Z275 – Galvanised	25
TCPG900032124	1.2mm x 32mm x 900mm	Punched	Z275 – Galvanised	25



# Installation Instructions – To the rafter or truss overhang

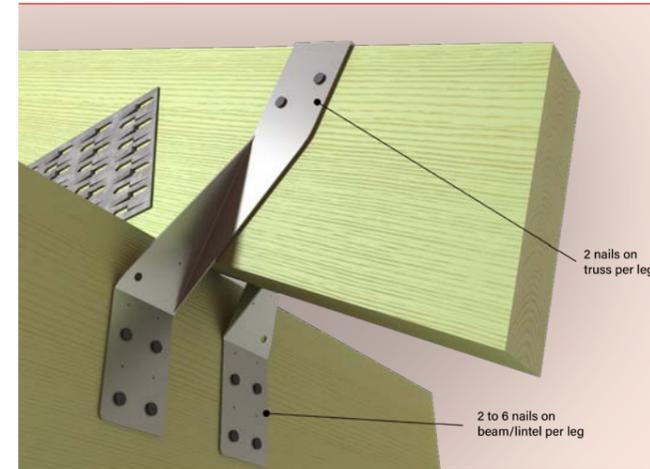
**1**

Place the Bremick® Cyclone Strap across the top of the timber truss and fasten 2 x Bremick® Timber Connector nails or 32mm x 2.5mm hardened screw shank machine driven nails through the strap and into the timber truss, as indicated below

**2**

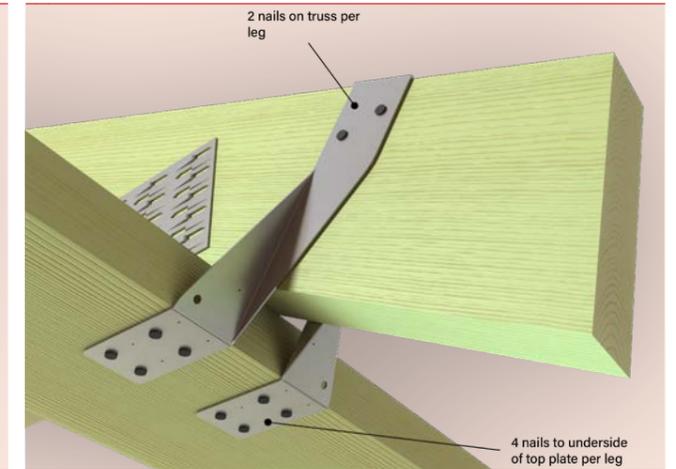
Use a hammer to bend the Bremick® Cyclone Strap over the edges and down the sides of the top member.

## Face fixed

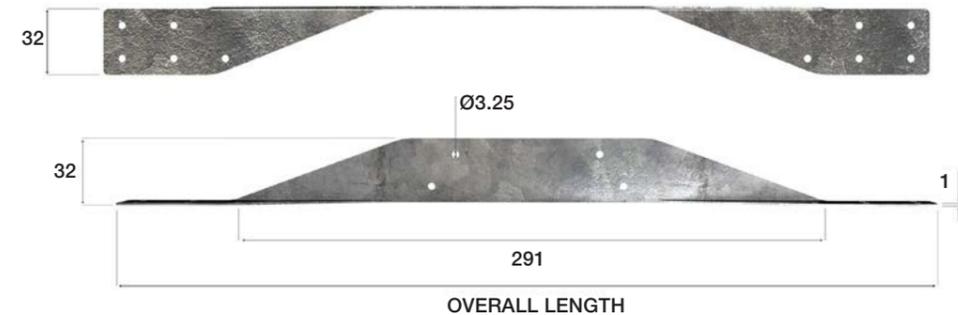


Fasten each leg of the Cyclone Tie to the face of the supporting member with 6 x Bremick® Timber Connector nails (or 8 x machine driven nails) to achieve the capacity.

## Wrapped under top plate



Use a hammer to fold the excess of each tie leg under the supporting member and secure each leg with 4 x Bremick® Timber Connector nails (or 5 x machine driven nails) to the underside.



# Technical Data

## CYCLONE STRAP

TCPG400032104

### LIMIT STATE WIND LOAD UPLIFT CAPACITY – FACE FIXED

**Table 1** CAPACITY: FOR 3-35 x 3.15mm DIAMETER NAILS USED @ EACH END OF 400 LENGTH STRAP - VERTICAL

NAILS PER LEG	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
3	3.5	4.7	5.7	7.9	10.1	11.4
NAILS PER LEG	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
3	2.3	3.1	4.0	5.7	7.9	10.1

**Table 2** CAPACITY: FOR 3-35 x 3.15mm DIAMETER NAILS USED @ EACH END OF 400 WIDTH STRAP – 20 DEGREES TO VERTICAL

NAILS PER LEG	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
3	0.8	1.1	1.6	2.6	4.1	5.7
NAILS PER LEG	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
3	1.4	1.8	2.3	2.6	3.1	3.9

# Technical Data

## CYCLONE STRAP

TCPG600032104 • TCUG600032104 • TCG900032104 • TCG900032124

### LIMIT STATE WIND LOAD UPLIFT CAPACITY – FACE FIXED

**Table 3** CAPACITY: FOR 3-35 x 3.15mm DIAMETER NAILS USED @ EACH END OF 600 & 900 LENGTH STRAP - VERTICAL

NAILS PER LEG	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
3	3.5	4.7	5.7	7.9	10.1	11.4
4	4.7	6.3	7.5	10.6	12.9 *	12.9 *
5	5.5	7.4	8.9	12.4	12.9 *	12.9 *
6	6.5	8.8	10.5	12.9 *	12.9 *	12.9 *
7	7.5	10.2	12.2	12.9 *	12.9 *	12.9 *
8	8.5	11.6	12.9 *	12.9 *	12.9 *	12.9 *
9	9.5	12.9 *	12.9 *	12.9 *	12.9 *	12.9 *
NAILS PER LEG	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
3	2.3	3.1	4.0	5.7	7.9	10.1
4	3.0	4.1	5.3	7.5	10.6	12.9 *
5	3.4	4.7	6.0	8.5	11.9	12.9 *
6	4.0	5.5	7.1	9.9	12.9 *	12.9 *
7	4.6	6.2	8.1	11.3	12.9 *	12.9 *
8	5.1	7.0	9.0	12.7	12.9 *	12.9 *
9	5.6	7.6	9.9	12.9 *	12.9 *	12.9 *

**Table 4** CAPACITY: FOR 3-35 x 3.15mm DIAMETER NAILS USED @ EACH END OF 600 & 900 WIDTH STRAP – 20 DEGREES TO VERTICAL

NAILS PER LEG	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
3 TO 9	0.8	1.1	1.6	2.6	4.1	5.7
NAILS PER LEG	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
3 TO 9	1.4	1.8	2.3	2.6	3.1	3.9

### 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.
- Nails must be spaced as per minimum requirements of AS1720.1.
- Wrapped Under subject to full testing regime.

# Hitch (Internal Wall Bracket) GALVANISED

## Application

The Bremick® Internal Wall Brackets are used to stabilise internal, non-load bearing walls from bottom chords of trusses.

## Advantages

The Bremick® Internal Wall Bracket provides numerous benefits including:

- Has built in slots that allow for vertical movement:
  - in the truss over time without transferring the load to the wall, which has not been designed to carry the load
  - of the wall frame due to foundation settlements without inducing forces on the truss.
- The coined product design provides added strength.
- Extra slots are provided to accommodate additional nailing, if required.

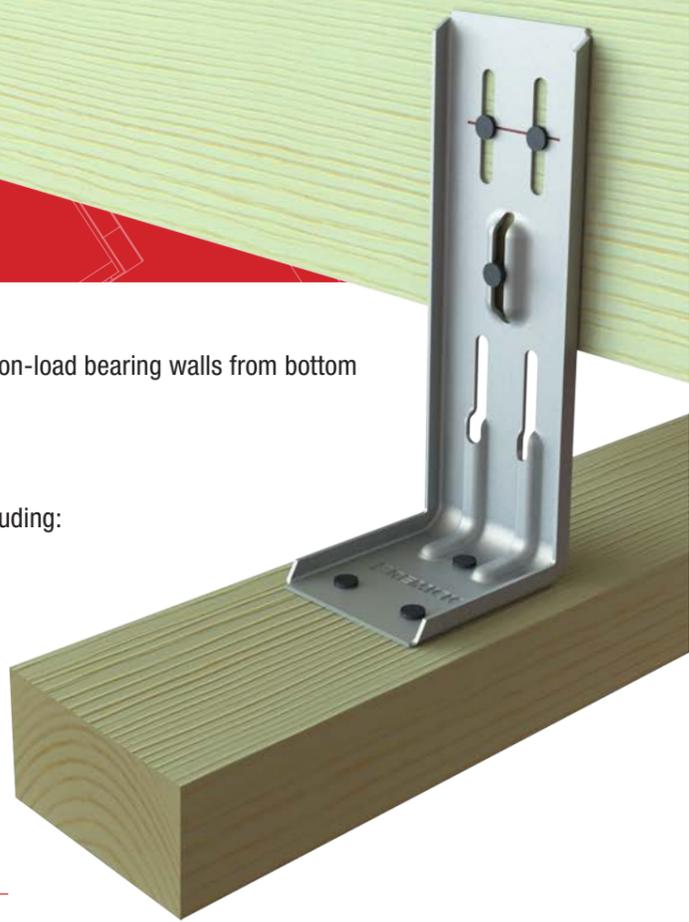
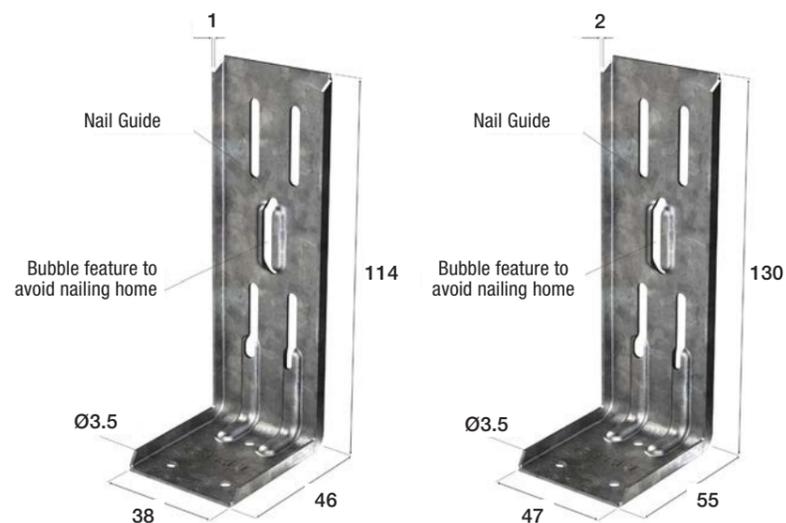
## Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.0mm, 2.0mm
Width	38mm, 47mm
Length A	114mm, 130mm
Length B	46mm, 55mm
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails



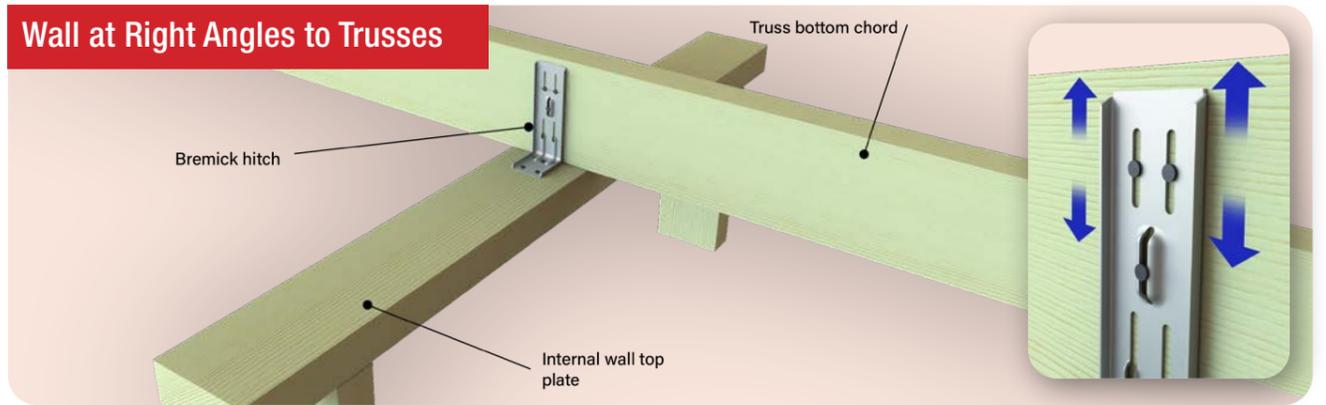
## Bremick® Ranging

Product Code	Dimensions	Coined/Plain	Coating	Pack Qty
THIG114046104	38mm x 114mm x 46mm x 1.0mm	Coined	Z275 – Galvanised	50
THHG130055204	47mm x 130mm x 55mm x 2.0mm	Coined	Z275 – Galvanised	50



# Installation Instructions

## Wall at Right Angles to Trusses



**1**

Place the Bremick® Internal Wall Bracket alongside the truss bottom chord.

**2**

Fasten the bracket to the top plate of the non-load bearing wall frame, using Bremick® Timber Connector Nails. Locate the nails through all the pre-punched nail holes. Fix 3 nails in the base of the bracket.

**3**

Fix the Bremick® Timber Connector Nails through the top of the slots and into the truss bottom chord. Ensure not to drive the nails fully home, as this will allow vertical movement of the truss. The nail should sit proud of the slots. 2 nails should be fastened into separate slots.

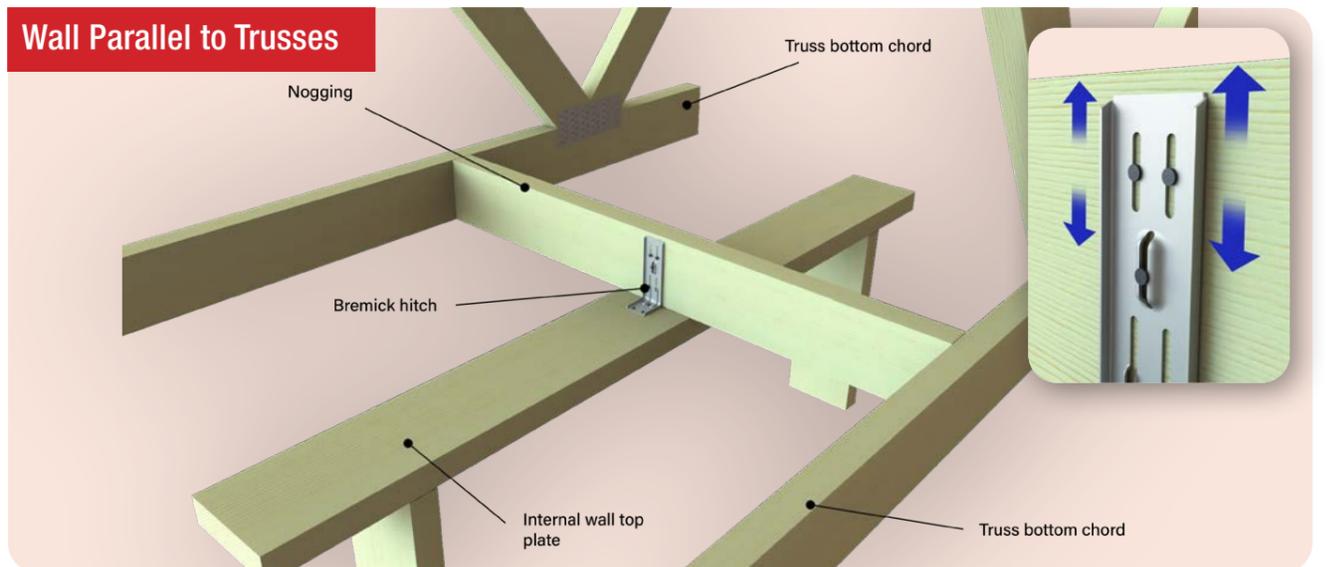
**4**

For truss cambers not exceeding 10mm the nail should be located midway into the slot. For larger truss cambers the nail should be located near the top of the slot.

**5**

Fix the Bremick® Internal Wall Bracket at every second truss or 1800mm intervals.

## Wall Parallel to Trusses



### Notes:

- Do not drive nails in all the way to allow vertical movement.

# Hold Down Bracket GALVANISED

## Application

The Bremick® Hold Down Bracket's L-shaped design allows it to be used in numerous timber connector applications. It is specifically designed to enable tie-down applications.

- (i) Tying down a roof truss to the top plate of a wall frame in high wind conditions.
- (ii) Tying down the bottom plate of a wall frame to the slab in high wind conditions.

## Advantages

The Bremick® Hold Down Bracket provides numerous benefits including:

- 2.0mm thickness and a 90° bend facilitates multiple right angle timber connections
- Bracket dimensions ensure it does not sit above the timber truss top chord when used as a tie-down
- Pre-drilled holes to enable easy fastening using nails, screws, M12 threaded rod or Anchor Screw

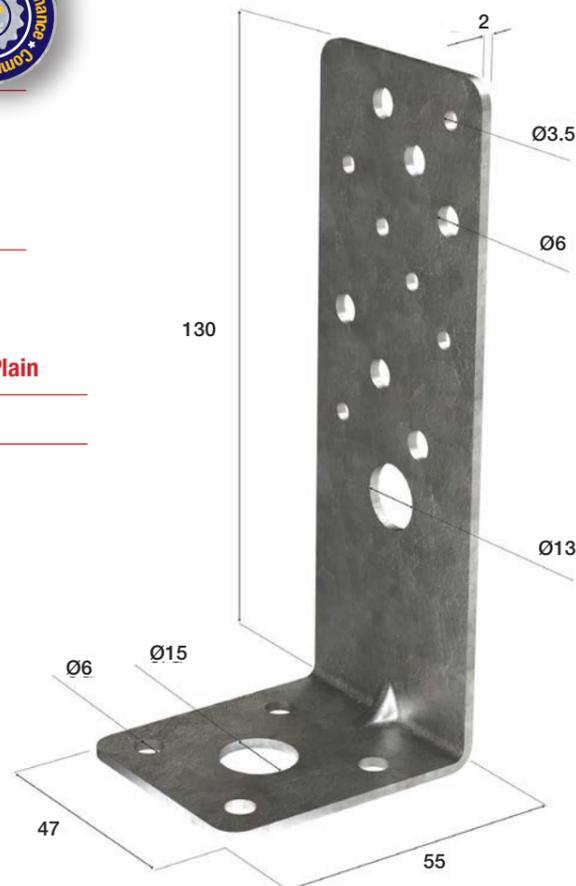
## Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	2.0mm
Width	47mm
Length A	130mm
Length B	55mm
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails Bremick® Type 17, 12g x 35mm/65mm Screws, M12 Tie Down Rod Square Washer, 40 x 40 x 5.0mm Anchor Screw, M12 x 150mm



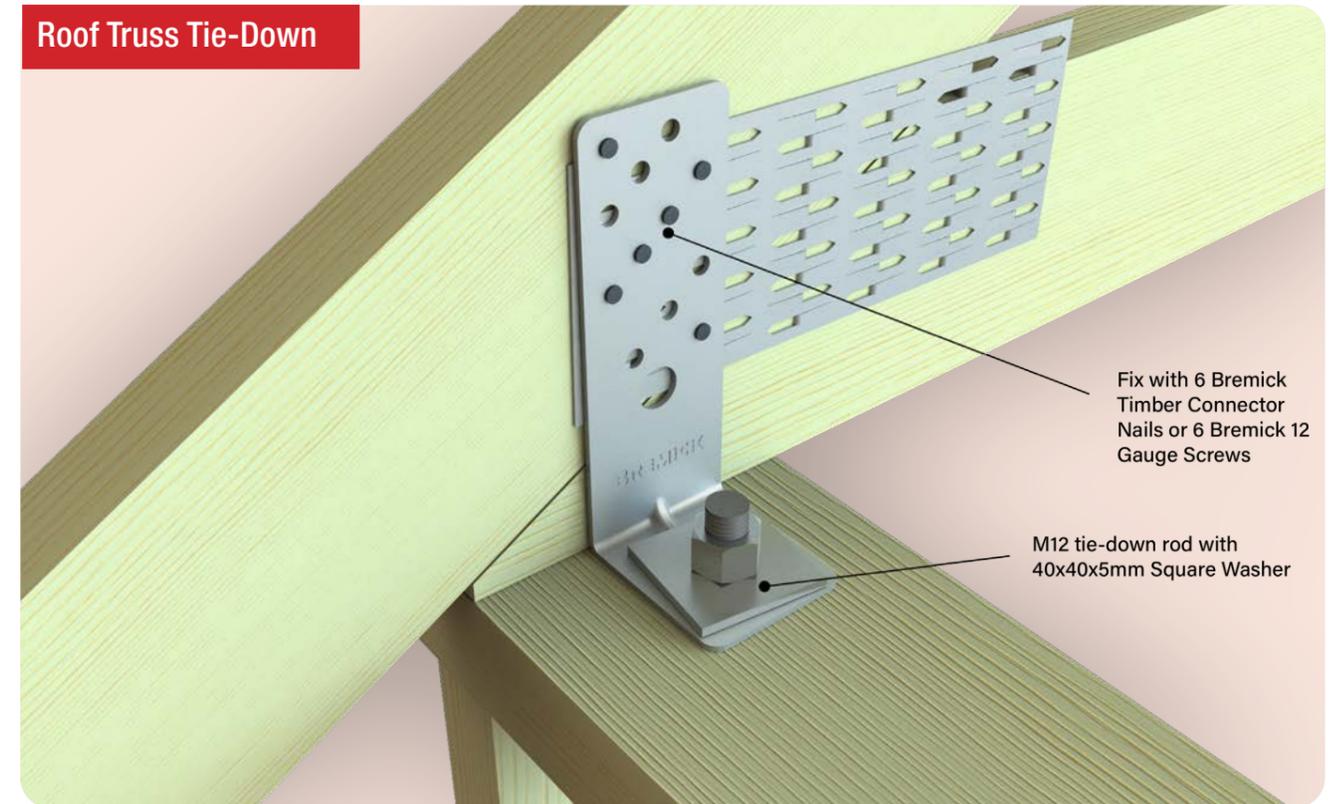
## Bremick® Ranging

Product Code	Dimensions	Coined/Plain
THDG130055204	130mm x 55mm x 47mm x 2.0mm	Plain
Coating	Pack Qty	
Z275 – Galvanised	50	



# Installation Instructions

## Roof Truss Tie-Down



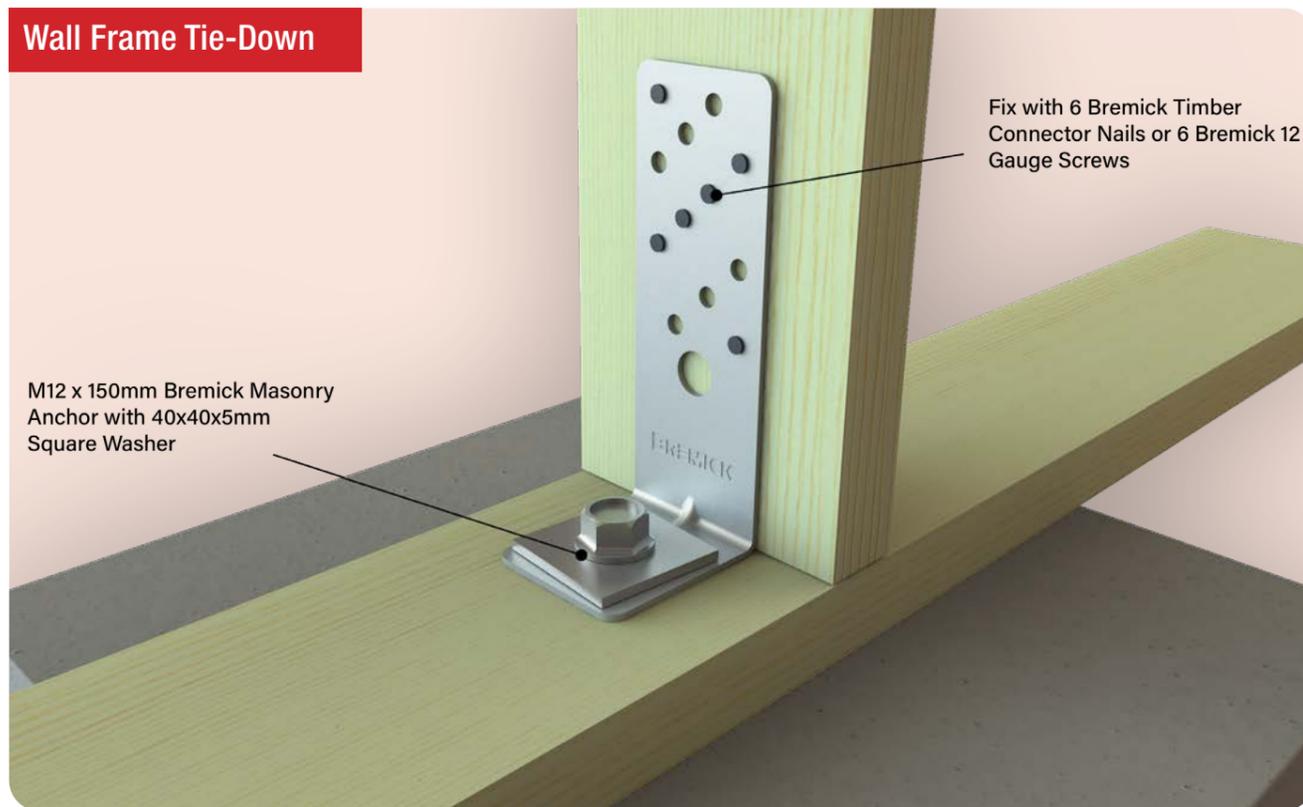
Fix with 6 Bremick Timber Connector Nails or 6 Bremick 12 Gauge Screws

M12 tie-down rod with 40x40x5mm Square Washer

- 1** Prior to fixing the Bremick® Hold Down bracket, install the tie-down rod into the wall frame. Take into consideration that the rod will need to feed through the pre-drilled hole of the bracket.
- 2** Locate the Bremick® Hold Down bracket, so the longest flange sits flush against the timber truss face and the shortest flange runs along the top plate of the wall frame and is centrally located.
- 3**
  - Ensure that the central hole in the bottom flange fits over the tie-down rod.
  - Locate 40 x 40 x 5.0mm square washer over rod and onto bottom flange of the bracket.
- 4** Fasten M12 nut onto tie-down rod and bracket until it is in position.
- 5** Whilst ensuring the bracket remains in position, fasten the longest flange into the timber truss by drilling Type 17, 12g x 35mm (single truss) or 65mm (double truss) timber screws through the 6 available pre-drilled screw holes. Or hammer Bremick® Timber Connectors nails through the 6 available pre-drilled nail holes.
- 6** Tighten off the screw onto the square washer.

# Installation Instructions

## Wall Frame Tie-Down



**1**

Locate the Bremick Hold Down Bracket, so the longest flange sits flush against the timber stud face and the shortest flange runs along the bottom plate of the wall frame and is centrally located.

**2**

Whilst ensuring the bracket remains in position, fasten the longest flange into the timber stud by drilling Type 17, 12g x 35mm (single stud) or 65mm (double stud) timber screws through the 6 available pre-drilled screw holes. Or hammer Bremick Timber Connectors nails through the 6 available pre-drilled nail holes.

**3**

Locate 40 x 40 x 5mm square washer over centrally locate hole on the bottom flange of the bracket.

**4**

Install the M12 x 150mm Masonry Anchor Screw through the washer and centrally located hole in the bottom flange of the bracket into the wall frame and concrete slab.

# Technical Data

## HOLD DOWN BRACKET

THDG130055204

**LOAD TYPE 1: LONGER FACE USED ON UPLIFTED MEMBER**

### HOLD DOWN BRACKET

**Table 1 UPLIFT CAPACITY: 1 M12 BOLT BOTTOM W/WASHER 6 – 12ga SCREWS TOP**

1.2G+WU OR 0.9G-WU		Seasoned Timber Capacity (kN)					
JOINT GROUP		JD6	JD5	JD4	JD3	JD2	JD1
		8.5	11.6	16.3	16.3	16.3	16.3
JOINT GROUP		Unseasoned Timber Capacity (kN)					
		J6	J5	J4	J3	J2	J1
		5.2	8.0	11.0	15.5	16.3	16.3

**Table 2 UPLIFT CAPACITY: 1 M12 BOLT BOTTOM W/WASHER 6 - 3.15mm DIAMETER NAILS TOP**

1.2G+WU OR 0.9G-WU		Seasoned Timber Capacity (kN)					
JOINT GROUP		JD6	JD5	JD4	JD3	JD2	JD1
		3.3	4.4	5.3	7.4	9.4	12.5
JOINT GROUP		Unseasoned Timber Capacity (kN)					
		J6	J5	J4	J3	J2	J1
		2.0	2.7	3.5	5.0	7.0	8.9

### 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.
- For Where back-to-back plates are used capacity can be doubled
- Loads applied at a limit state, apply additional load factors when designing using AS1170.

# Joist Strap GALVANISED



### Application

The Bremick® Joist Strap is ideal for connecting 2 timber members that intersect at right angles. Typical applications include rafters to beams, purlins to rafters or trusses, hanging beams to ceiling joists and floor joists to bearers.

### Advantages

The Bremick® Joist Strap provides numerous benefits including:

- Built-in nails for easy fastening of the strap to timber members.
- Pre-drilled nail holes to allow easy fixing of nails.

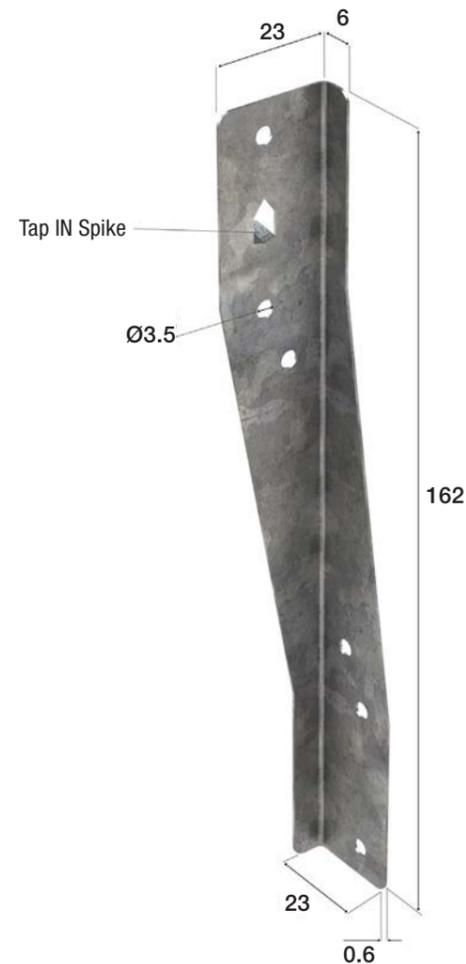
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	0.6mm
Width A	23mm
Width B	6mm
Length	162mm
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails



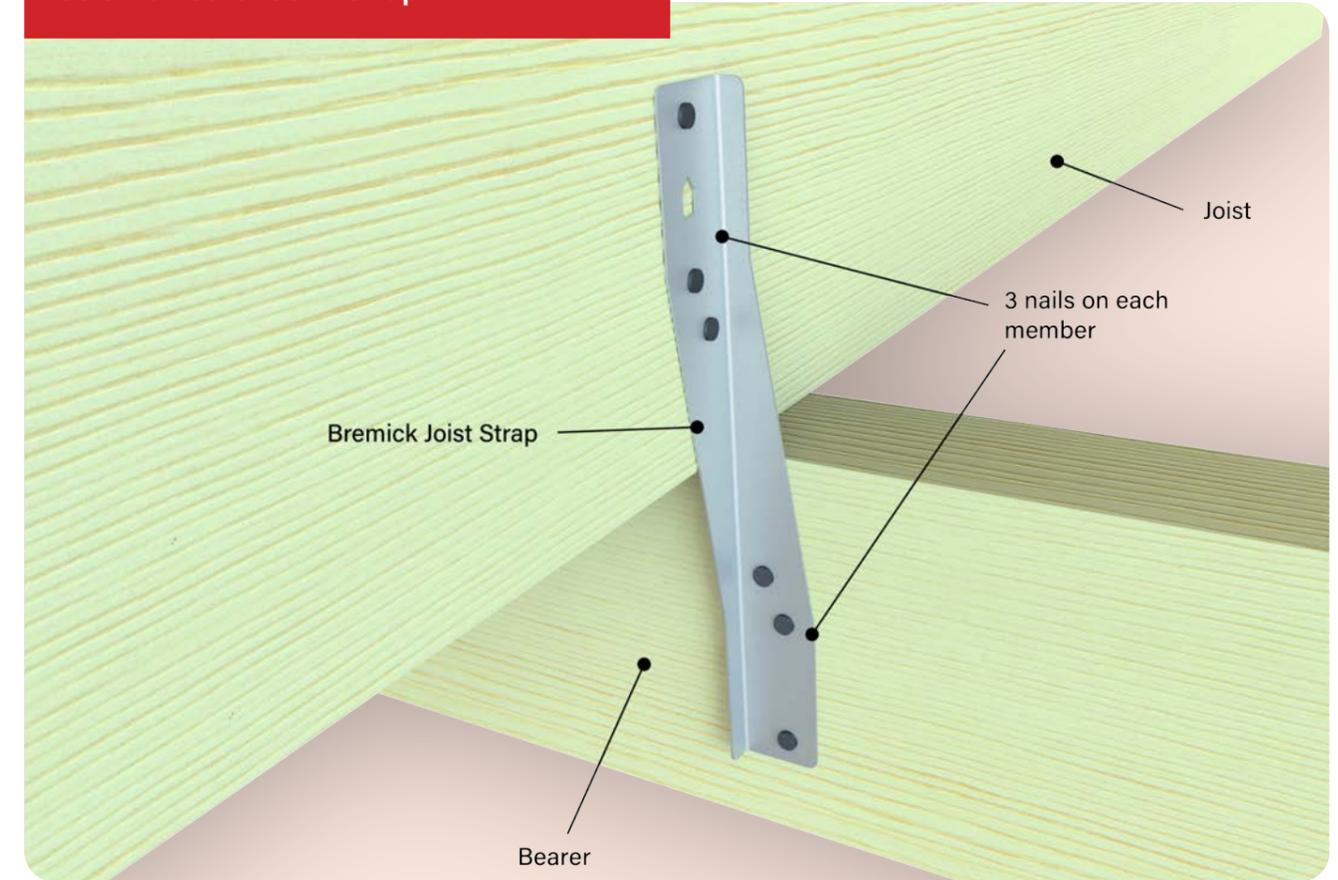
### Bremick® Ranging

Product Code	Dimensions
TJSG162000064	162mm x 23mm x 6mm x 0.6mm
Coating	Pack Qty
Z275 – Galvanised	100



## Installation Instructions

### Joist to Bearer Joint Strap



- 1 Locate the Bremick Joist Strap into position.
- 2 Hammer built-in nail into the first timber member.
- 3 Then hammer the remaining built-in nail of the strap into the second timber member, that is at right angles to the first timber member.
- 4 Hammer 3 Bremick Timber Connector Nails through the pre-drilled nail holes into the first timber member.
- 5 Then Hammer 3 Bremick Timber Connector Nails through the pre-drilled nail holes into the second timber member.

# Technical Data

## JOIST STRAP

TJSG162000064

### SINGLE JOIST STRAP LIMIT STATE CAPACITY (1.35G)

Table 1 2 - 3.15mm DIAMETER NAILS USED ON FACE

NUMBER OF JOIST STRAP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
1/JOIST STRAP	0.5	0.7	0.9	1.2	1.5	2.0
2/JOIST STRAP	0.9	1.2	1.4	2.0	2.6	3.4
3/JOIST STRAP	1.3	1.7	2.0	2.9	3.6	4.8
4/JOIST STRAP	1.6	2.2	2.6	3.7	4.7	6.3
	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
1/JOIST STRAP	0.3	0.5	0.6	0.9	1.2	1.5
2/JOIST STRAP	0.6	0.8	1.0	1.4	2.0	2.6
3/JOIST STRAP	0.8	1.1	1.4	2.0	2.9	3.6
4/JOIST STRAP	1.1	1.4	1.9	2.6	3.7	4.7

### REMARKS

- These design capacities apply directly for Category 1 joints as described in Table 2.2 of AS1720.1:2010. For Category 2 and Category 3 joints, multiply these capacities by 0.94 and 0.88 respectively.
- Capacity for (UNPUNCHED) product not provided due to uncertainty in nail depth, location, and quality.
- Connected members must be independently restrained from rolling.
- Capacity can be multiplied by 1.5 if 3 – 3.15mm diameter nails used on face.
- The design capacities tabulated above apply directly for 1.35G load case using  $k_1 = 0.57$ . For other load cases, multiply these capacities by the load factors given below. For a joist strap, the resultant capacity must not exceed the steel ultimate capacity of 3KN.

Load Case	Load factor			
	1.35G	1.2G+1.5QF	1.2G+1.5QR	1.2G+WD or 0.9G - Wu
Factor	1	1.21	1.35	2

## Mini Grip GALVANISED

### Application

The Bremick® Mini Grip is an economical connector for lightly loaded ties in houses and DIY projects. Typical applications include Face Fixing Beams, and Stud/Column fixing.

### Advantages

The Bremick® Mini Grip provides numerous benefits including:

- Economical and simple to use connector for right angled joints
- Pre-drilled holes to allow easy fixing of hand driven nails
- 12-gauge, Type 17 self-drilling screws can be driven through the pre-drilled holes and provide additional capacity

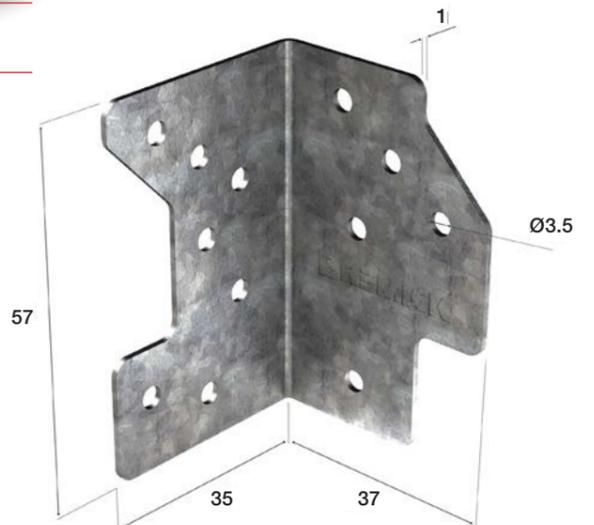
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.0mm
Width A	35mm
Width B	37mm
Length	57mm
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails Bremick® Type 17, 12g x 35mm Screws

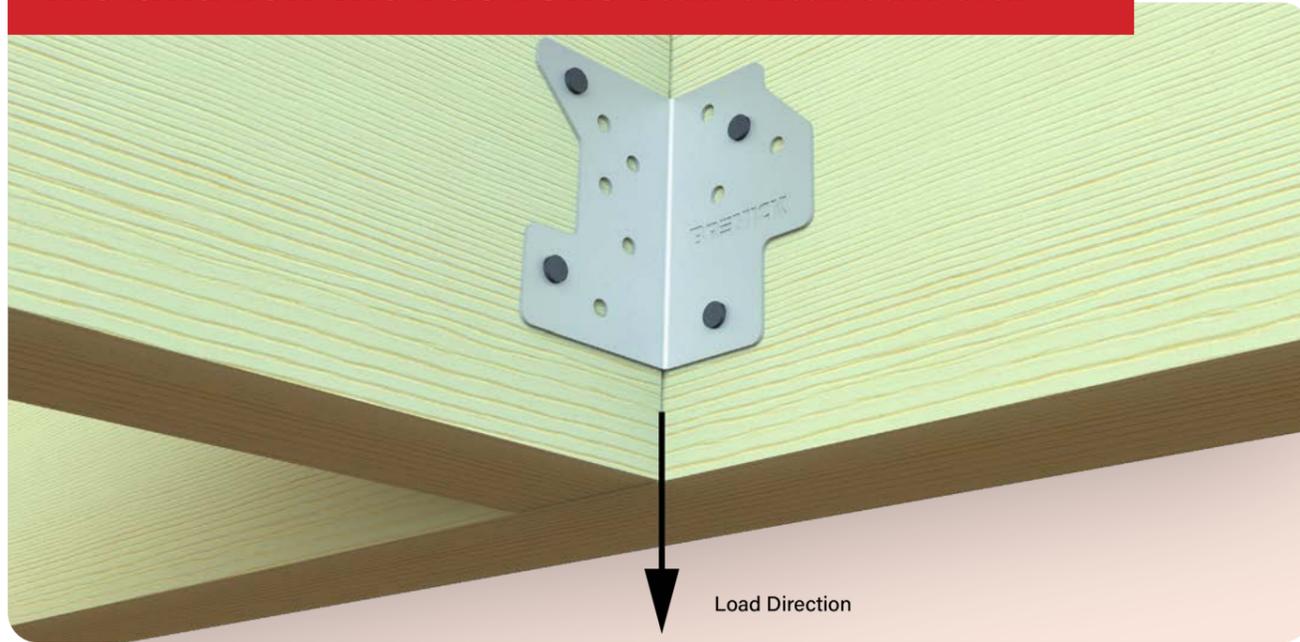


### Bremick® Ranging

Product Code	Dimensions
TMGG057035104	57mm x 35mm x 37mm x 1.0mm
Coating	Pack Qty
Z275 – Galvanised	100



# Installation Instructions Beam to Beam Connection



**1**

**2**

**3**

Locate the Bremick® Mini Grip into position, so each flange is flush against the 2 timber beams that are at right angles to each other.

Fix 2 Bremick® Timber Connector Nails or 12-gauge, Type 17 self-drilling screws through the pre-punched holes and into each flange.

Repeat steps 1 and 2 on the other side of the timber beam.

# Technical Data

## MINI GRIP

TMGG057035104

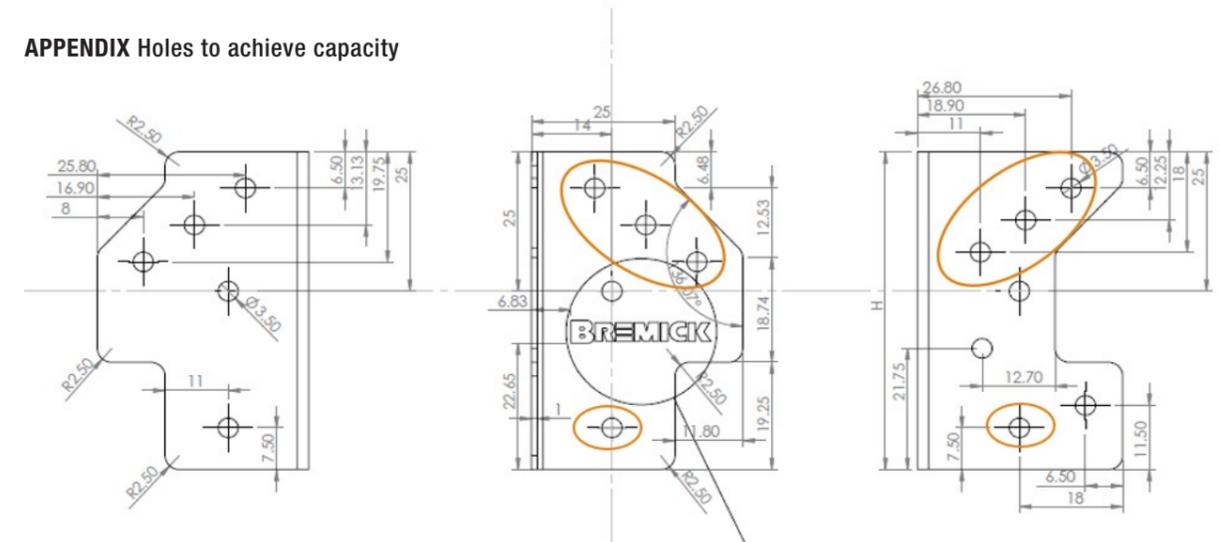
### MINIGRIP CAPACITY (ALWAYS USED AS PAIRS)

**Table 1** UPLIFT CAPACITY: 2 - 3.15mm DIAMETER NAILS USED @ EACH WING

1.2G+WU OR  
0.9G-WU

JOINT GROUP	Seasoned Timber Capacity (kN) for a PAIR of Minigrrips					
	JD6	JD5	JD4	JD3	JD2	JD1
	1.9	2.6	3.1	4.3	5.5	7.3
JOINT GROUP	Unseasoned Timber Capacity (kN) for a PAIR of Minigrrips					
	J6	J5	J4	J3	J2	J1
	1.2	1.7	2.2	3.1	4.3	5.5

### APPENDIX Holes to achieve capacity



Fix in at least one of the top three holes plus the bottom hole.

### REMARKS

- These design capacities apply directly for Category 1 joints as described in Table 2.2 of AS1720.1:2010. For Category 2 and Category 3 joints, multiply these capacities by 0.94 and 0.88 respectively.
- The design capacities tabulated above apply directly for wind load case using  $k_1 = 1.14$ . For other load cases, multiply these capacities by the load factors given below.

LOAD CASE	Load Factor			
	1.35G	1.2G+1.5QF	1.2G+1.5QR	1.2G+WD OR 0.9G - WU
FACTOR	0.5	0.6	0.68	1

# Multi Grip GALVANISED & SS316

## Application

The Bremick® Multi Grip is a multi-purpose connector that has many applications in timber framing. Applications include a tie down connector for trusses or rafters to top plates and for fixing joists to the face of bearers. Plus, various projects including carports, pergolas, decks and other projects that require a right-angled joint connection.

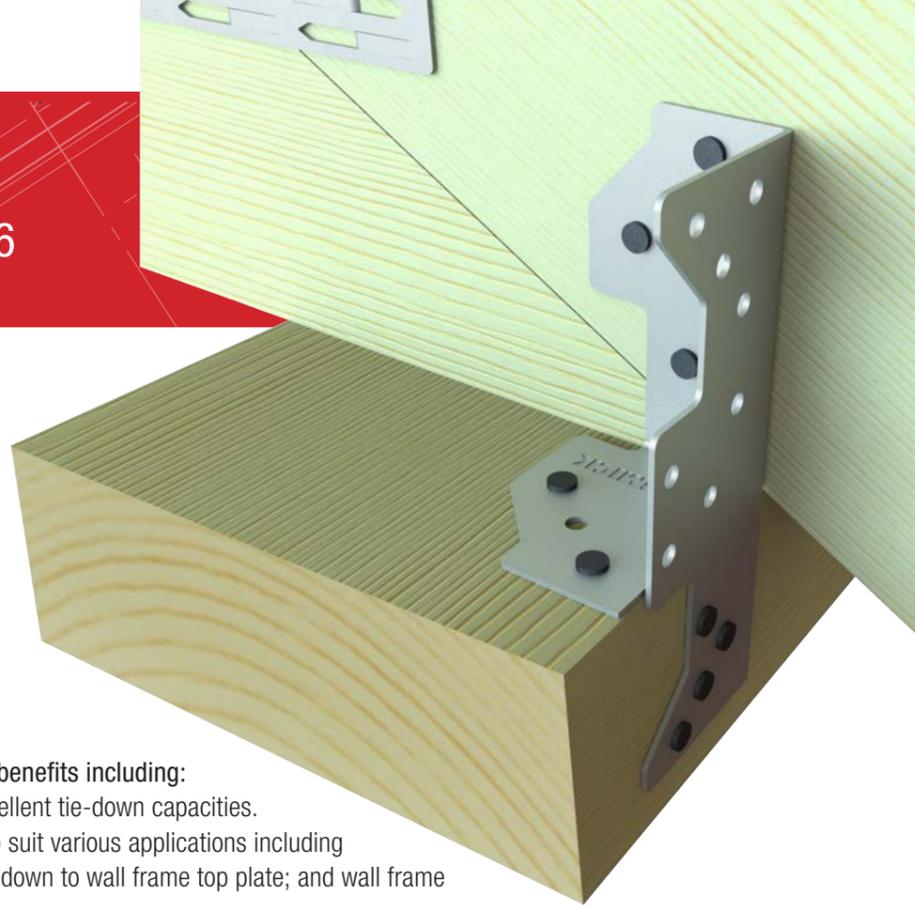
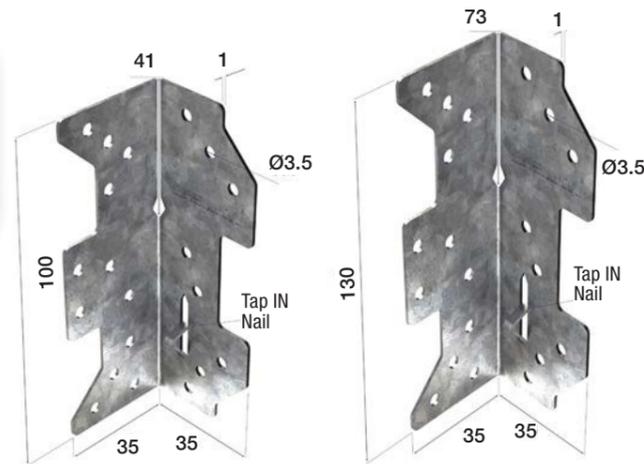
## Advantages

The Bremick® Multi Grip provides numerous benefits including:

- Multi-purpose connector that provides excellent tie-down capacities.
- Design allows the connector to be modified to suit various applications including beam to beam connection; truss/rafter tie-down to wall frame top plate; and wall frame stud to bottom plate connection.
- Marine grade 316 stainless steel product lines available for use in external construction and when near the seaside.
- Pre-drilled holes to allow easy fixing of hand driven nails.
- 12-gauge, Type 17 self-drilling screws can be driven through the pre-drilled holes and provide additional capacity.
- Pre-punched nail to ease the locating of the multigrip into position.

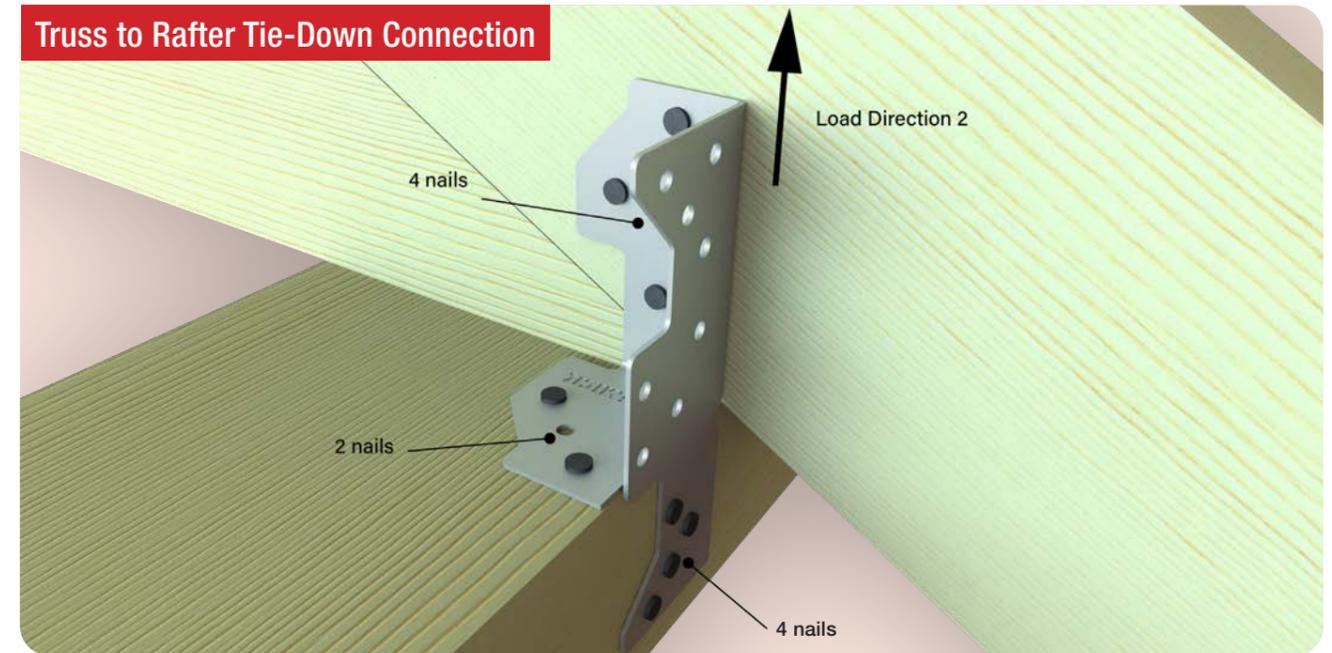
## Specifications

<b>Steel Grade</b>	G300
<b>Coating</b>	Z275 – Galvanised & SS316
<b>Thickness</b>	1.0mm
<b>Width A</b>	35mm
<b>Width B</b>	35mm
<b>Length</b>	100mm
<b>Fasteners</b>	Bremick® 35 x 3.15mm Timber Connector Nails (Gal or SS316) 32 x 2.5mm Screw Shank Machine Fastened Nails Bremick® Type 17, 12g x 35mm Screws



## Installation Instructions

### Truss to Rafter Tie-Down Connection



**1**

**2**

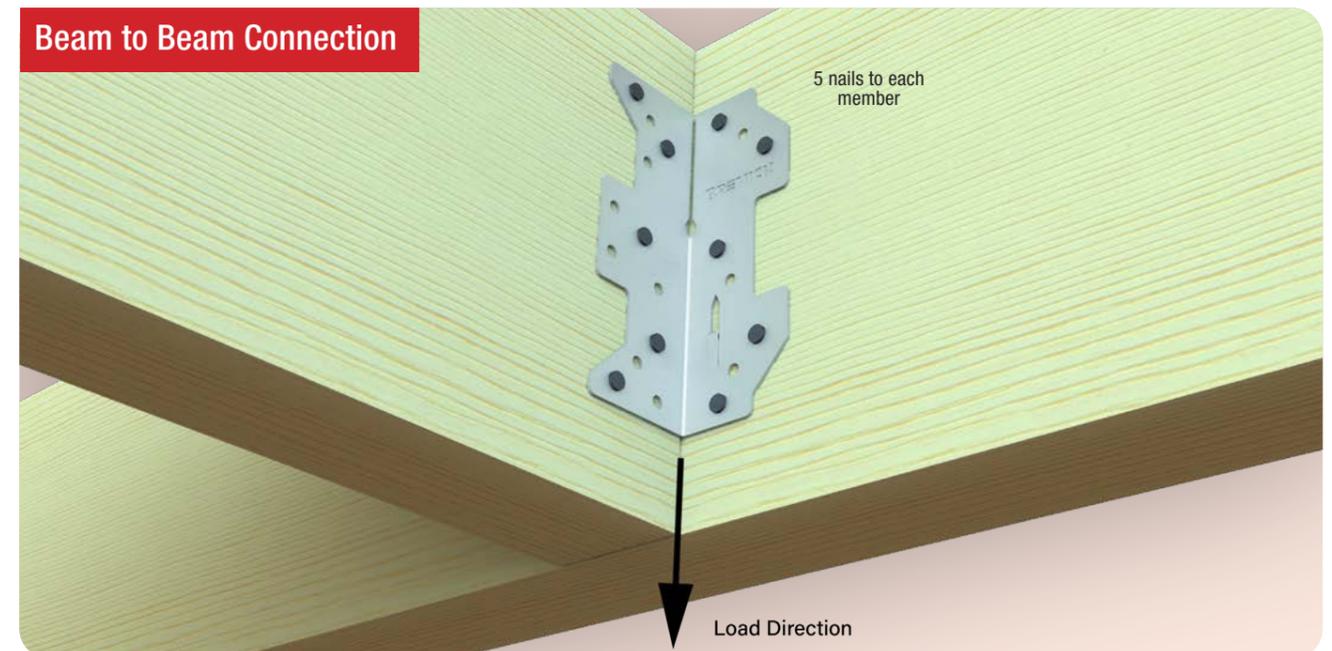
**3**

Fold up 1 flange of the Bremick® Multi Grip so it is sitting at right angles to the vertical.

Locate the Bremick® Multi Grip into position. The vertical is sitting flush against the truss/rafter and the folded flange is sitting on top of the supporting beam or top plate of the wall frame.

Fix Bremick® Timber Connector Nails through the pre-punched holes as described in the image.

### Beam to Beam Connection



**1**

**2**

**3**

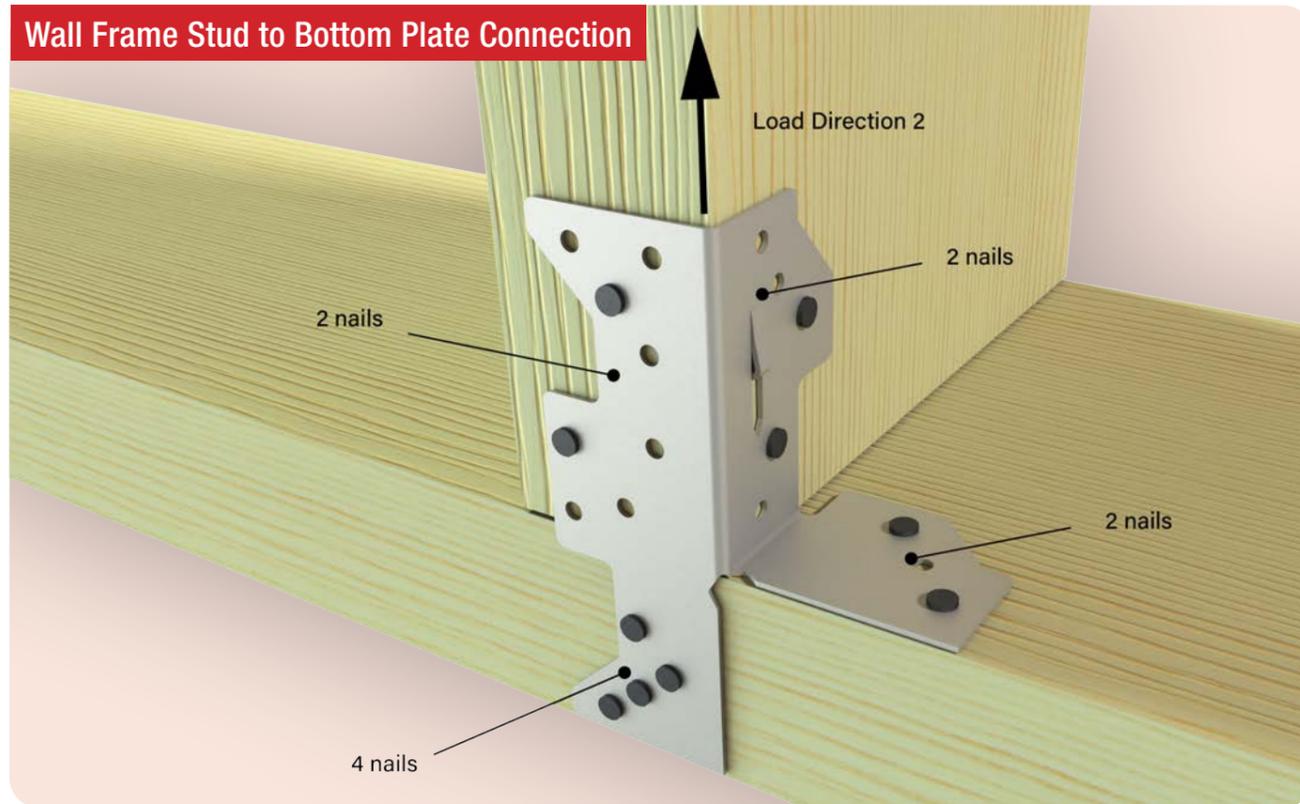
Locate the Bremick® Multi Grip into position, so each flange is flush against the 2 timber beams, that are at right angles to each other.

Fix 5 x Bremick® Timber Connector Nails through the pre-punched holes into each timber member, as described in the image.

Repeat steps 1 and 2 on the other side of the timber beam.

# Installation Instructions

## Wall Frame Stud to Bottom Plate Connection



**1**

Fold up 1 flange of the Bremick® Multi Grip so it is sitting at right angles to the vertical.

**2**

Locate the Bremick® Multi Grip into position  
 a. The vertical is sitting flush against the corner of the stud and the 2 flanges fold around onto the 2 faces of the stud.  
 b. The bottom of the vertical overlaps onto the side of bottom plate.  
 c. The folded flange is sitting on top of the bottom plate.

**3**

Fix Bremick® Timber Connector Nails through the pre-punched holes as described in the image.

### Notes

- Use half as many 12-gauge, Type 17 self-drilling screws to Bremick® Timber Connector Nails, to achieve the same capacity. More screws can be applied to boost the tie-down capacity. Screws are drilled through the pre-punched holes.
- Use Marine Grade 316 Stainless Steel Bremick® Timber Connector Nails when fastening stainless steel Multi Grips
- When fastening Bremick® Multi Grips with machine fired nails, use the Multi Grips with unpunched holes. Fire the nails around the location of the dimples. Use 32 x 2.5mm galvanised, screw shank nails. 20% more nails should be used to match the capacity of the hand driven Bremick® Timber Connector nail.

# Technical Data

## MULTI GRIP

TMPG100035104 • TMPG130035104 • TMP6100035104

### MULTIGRIP CAPACITY (ALWAYS USED AS PAIR)

**Table 1** WIND UPLIFT CAPACITY: 5 - 3.15mm DIAMETER NAILS USED @ EACH WING ON EACH MEMBER

1.2G+WU OR 0.9G-WU	Seasoned Timber Capacity (kN) for a PAIR of Multigrips					
	JD6	JD5	JD4	JD3	JD2	JD1
JOINT GROUP	3.7	4.9	5.9	8.3	8.3	8.3
JOINT GROUP	Unseasoned Timber Capacity (kN) for a PAIR of Multigrips					
	J6	J5	J4	J3	J2	J1
	2.4	3.2	4.2	5.9	8.3	8.3

### REMARKS

- These values are directly copied from AS1684.2 Table 9.1. No calculations or testing have been undertaken
- These design capacities apply directly for Category 1 joints as described in Table 2.2 of AS1720.1:2010. For Category 2 and Category 3 joints, multiply these capacities by 0.94 and 0.88 respectively.
- The design capacities tabulated above apply directly for wind load case using  $k_1 = 1.14$ . For other load cases, multiply these capacities by the load factors given below.

	LOAD FACTOR			
LOAD CASE	1.35G	1.2G+1.5Q <sub>F</sub>	1.2G+1.5Q <sub>R</sub>	1.2G+WD OR 0.9G - W <sub>u</sub>
FACTOR	0.5	0.6	0.68	1

# Triple Grip GALVANISED & SS316

## Application

The Bremick® Triple Grip is used in numerous tie-down connection applications in timber framing. Applications include trusses or rafters to wall frame top plates, joist to supporting beam, purlin to truss, hanger to ceiling joist, stud to wall plate and corner studs to wall plate. Plus, various projects including carports, pergolas, decks, and other projects that require a right-angled joint connection.

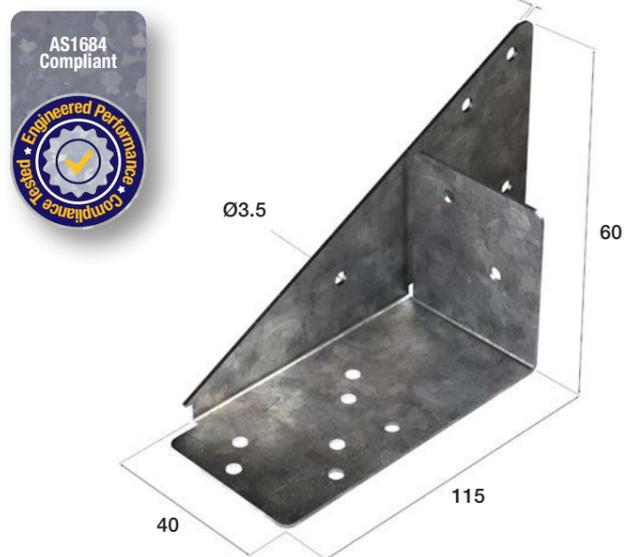
## Advantages

The Bremick® Triple Grip provides numerous benefits including:

- Multi-purpose connector that provides excellent tie-down capacities in high wind zones
- Various tie-down applications including trusses or rafters to wall frame top plates, joist to supporting beam, purlin to truss, hanger to ceiling joist, stud to wall plate and corner studs to wall plate
- Left-hand and right-hand product design allows the connector to be nailed into position to suit frame design and installer's nailing preference
- Marine grade 316 stainless steel product lines available for use in external construction and when near the seaside.
- Pre-drilled holes to allow easy fixing of hand driven nails
- 12-gauge, Type 17 self-drilling screws can be driven through the pre-drilled holes and provide additional capacity

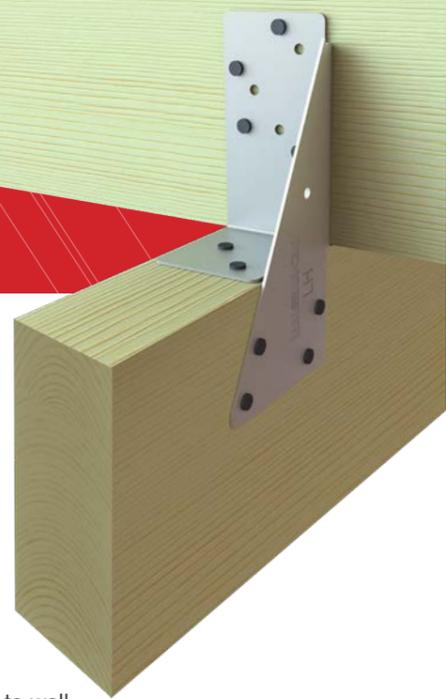
## Specifications

<b>Steel Grade</b>	G300
<b>Coating</b>	Z275 – Galvanised & SS316
<b>Thickness</b>	1.0mm
<b>Width A</b>	40mm
<b>Width B</b>	60mm
<b>Length A</b>	115mm
<b>Length B</b>	73mm
<b>Fasteners</b>	Bremick® 35 x 3.15mm Timber Connector Nails (Gal or SS316) 32 x 2.5mm Screw Shank Machine Fastened Nails Bremick® Type 17, 12g x 35mm Screws



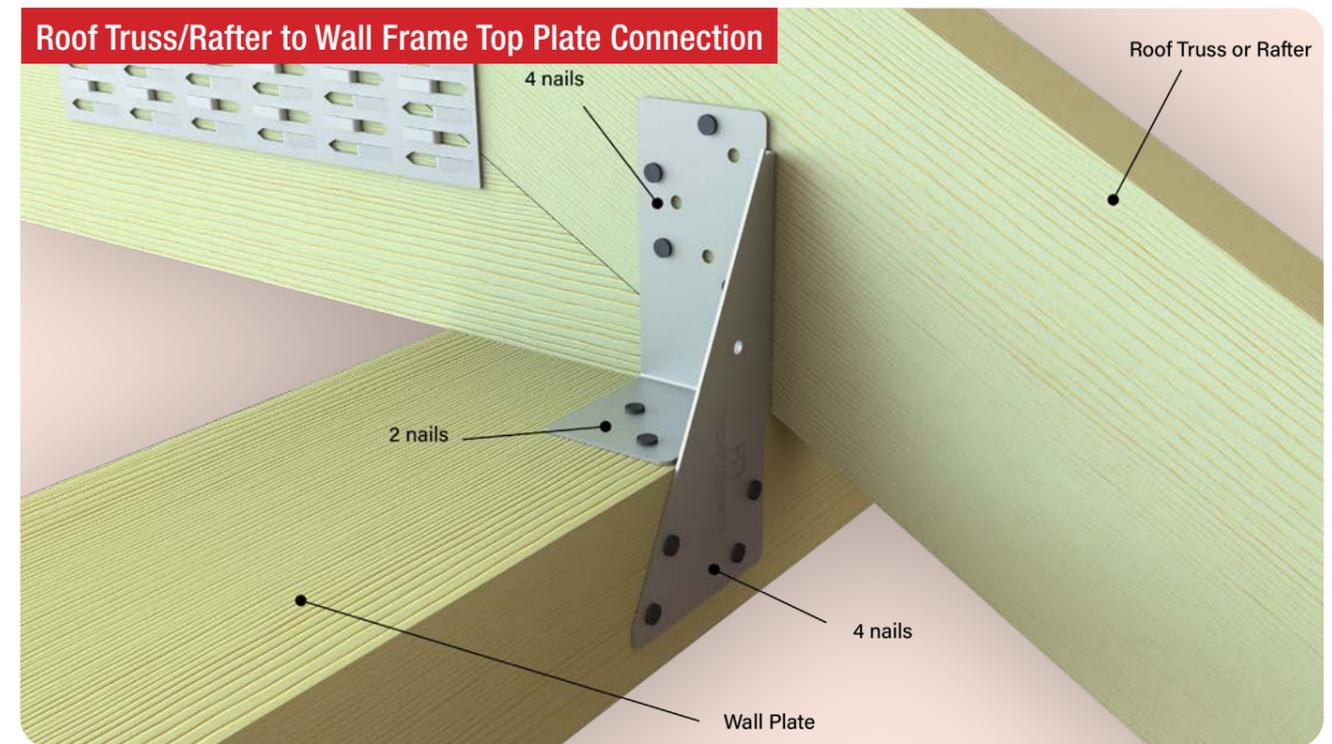
## Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TTLPG11560104	115mm x 73mm x 40mm x 60mm x 1.0mm – Left Hand	Z275 – Galvanised	50
TTRPG11560104	115mm x 73mm x 40mm x 60mm x 1.0mm – Right Hand	Z275 – Galvanised	50
TTLPG11560104	115mm x 73mm x 40mm x 60mm x 1.0mm – Left Hand	SS316	20
TTRPG11560104	115mm x 73mm x 40mm x 60mm x 1.0mm – Right Hand	SS316	20



# Installation Instructions

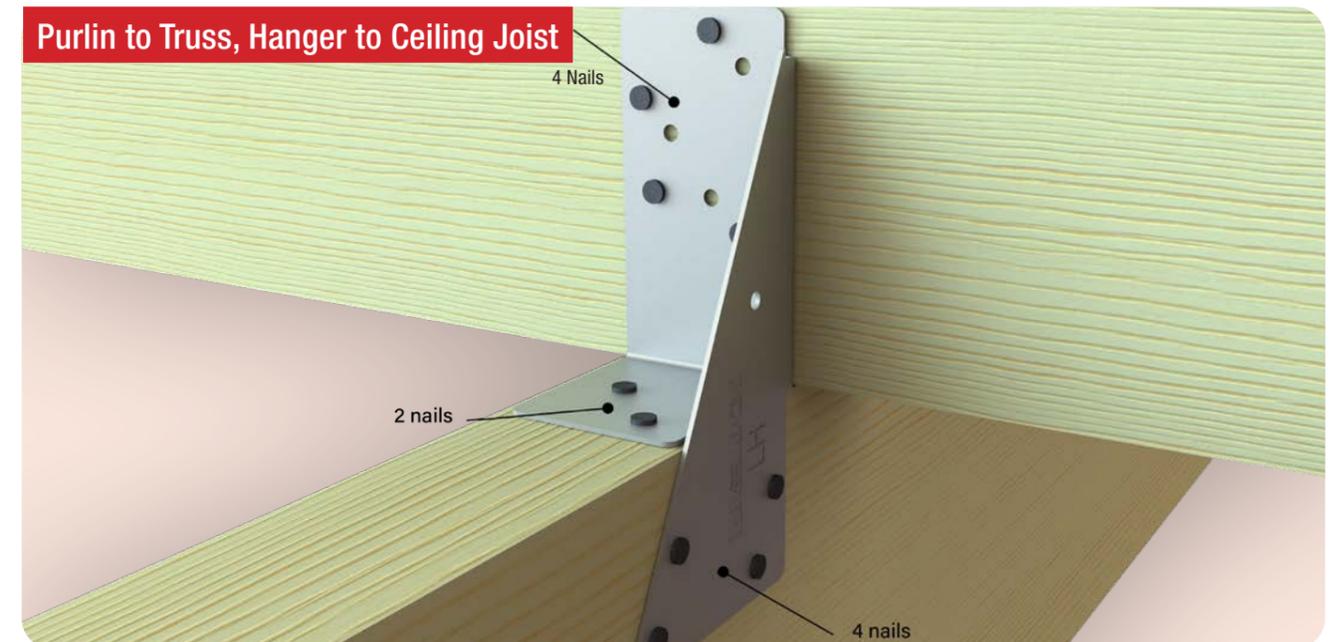
## Roof Truss/Rafter to Wall Frame Top Plate Connection



1 Locate the Bremick® Triple Grip into position. The vertical is sitting flush against the truss/rafter and the edge of the wall frame top plate. The folded flange is sitting on top of the top plate of the wall frame.

2 Fix Bremick® Timber Connector Nails through the pre-punched holes as described in the image.

## Purlin to Truss, Hanger to Ceiling Joist

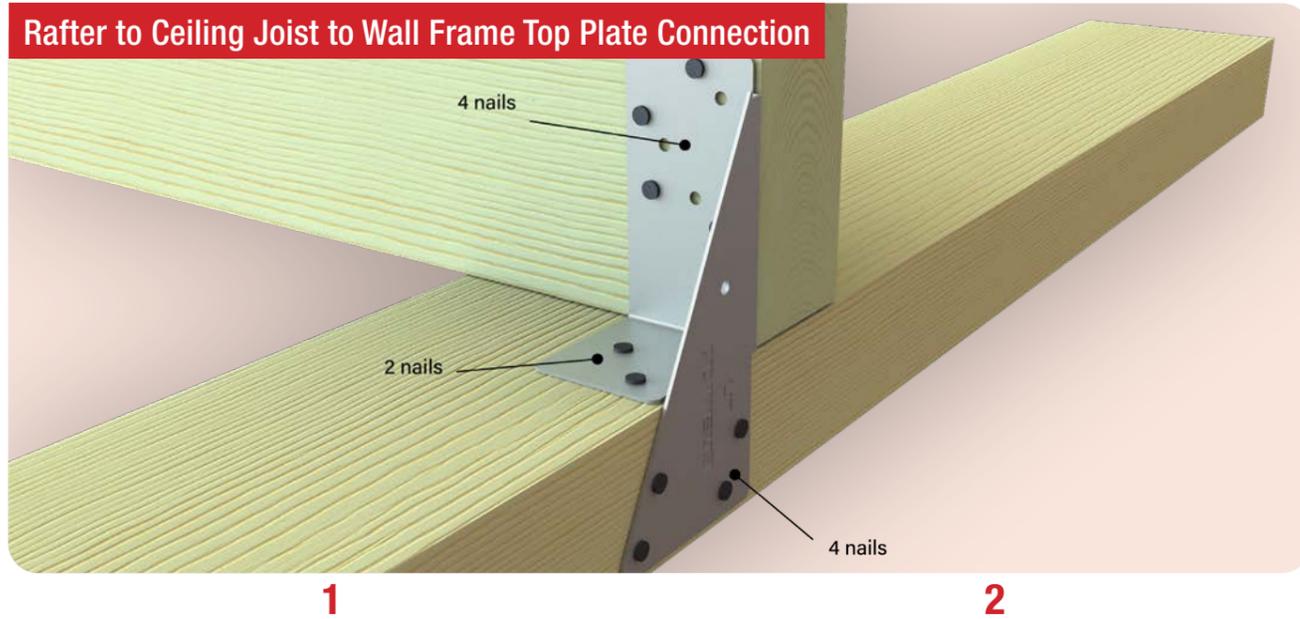


1 Locate the Bremick® Triple Grip into position. The vertical is sitting flush against the truss or hanger and the edge of the truss or ceiling joist. The folded flange is sitting on top of the truss or ceiling joist.

2 Fix Bremick® Timber Connector Nails through the pre-punched holes as described in the image.

# Installation Instructions

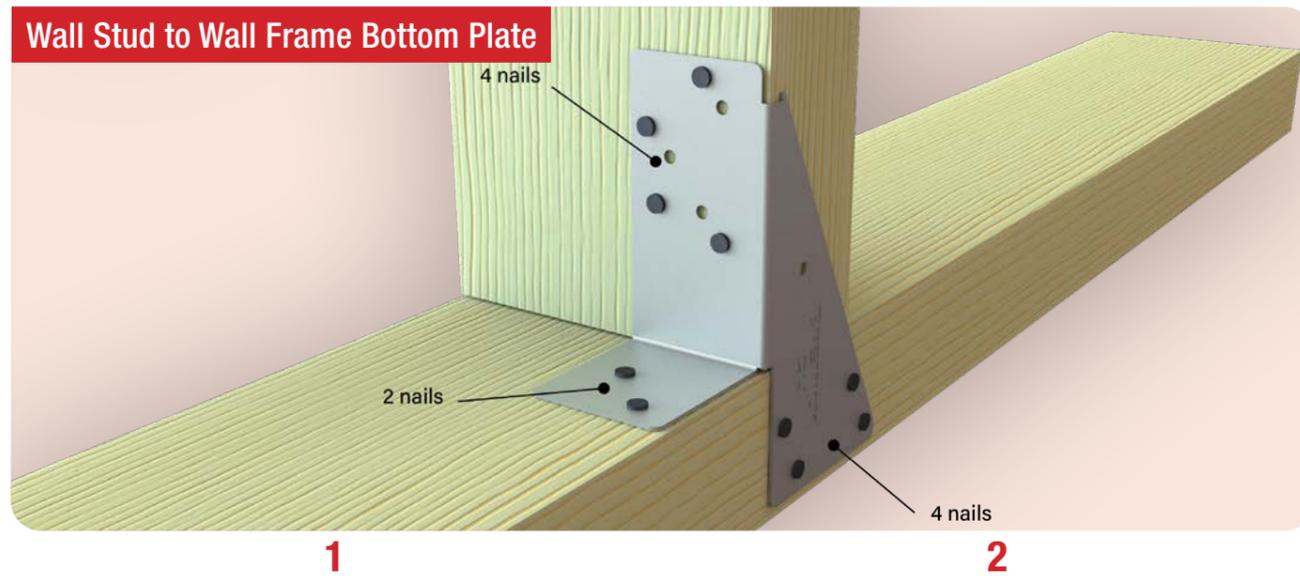
## Rafter to Ceiling Joist to Wall Frame Top Plate Connection



1 Locate the Bremick® Triple Grip into position. The vertical is sitting flush against the rafter or ceiling joist and the edge of the wall frame top plate. The folded flange is sitting on top of the top plate of the wall frame.

2 Fix Bremick® Timber Connector Nails through the pre-punched holes as described in the image.

## Wall Stud to Wall Frame Bottom Plate



1 Locate the Bremick® Triple Grip into position. The vertical is sitting flush against the wall stud and the edge of the wall frame bottom plate. The folded flange is sitting on top of the wall frame bottom plate.

2 Fix Bremick® Timber Connector Nails through the pre-punched holes as described in the image.

### Notes

- Use half as many 12-gauge, Type 17 self-drilling screws to Bremick® Timber Connector Nails, to achieve the same capacity. More screws can be applied to boost the tie-down capacity. Screws are drilled through the pre-punched holes.
- Use Marine Grade 316 Stainless Steel Bremick® Timber Connector Nails when fastening stainless steel Triple Grips.
- When fastening Bremick® Triple Grips with machine fired nails, use the Triple Grips with unpunched holes. Fire the nails around the location of the dimples. Use 32 x 2.5mm galvanised, screw shank nails. 20% more nails should be used to match the capacity of the hand driven Bremick® Timber Connector nail.

# Technical Data

## TRIPLE GRIP

TTLPG11560104 • TTRPG11560104 • TTLP611560104 • TTRP611560104

### TRIPLE GRIP CAPACITY (SINGLE)

**Table 1** WIND UPLIFT CAPACITY: 3.15mm DIAMETER NAILS USED AS PER INSTALLATION INSTRUCTIONS

1.2G+WU OR 0.9G-WU						
JOINT GROUP	Seasoned Timber Capacity (kN) for a SINGLE Triple Grip					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.2	2.9	3.5	4.9	4.9	4.9
JOINT GROUP	Unseasoned Timber Capacity (kN) for a SINGLE Triple Grip					
	J6	J5	J4	J3	J2	J1
	1.4	1.9	2.5	3.5	4.9	4.9

### TRIPLE GRIP CAPACITY (PAIR)

**Table 2** WIND UPLIFT CAPACITY: 3.15mm DIAMETER NAILS USED AS PER INSTALLATION INSTRUCTIONS

1.2G+WU OR 0.9G-WU						
JOINT GROUP	Seasoned Timber Capacity (kN) for a PAIR of Triple Grip					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.7	4.9	5.9	8.3	8.3	8.3
JOINT GROUP	Unseasoned Timber Capacity (kN) for a PAIR of Triple Grip					
	J6	J5	J4	J3	J2	J1
	2.4	3.3	4.2	5.9	8.3	8.3

### REMARKS

- These values are directly copied from AS1684.2 Table 9.1. No calculations or testing have been undertaken
- These design capacities apply directly for Category 1 joints as described in Table 2.2 of AS1720.1:2010. For Category 2 and Category 3 joints, multiply these capacities by 0.94 and 0.88 respectively.
- The design capacities tabulated above apply directly for wind load case using  $k_1 = 1.14$ . For other load cases, multiply these capacities by the load factors given below.

	LOAD FACTOR			
LOAD CASE	1.35G	1.2G+1.5Q <sub>F</sub>	1.2G+1.5Q <sub>R</sub>	1.2G+WD OR 0.9G - Wu
FACTOR	0.5	0.6	0.68	1

# Truss Tie GALVANISED

## Application

The Bremick® Truss Ties are designed to tie down roof trusses or rafters to a timber wall frame top plate. Typically used as a tie-down when the roofs will be tiled.

## Advantages

The Bremick® Truss Ties provides numerous benefits including:

- Simple and easy method of tying down roof trusses to the wall frame top plate.
- Preformed teeth in the connector, allows the installer to simply hammer both ends of the connector into position.
- Left- and right-hand product design allows the connector to be nailed into position to suit frame design and installer's nailing preference.
- Can be used in pairs to double the capacity.

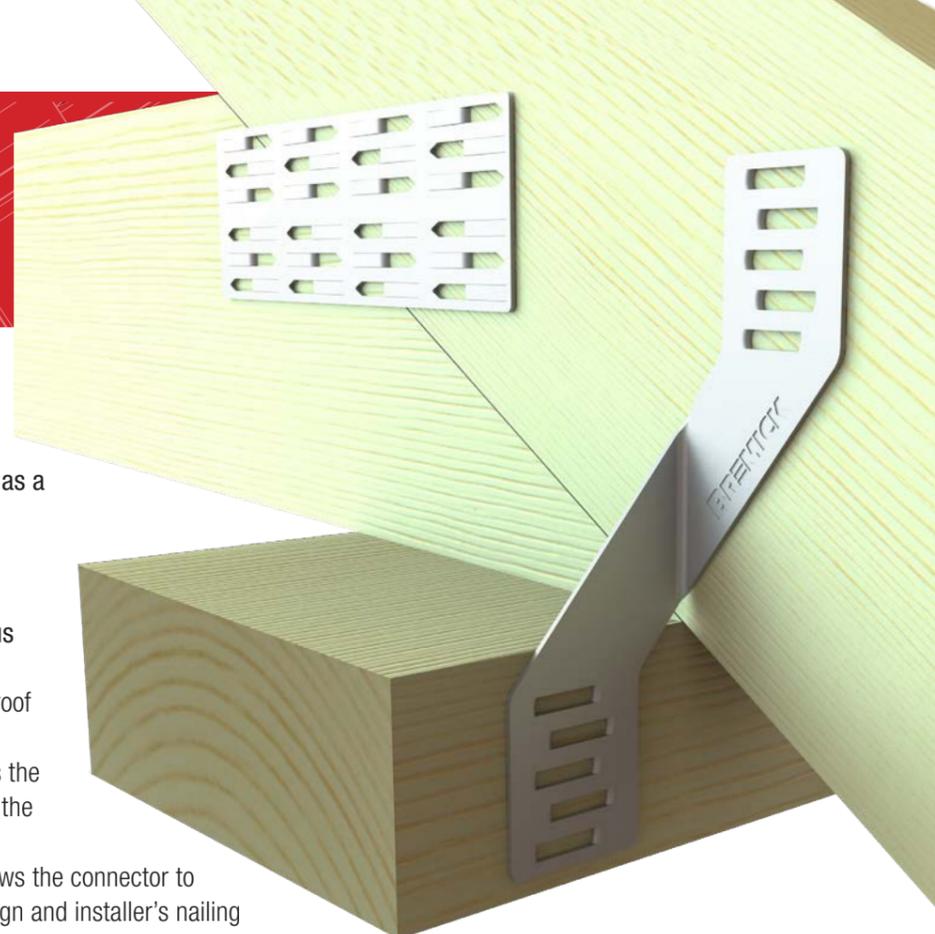
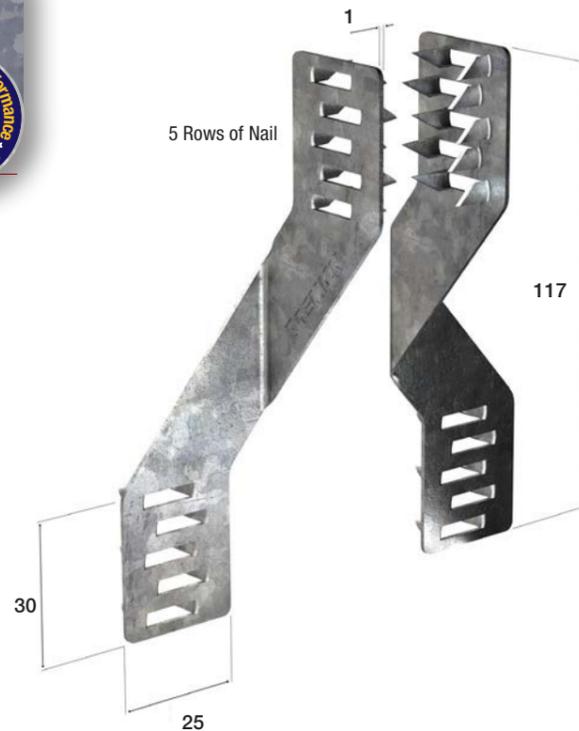
## Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.0mm
Width	25mm
Length	117mm



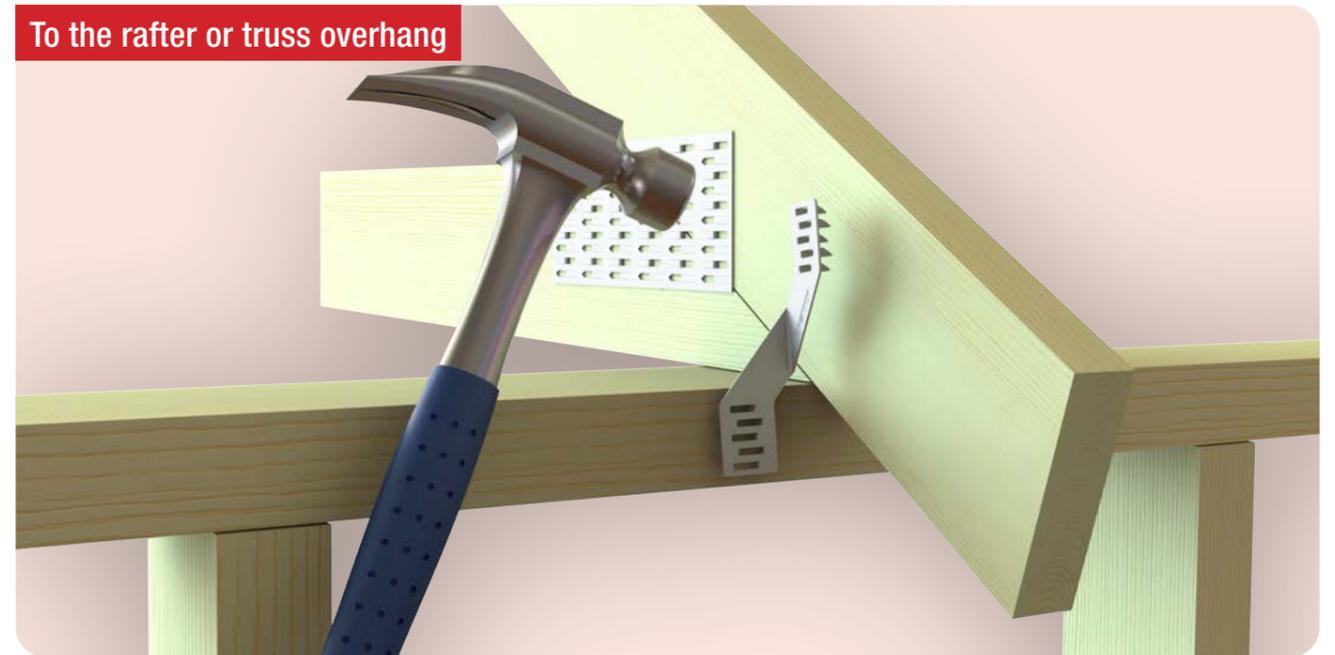
## Bremick® Ranging

Product Code	Dimensions
TTTG117025104	117mm x 25mm x 1.0mm
Coating	Pack Qty
Z275 – Galvanised	50 (25 L, 25 R)



# Installation Instructions

To the rafter or truss overhang



**1**

Prevent the truss or rafter from moving along the wall frame top plate by hammering a nail into the top plate, against the side, away from the Truss Tie.

**2**

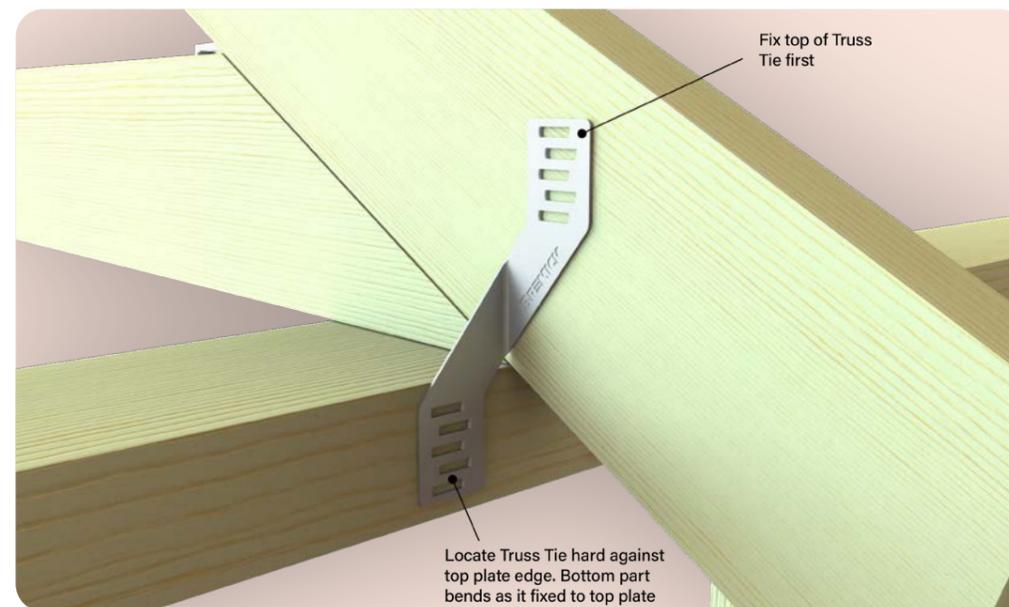
Locate the top of the Truss Tie against the face of the truss or rafter and hammer into position.

**3**

Ensure the bottom of the Truss Tie is located on the outside face of the wall frame top plate and then hammer into position. The Truss Tie will bend slightly during this step, this is ok.

**4**

If 2 Truss Ties are required, the second Truss Tie should be located on the opposite side of the truss or rafter face and repeats steps 2 and 3.



# Unitie GALVANISED

## Application

The Bremick® Unitie is used in numerous tie-down connection applications in timber framing. Applications include trusses or rafters to wall frame double top plates, joist to supporting beam, purlin to truss, and hanger to ceiling joist. Plus, various projects including carports, pergolas, decks, and other projects that require a right-angled joint connection.

## Advantages

The Bremick® Unitie provides numerous benefits including:

- Multi-purpose connector that assists in connecting timbers at right angles and achieving a strong and rigid structure. Is more effective than skew or end nailing.
- Various tie-down applications including trusses or rafters to wall frame double top plates, joist to supporting beam, purlin to truss, and hanger to ceiling joist.
- Left- and right-hand product design allows the connector to be nailed into position to suit frame design and installer's nailing preference.
- Pre-drilled holes to allow easy fixing of hand driven nails.
- 12-gauge, Type 17 self-drilling screws can be driven through the pre-drilled holes and provide additional capacity.
- Unpunched nail hole product lines available. Dimples indicating location of machine-driven nails provided.
- Pre-punched nail to ease the locating of the Unitie into position.

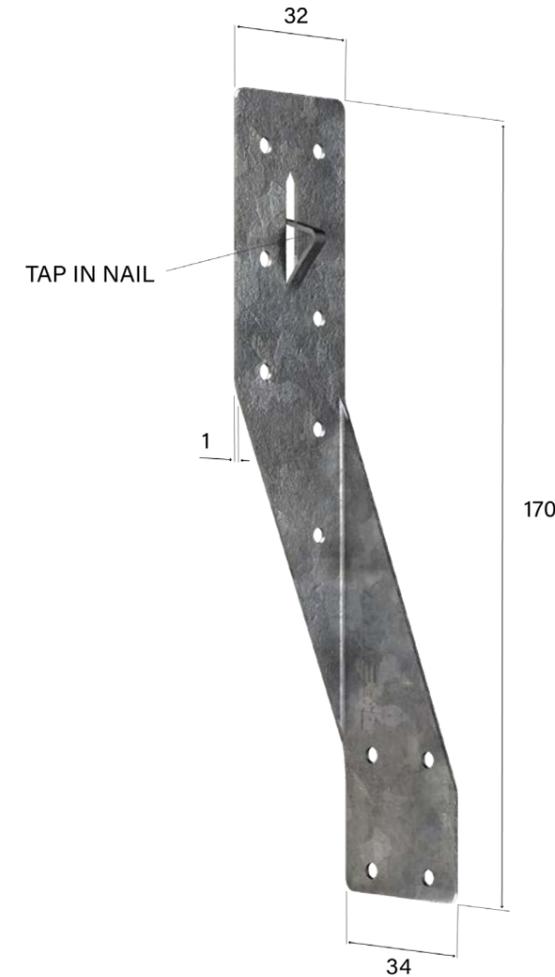
## Specifications

<b>Steel Grade</b>	G300
<b>Coating</b>	Z275 – Galvanised
<b>Thickness</b>	1.0mm
<b>Width</b>	32mm
<b>Overall Length</b>	170mm
<b>Length A</b>	120mm
<b>Length B</b>	86mm
<b>Fasteners</b>	Bremick® 35 x 3.15mm Timber Connector Nails (Gal) 32 x 2.5mm Screw Shank Machine Fastened Nails Bremick Type 17, 12g x 35mm Screws



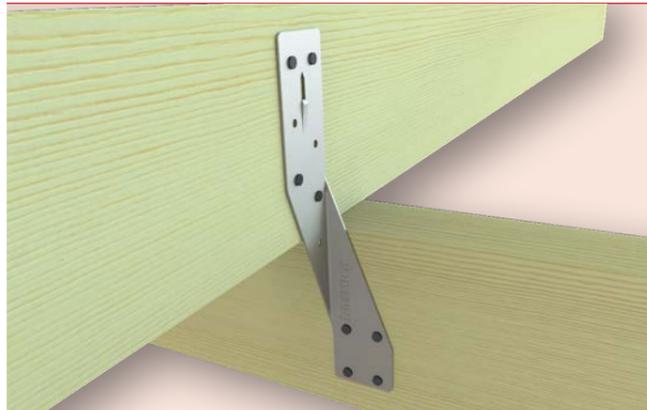
## Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TULPG17032104	170mm x 32mm x 1.0mm – Left Hand	Z275 – Galvanised	50
TURPG17032104	170mm x 32mm x 1.0mm – Right Hand	Z275 – Galvanised	50
TULUG17032104	170mm x 32mm x 1.0mm – Left Hand (Unpunched – For Machine Driven Nail Use)	Z275 – Galvanised	50
TURUG17032104	170mm x 32mm x 1.0mm – Right Hand (Unpunched – For Machine Driven Nail Use)	Z275 – Galvanised	50

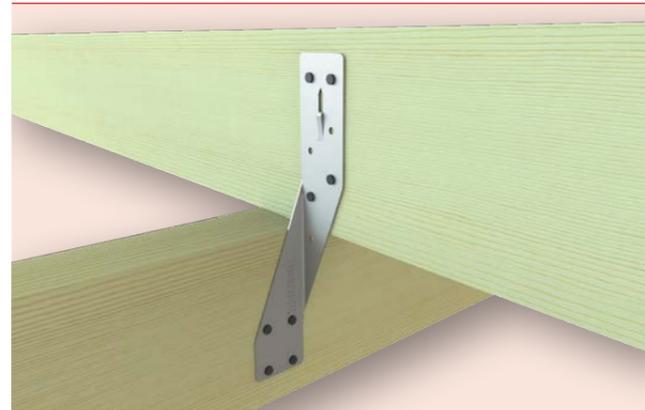


## Installation Instructions

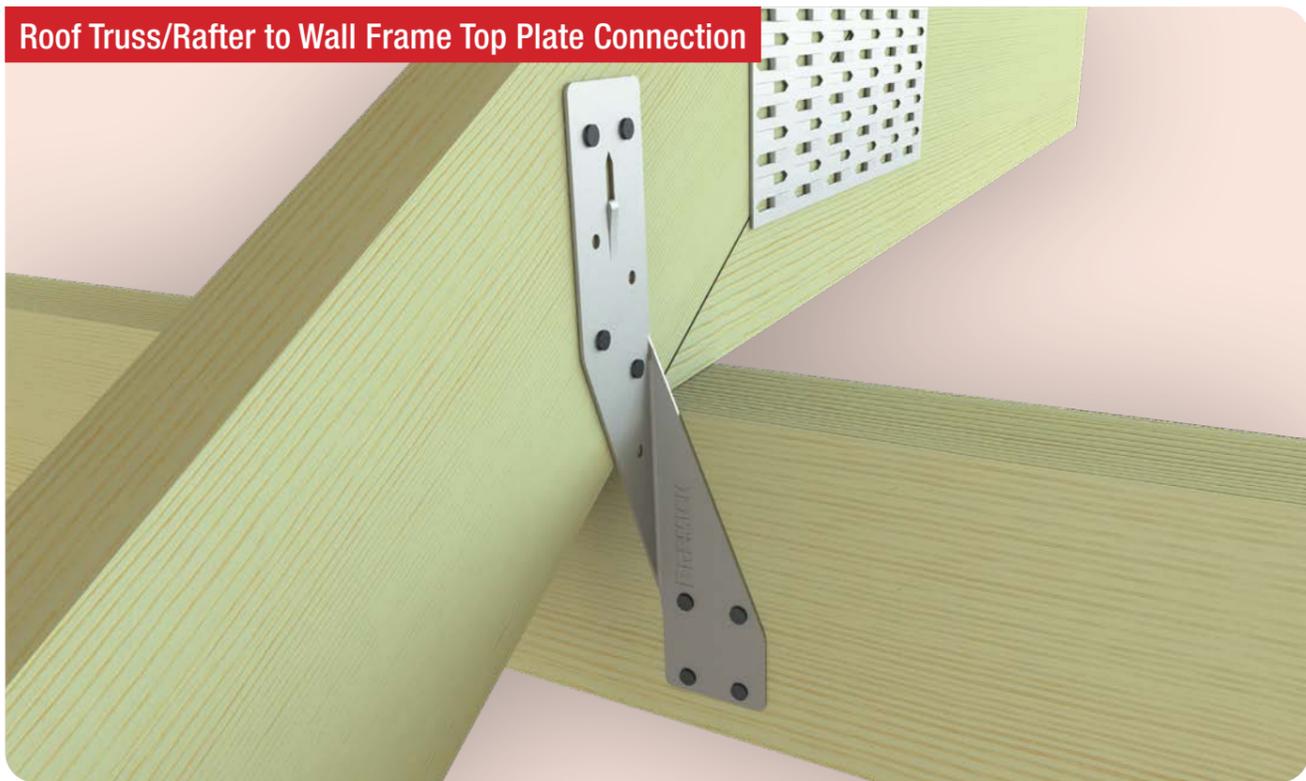
Unitie Left Hand



Unitie Right Hand



Roof Truss/Rafter to Wall Frame Top Plate Connection



1

2

1. Locate the Bremick® Unitie into position. The upper vertical is sitting flush against the truss/rafter and the lower vertical is sitting against the edge of the wall frame ribbon plate and lower wall frame top plate.

2. Fix Bremick Timber Connector Nails through the pre-punched holes as described in the image. 4 nails into each timber member.

### Notes

1. Use half as many 12-gauge, Type 17 self-drilling screws to Bremick® Timber Connector Nails, to achieve the same capacity. More screws can be applied to boost the tie-down capacity. Screws are drilled through the pre-punched holes.
2. When fastening Bremick Unities with machine fired nails, use the Unities with unpunched holes. Fire the nails around the location of the dimples. Use 32 x 2.5mm galvanised, screw shank nails. 20% more nails should be used to match the capacity of the hand driven Bremick Timber Connector nail.

## Installation Instructions

Right Angle Connection



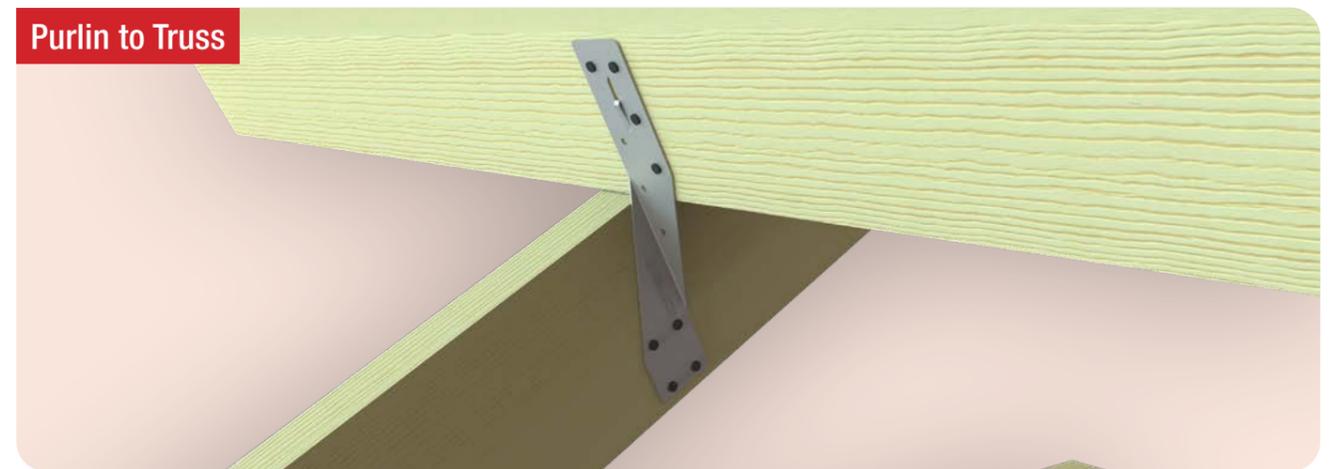
1

2

1. Locate the Bremick® Unitie into position. The upper vertical is sitting flush against the top timber member and the lower vertical is sitting flush against the bottom timber member.

2. Fix Bremick Timber Connector Nails through the pre-punched holes as described in the image. 4 nails into each timber member.

Purlin to Truss



1

2

1. Locate the Bremick® Unitie into position. The upper vertical is sitting flush against the purlin and the vertical is sitting flush against the truss top chord.

2. Fix Bremick Timber Connector Nails through the pre-punched holes as described in the image. 4 nails into each timber member.

### Notes

1. Use half as many 12-gauge, Type 17 self-drilling screws to Bremick® Timber Connector Nails, to achieve the same capacity. More screws can be applied to boost the tie-down capacity. Screws are drilled through the pre-punched holes.
2. When fastening Bremick Unities with machine fired nails, use the Unities with unpunched holes. Fire the nails around the location of the dimples. Use 32 x 2.5mm galvanised, screw shank nails. 20% more nails should be used to match the capacity of the hand driven Bremick Timber Connector nail.

# Technical Data

## UNITIE

TULPG17032104 • TURPG17032104 • TULUG17032104 • TURUG17032104

UNITIE CAPACITY SINGLE						
Table 1 UPLIFT CAPACITY: 4 - 3.15mm DIAMETER x 35mm MIN NAILS EACH END						
1.2G+WU OR 0.9G-WU						
0.9G-WU	Seasoned Timber Capacity (kN) for a SINGLE UNITIE					
	JD6	JD5	JD4	JD3	JD2	JD1
	1.2	1.6	2.0	2.3	2.3	2.3
JOINT GROUP	Unseasoned Timber Capacity (kN) for a SINGLE UNITIE					
	J6	J5	J4	J3	J2	J1
	0.8	1.1	1.4	2.0	2.3	2.3

UNITIE CAPACITY PAIR						
Table 2 UPLIFT CAPACITY: 4 - 3.15mm DIAMETER x 35mm MIN NAILS EACH END						
1.2G+WU OR 0.9G-WU						
JOINT GROUP	Seasoned Timber Capacity (kN) for a PAIR of UNITIE					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.0	2.8	3.3	4.5	4.5	4.5
JOINT GROUP	Unseasoned Timber Capacity (kN) for a PAIR of UNITIE					
	J6	J5	J4	J3	J2	J1
	1.3	1.8	2.3	3.3	4.5	4.5

# Technical Data

UNITIE CAPACITY DOUBLE PAIR						
Table 3 UPLIFT CAPACITY: 4 - 3.15mm DIAMETER x 35mm MIN NAILS EACH END						
1.2G+WU OR 0.9G-WU						
0.9G-WU	Seasoned Timber Capacity (kN) for a DOUBLE PAIR of UNITIE					
	JD6	JD5	JD4	JD3	JD2	JD1
	3.7	5.0	6.0	8.4	9.0	9.0
JOINT GROUP	Unseasoned Timber Capacity (kN) for a DOUBLE PAIR of UNITIE					
	J6	J5	J4	J3	J2	J1
	2.4	3.3	4.3	6.0	8.4	9.0

- 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.
  - Reduce the tabulated capacities by 20% if 4/3.15 machine driven nails are used to each connected member.
  - Nails must be spaced as per minimum requirements of AS1720.1
  - Loads applied at a limit state wind load, apply additional load factors when designing for other load combinations when using AS1170.1
  - Minimum nail length 35mm. Nails to be tight fit in holes.
  - Connected members must be independently restrained against rolling.
  - Steel capacity to be determined from testing and may govern results. Final capacity for each load case will be taken as the lesser of the timber connection capacity (provided in this document) or steel ultimate capacity (determined from testing) results.



# Stud Tie - Single Sided

## GALVANISED

### Application

The Bremick® Single Sided Stud Tie is a quick and easy method of connecting the wall frame top and bottom plates to the stud.

### Advantages

The Bremick® Truss Ties provides numerous benefits including:

- **Superior tie-down strength:** The stud tie is driven into the side grain of the stud to resist wind uplift in lateral shear. This is far stronger than relying on the withdrawal strength of common nails in the end grain.
- **No splitting of the timber:** When installed correctly, the single sided stud tie is located away from the edges of the timber and therefore prevent the splitting of the timber members. If the timber splits it reduces the strength of the joint significantly. When hand or machine nailing this connection there is a potential for this to occur, particularly with skew nailing.
- **Quick and easy to install:** No need to rotate the frame during manufacture or to fasten to the underside of the frame.
- **Multiple applications:** Can be installed when constructing wall frames onsite or in a factory.
- Pre-punched nail to ease the locating of the Stud Tie into position.

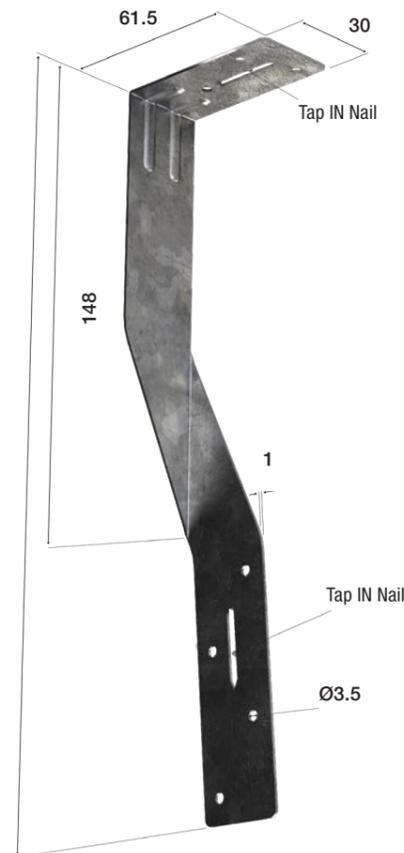
### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.0mm
Width	30mm
Length A	240mm
Length B	60mm
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails (Gal or SS316) 32 x 2.5mm Screw Shank Machine Fastened Nails



### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TSPLG24060104	240mm x 60mm x 30mm x 1.0mm – Left Hand	Z275 – Galvanised	50
TSPRG24060104	240mm x 60mm x 30mm x 1.0mm – Right Hand	Z275 – Galvanised	50
TSULG24060104	240mm x 60mm x 30mm x 1.0mm – Left Hand (Unpunched – For Machine Driven Nail Use)	Z275 – Galvanised	50
TSURG24060104	240mm x 60mm x 30mm x 1.0mm – Right Hand (Unpunched – For Machine Driven Nail Use)	Z275 – Galvanised	50



## Installation Instructions

Stud Tie Single Sided Left Hand

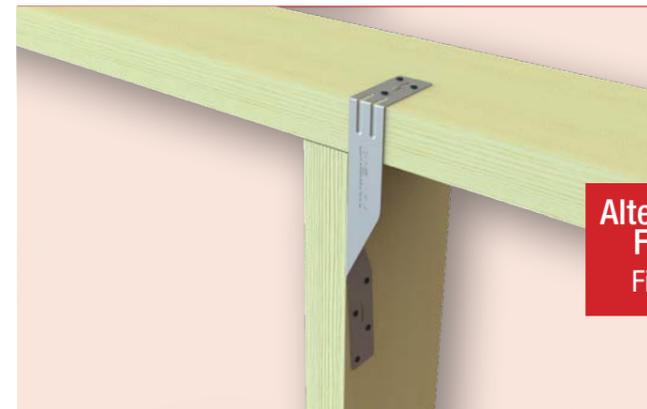


Stud Tie Single Sided Right Hand



Standard Fixing  
Figure1

Stud Tie Single Sided Left Hand

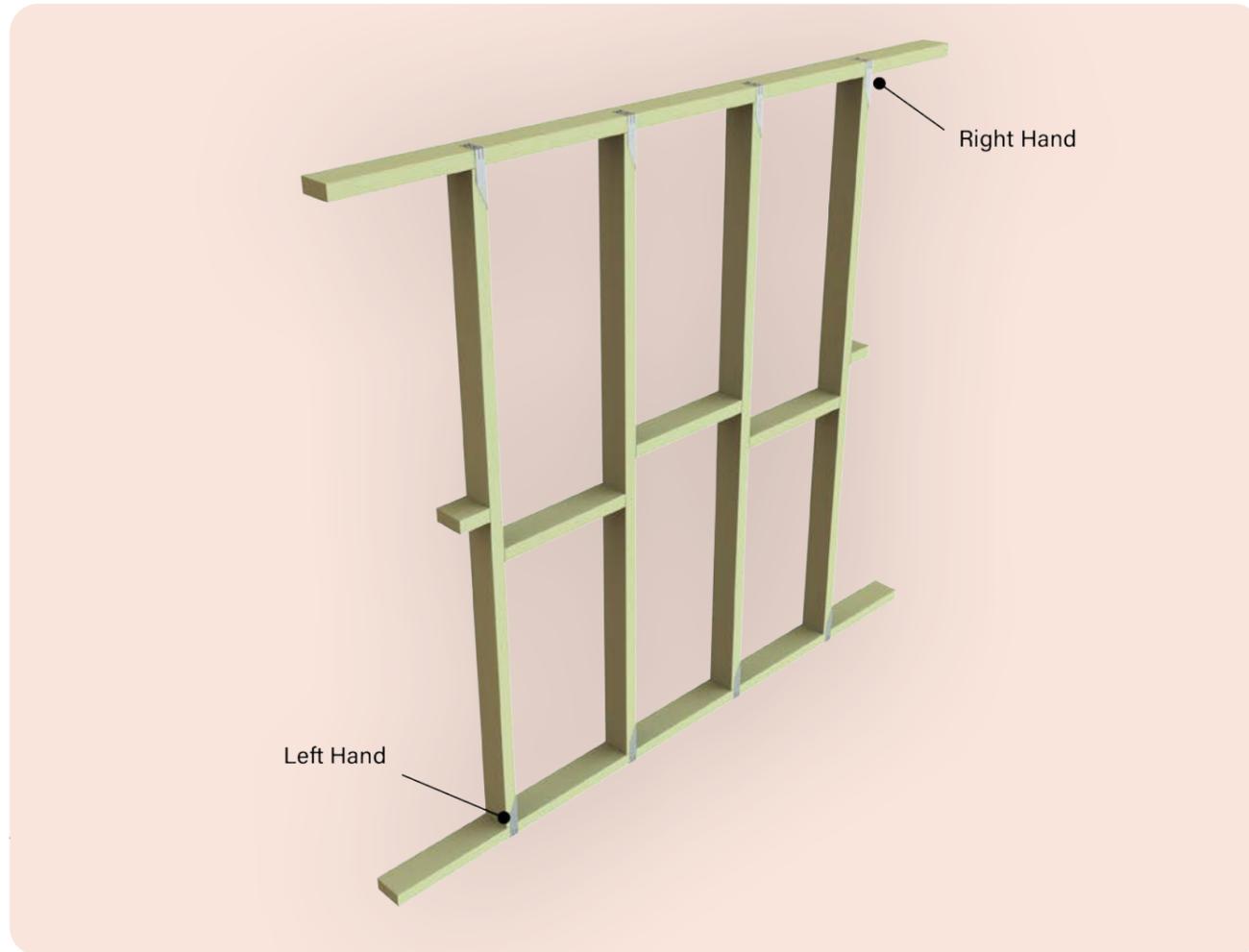


Stud Tie Single Sided Right Hand



Alternative Fixing  
Figure2

# Installation Instructions



**1**

For wall bracing unit connections, the Bremick Single Sided Stud Ties must be fixed on the same side as the wall bracing strap.

**2**

For holding down the wall frame top plate against wind uplift forces from trusses or rafters, ensure that the Bremick Single Sided Stud Tie is fixed on the same side as the tie-down connector.

**3**

Apply the right-handed single sided stud tie for right-handed installation or left-handed single sided stud tie for left-handed installation.

**4**

Locate the single sided stud tie over the stud with the vertical bend in line with the stud corner (standard fixing, see figure 1) or offset to one side (alternate fixing, see figure 2).

**5**

Then, ensure the top angle of the stud tie sits on top of the wall plate.

**6**

Fasten 3 Bremick timber connector nails into the top angle, through the pre-punched holes and into the wall frame top or bottom plate. Then fasten 4 Bremick timber connector nails into the vertical length of the stud tie, through the pre-punched holes and into the stud. As per figures 1 and 2.

## Notes

When fastening Bremick® Single Sided Stud Ties with machine fired nails, use the stud ties with unpunched holes. Fire the nails around the location of the dimples. Use 32 x 2.5mm galvanised, screw shank nails.

# Technical Data

## STUD TIE – SINGLE SIDED

TSPLG24060104 • TSPRG24060104 • TSULG24060104 • TSURG24060104

### STUD TIE (SINGLE) LIMIT STATE WIND LOAD CAPACITY

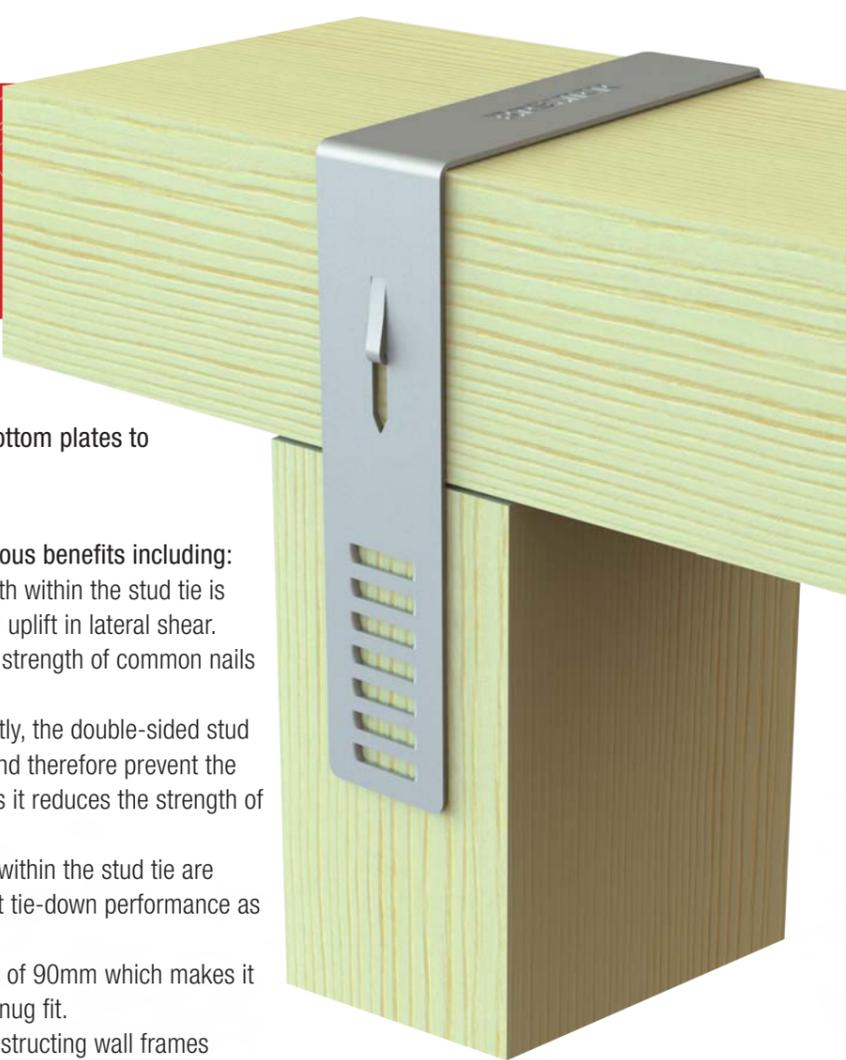
**Table 1** UPLIFT CAPACITY: 4 - 3.15mm DIAMETER x 35mm MIN NAILS EACH END

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	1.2	1.6	2.0	2.3	2.3	2.3
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	0.8	1.1	1.4	2.0	2.3	2.3

### 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.
- Reduce the tabulated capacities by 20% if 4/3.15 machine driven nails are used to each connected member. Nails must be spaced as per minimum requirements of AS1720.1
- Loads applied at a limit state wind load, apply additional load factors when designing for other load combinations when using AS1170.1
- Multiply the values above by the number of unities per joint.
- Minimum nail length 35mm. Nails to be tight fit in holes.
- Connected members must be independently restrained against rolling.
- Steel capacity to be determined from testing and may govern results. Final capacity for each load case will be taken as the lesser of the timber connection capacity (provided in this document) or steel ultimate capacity (determined from testing) results.

# Stud Tie - Double Sided GALVANISED



## Application

The Bremick® Double Sided Stud Tie is a quick and easy method of connecting the wall frame top and bottom plates to the stud.

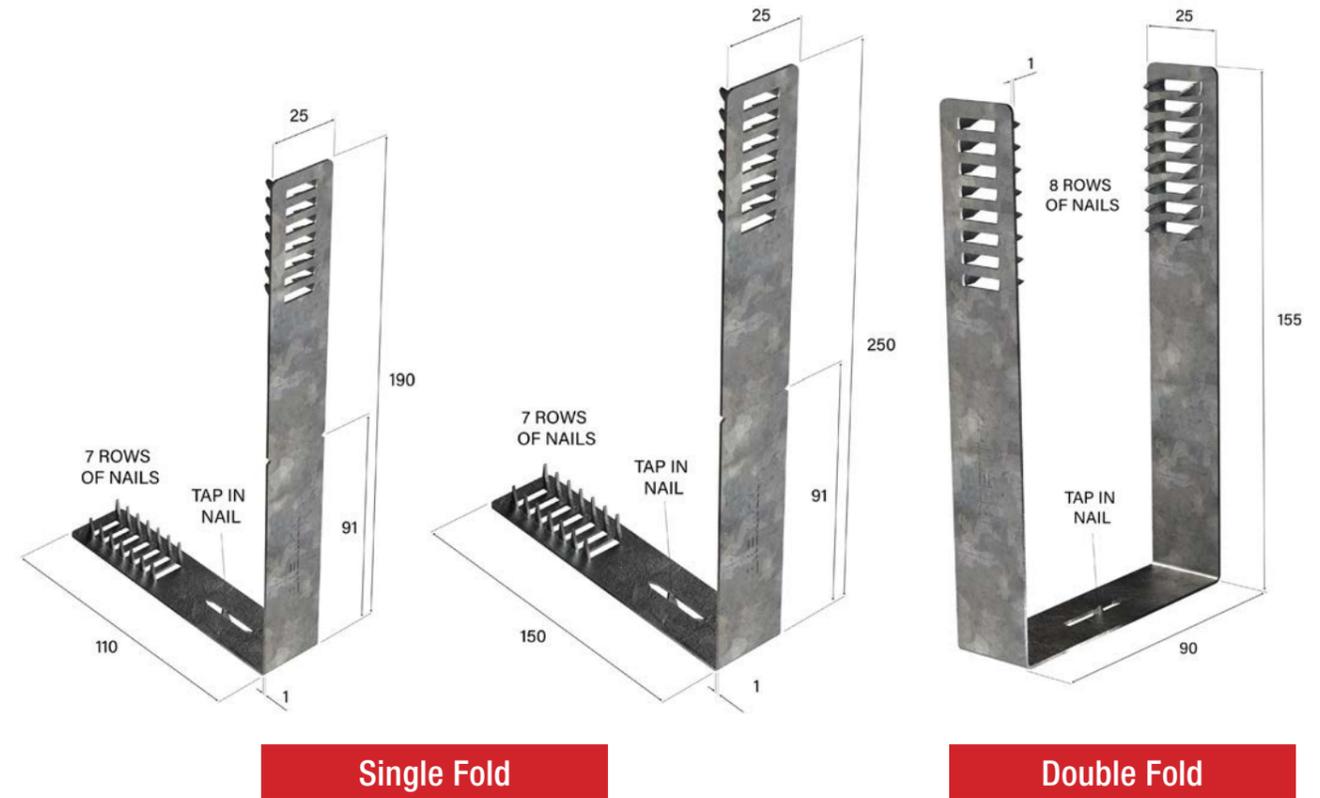
## Advantages

The Bremick® Double Sided Stud Tie provides numerous benefits including:

- **Superior tie-down strength:** The pre-formed teeth within the stud tie is driven into the side grain of the stud to resist wind uplift in lateral shear. This is far stronger than relying on the withdrawal strength of common nails in the end grain.
- **No splitting of the timber:** When installed correctly, the double-sided stud tie is located away from the edges of the timber and therefore prevent the splitting of the timber members. If the timber splits it reduces the strength of the joint significantly.
- **Quick and easy to install:** The pre-formed teeth within the stud tie are easily hammered into position providing consistent tie-down performance as no nails are inadvertently missed. The double folded stud tie has a pre-formed width of 90mm which makes it easy to fit over a 90mm wall plate and provide a snug fit.
- **Multiple applications:** Can be installed when constructing wall frames onsite or in a factory.
- **Complies:** Meets AS1684.4 requirements for use in Type A & B wall bracing units and AS1684.2 and AS1684.3 for use in metal tensioned strap wall bracing units
- Pre-punched nail to ease the locating of the Stud Tie-Double Sided into position.

## Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	1.0mm
Width	25mm
<b>Single Fold</b>	
Length A	190mm; 250mm
Length B	110mm; 150mm
<b>Double Fold</b>	
Length A	155mm
Length B	90mm



## Installation Instructions

Stud Tie Double Sided One Prebend



Stud Tie Double Sided Two Prebend

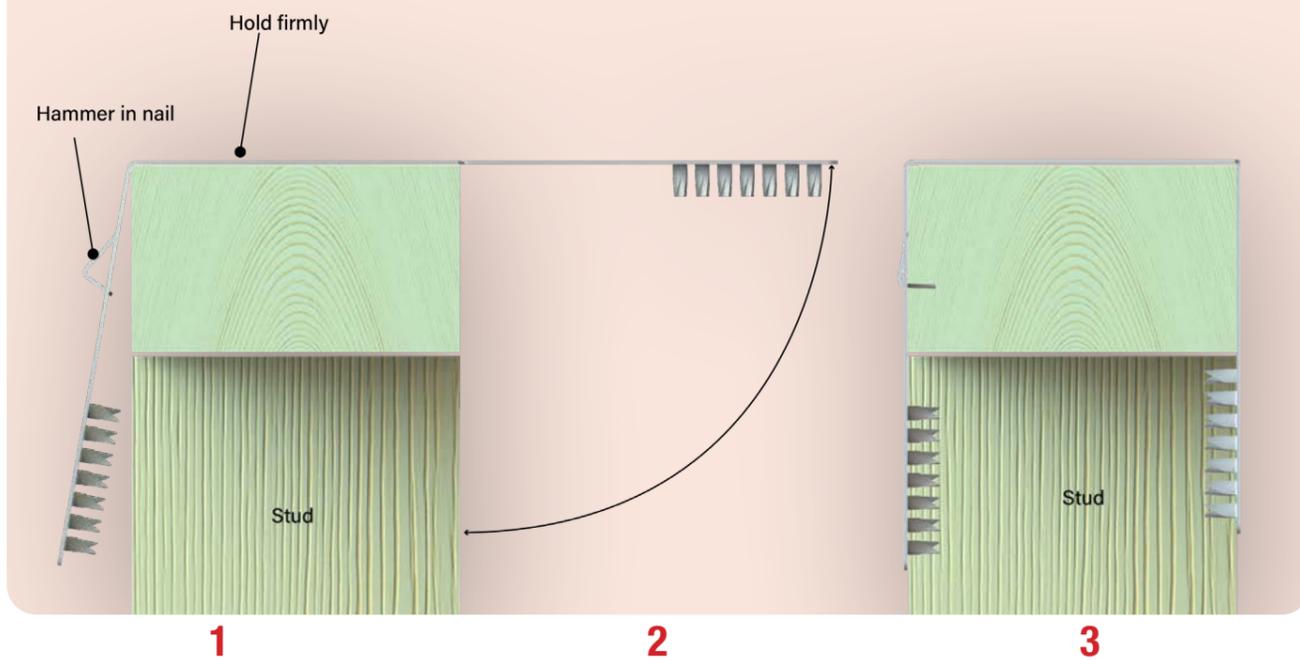


## Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TS1G300025104	190mm x 110mm x 25mm x 1.0mm – Single Fold	Z275 – Galvanised	50
TS1G400025104	250mm x 150mm x 25mm x 1.0mm – Single Fold	Z275 – Galvanised	50
TS2G400025104	155mm x 155mm x 25mm x 1.0mm – Double Fold	Z275 – Galvanised	50

# Installation Instructions

## Wall Bracing Units



1  
Hold Double Sided Stud Tie firmly against the side and face of wall plate with the long leg across the plate.

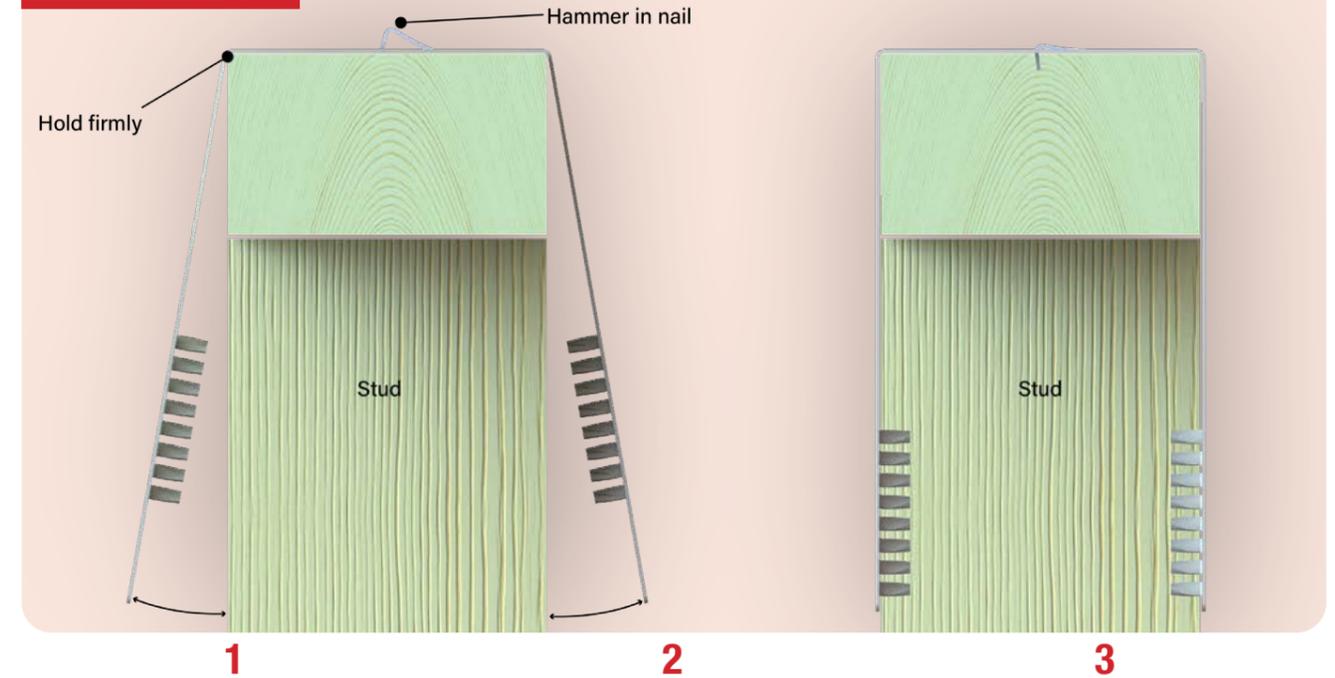
2  
Fasten to wall plate by hammering in the Tap-In Nail.

3  
Hammer pre-formed teeth within the Stud Tie into the stud, then bend outstanding leg around the wall plate.

4  
Once a tight bend has been achieved, hammer remaining pre-formed teeth within the Stud Tie into the other side of the stud.

# Installation Instructions

## Double Fold



1  
Place the Double-Sided Stud Tie over the 90mm wide wall plate.

2  
Ensure the legs of the stud tie are located centrally along the length of the stud.

3  
Fasten to wall plate by hammering in the Tap-In Nail.

4  
Hammer the pre-formed teeth within the Stud Tie into the stud.

5  
Then, ensure the top angle of the stud tie sits on top of the wall plate.

6  
Then hammer the remaining pre-formed teeth within the Stud Tie into the opposite side of the stud.

# Joist Hangers

Bremick Joist Hangers facilitate a quick and easy connection of perpendicular timber members and beams. These are available in standard flange, split and heavy duty configurations.

Joist Hangers

**108**

Heavy Duty Joist Hangers

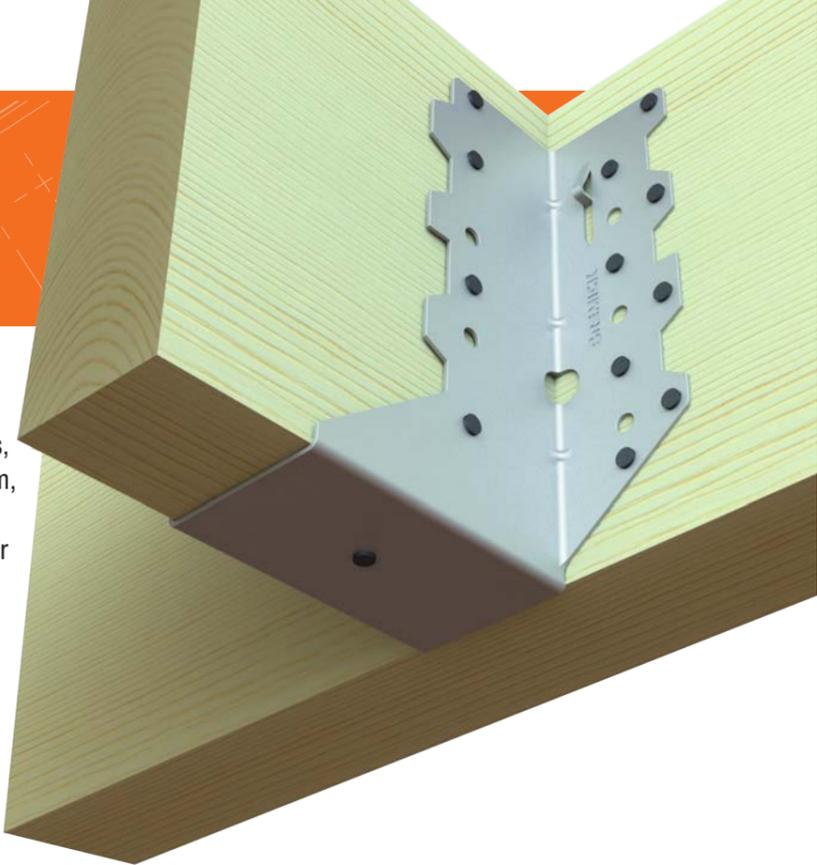
**118**

Split Joist Hangers

**121**

# Joist Hangers

## GALVANISED & SS316



### Application

The Bremick® Joist Hangers are typically used in the construction of the roof frame, carports, decks, gazebos, and pergolas. Typical connections include beam to beam, joists and floor trusses to the face of a beam, standard roof truss to a girder truss, jack truss to truncated girder truss, and right-angle joints.

### Advantages

The Bremick® Joist Hangers provides numerous benefits including:

- **Cost effective.** Simple method of connecting two timber members while achieving the required design loads, without the need for costly onsite skilled labour constructing special jointing connections.
- **Efficient.** Quickly and easily connects the two timber members into a structurally sound application using either Bremick Timber Connector Nails, Bremick Type 17 12-gauge screws or 32 x 2.5mm screw shank machine fired nails.
- **Wide Range.** Available in a range of widths and depths to suit the most common timber sizes.
- **Built-in pre-formed nail in Joist Hanger flange.** Allows the installer to easily hold the hanger in position by simply hammering in the pre-formed nails. They can then more easily, quickly and safely nail off the hanger into the supporting timber member.

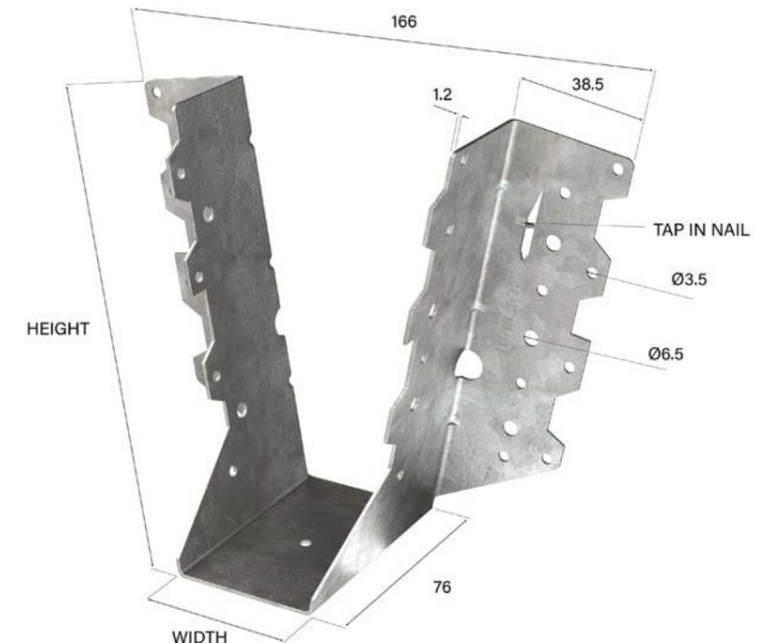
### Specifications

<b>Steel Grade</b>	G300
<b>Coating</b>	Z275 – Galvanised & SS316
<b>Thickness</b>	1.2mm
<b>Width</b>	35mm, 38mm, 45mm & 50mm
<b>Length</b>	90mm, 120mm, 140mm, 180mm & 220mm
<b>Fasteners</b>	Bremick® 35 x 3.15mm Timber Connector Nails (Gal or SS316) 32 x 2.5mm Screw Shank Machine Fastened Nails Bremick® Type 17, 12g x 35mm/65mm Screws

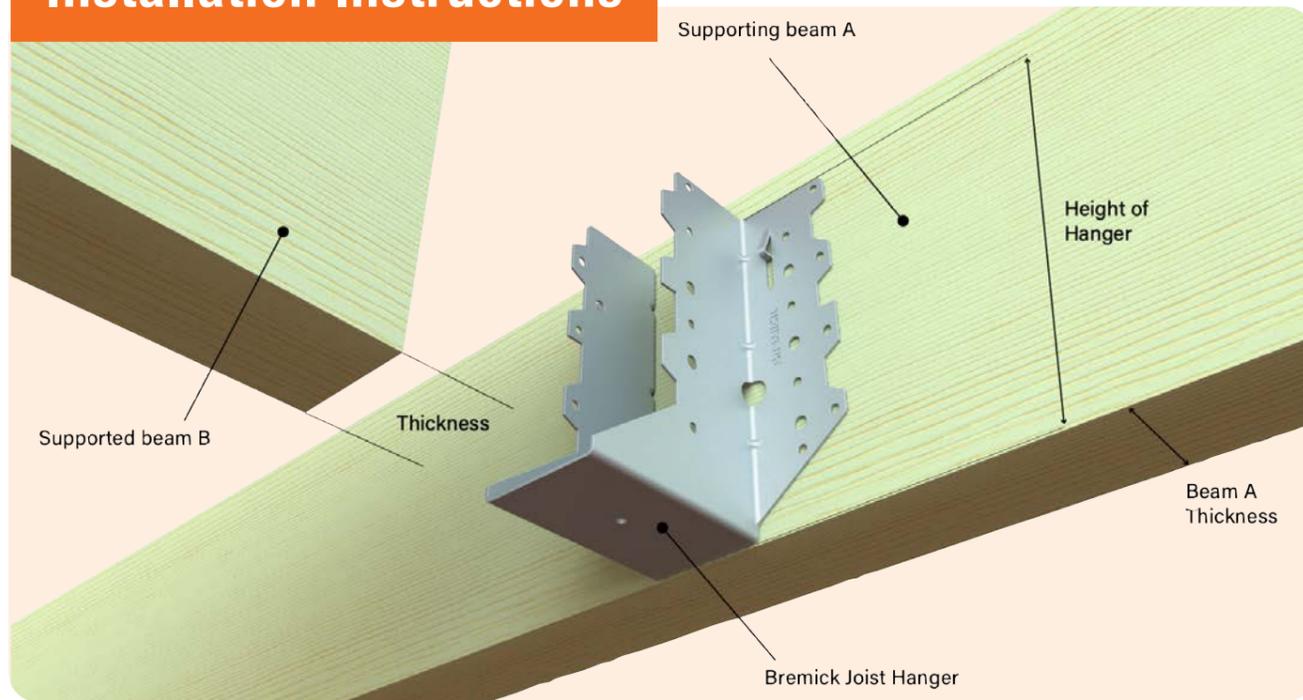


### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TJHG090035124	35mm x 90mm x 1.2mm	Z275 – Galvanised	40
TJHG120035124	35mm x 120mm x 1.2mm	Z275 – Galvanised	40
TJHG140035124	35mm x 140mm x 1.2mm	Z275 – Galvanised	35
TJHG180035124	35mm x 180mm x 1.2mm	Z275 – Galvanised	25
TJHG090038124	38mm x 90mm x 1.2mm	Z275 – Galvanised	40
TJHG120038124	38mm x 120mm x 1.2mm	Z275 – Galvanised	40
TJHG140038124	38mm x 140mm x 1.2mm	Z275 – Galvanised	35
TJHG180038124	38mm x 180mm x 1.2mm	Z275 – Galvanised	25
TJHG090045124	45mm x 90mm x 1.2mm	Z275 – Galvanised	40
TJHG120045124	45mm x 120mm x 1.2mm	Z275 – Galvanised	40
TJHG140045124	45mm x 140mm x 1.2mm	Z275 – Galvanised	35
TJHG180045124	45mm x 180mm x 1.2mm	Z275 – Galvanised	25
TJHG220045124	45mm x 220mm x 1.2mm	Z275 – Galvanised	15
TJHG090050124	50mm x 90mm x 1.2mm	Z275 – Galvanised	40
TJHG120050124	50mm x 120mm x 1.2mm	Z275 – Galvanised	40
TJHG140050124	50mm x 140mm x 1.2mm	Z275 – Galvanised	35
TJHG180050124	50mm x 180mm x 1.2mm	Z275 – Galvanised	25
TJHG220050124	50mm x 220mm x 1.2mm	Z275 – Galvanised	15
TJH6090035124	35mm x 90mm x 1.2mm	SS316	20
TJH6090045124	45mm x 90mm x 1.2mm	SS316	20
TJH6140045124	45mm x 140mm x 1.2mm	SS316	20
TJH6180045124	45mm x 180mm x 1.2mm	SS316	20
TJH6090050124	50mm x 90mm x 1.2mm	SS316	20
TJH6140050124	50mm x 140mm x 1.2mm	SS316	20
TJH6180050124	50mm x 180mm x 1.2mm	SS316	20



# Installation Instructions



1 Select the appropriate joist hanger based on the following criteria:

- a. Joint Groups.
- b. Applied Loads.
- c. Thickness and height of the supported beam, truss or joist. The joist hanger must run at least 2/3 the height of the supported beam.
- d. Thickness and height of the supporting beam.

2 Fix the Bremick Joist Hanger to the supporting beam into the desired position by hammering in the pre-formed nails.

3 Using Bremick Timber Connector Nails or Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's two flanges with the fasteners and fix off into the supporting beam.

4 Place the timber member to be supported into the Joist Hanger so that it is firmly against the supporting timber member.

5 Using Bremick Timber Connector Nails or Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes with the fasteners and fix off into the supported timber member.

## Fixing Table

Joist Hanger Length (mm)	Fixing To			
	Supporting Member		Supported Member	
	35 x 3.15mm Timber Connector Nail	Type 17, 12 Gauge Screw	35 x 3.15mm Timber Connector Nail	Type 17, 12 Gauge Screw
90mm	8	4	4	2
120mm	12	6	6	4
140mm	16	6	8	4
180mm	20	8	10	6
220mm	26	10	13	8

## Notes

When fastening Bremick Joist Hangers with machine fired nails, fire the nails near, but away from away from the pre-punched holes. Use 32 x 2.5mm galvanised, screw shank nails. 20% more nails should be used to match the capacity of the hand driven Bremick Timber Connector nail.

# Technical Data

## JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

TABLE 1 CAPACITY: FOR 6-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 4-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG090035124	JOIST HANGER	90	35	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	3.3	4.1	4.1	7.4	7.9	9.5
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.0	2.7	3.5	4.1	5.4	7.0

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

TABLE 2 CAPACITY: FOR 6-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 4-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG090035124	JOIST HANGER	90	35	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	3.9	5.4	5.8	8.9	11.1	13.4
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.4	3.3	4.3	5.8	7.6	9.9

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

TABLE 3 CAPACITY: FOR 6-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 4-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG090035124	JOIST HANGER	90	35	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	4.4	6.0	6.8	10.0	12.7	15.7
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.7	3.7	4.8	6.7	8.9	11.6

## REMARKS

- Use only Bremick nails with shank a close fit in all of the nail holes.
- The supported member must sit on the base of the joist hanger and the maximum permissible gap between supported member and face of supporting member 2mm
- 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
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Technical Data

## JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 4** CAPACITY: FOR 8-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180038124	JOIST HANGER	180	38	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	4.3	5.3	5.3	9.7	10.2	12.3
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.5	3.5	4.5	5.3	7.0	9.1

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 5** CAPACITY: FOR 8-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180038124	JOIST HANGER	180	38	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	5.2	7.0	7.5	11.7	14.3	17.3
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.1	4.2	5.4	7.5	9.8	12.8

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 6** CAPACITY: FOR 8-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180038124	JOIST HANGER	180	38	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	5.8	7.8	8.8	13.1	16.6	20.3
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.4	4.7	6.1	8.6	11.5	15.0

### REMARKS

- Use only Bremick nails with shank a close fit in all of the nail holes.
- The supported member must sit on the base of the joist hanger and the maximum permissible gap between supported member and face of supporting member 2mm
- 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
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Technical Data

## JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 7** CAPACITY: FOR 13-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 7-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG220045124	JOIST HANGER	220	45	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	5.7	5.7	5.7	10.9	10.9	13.2
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.3	4.5	5.7	5.7	7.4	9.7

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 8** CAPACITY: FOR 13-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 7-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG220045124	JOIST HANGER	220	45	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	6.9	8.0	8.0	15.3	15.3	18.5
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.0	5.5	7.1	8.0	10.5	13.7

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 9** CAPACITY: FOR 13-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 7-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG220045124	JOIST HANGER	220	50	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	7.7	9.4	9.4	17.6	17.9	21.7
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.5	6.1	7.9	9.4	12.3	16.1

### REMARKS

- Use only Bremick nails with shank a close fit in all of the nail holes.
- The supported member must sit on the base of the joist hanger and the maximum permissible gap between supported member and face of supporting member 2mm
- 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
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Technical Data

## JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 10** CAPACITY: FOR 11-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180045124	JOIST HANGER	180	45	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	5.2	5.2	5.2	9.9	9.9	12.0
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.3	4.5	5.2	5.2	6.8	8.9

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 11** CAPACITY: FOR 11-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180045124	JOIST HANGER	220	50	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	6.9	7.3	7.3	13.9	13.9	16.9
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.0	5.5	7.1	7.3	9.5	12.5

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 12** CAPACITY: FOR 11-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180045124	JOIST HANGER	220	50	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	7.7	8.6	8.6	16.4	16.4	19.8
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.5	6.1	7.9	8.6	11.2	14.6

### REMARKS

- Use only Bremick nails with shank a close fit in all of the nail holes.
- The supported member must sit on the base of the joist hanger and the maximum permissible gap between supported member and face of supporting member 2mm
- 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
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Technical Data

## JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 13** CAPACITY: FOR 6-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 4-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG090045124	JOIST HANGER	90	45	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	3.3	3.9	3.9	7.4	7.5	9.1
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.0	2.7	3.5	3.9	5.1	6.7

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 14** CAPACITY: FOR 6-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 4-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG090045124	JOIST HANGER	90	45	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	3.9	5.4	5.5	8.9	10.5	12.7
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.4	3.3	4.3	6.0	7.2	9.4

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 15** CAPACITY: FOR 6-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 4-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG090045124	JOIST HANGER	90	45	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	4.4	6.0	6.5	10.0	12.4	15.0
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.7	3.7	4.8	6.5	8.5	11.1

### REMARKS

- Use only Bremick nails with shank a close fit in all of the nail holes.
- The supported member must sit on the base of the joist hanger and the maximum permissible gap between supported member and face of supporting member 2mm
- 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
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Technical Data

## JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 16** CAPACITY: FOR 10-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180050124	JOIST HANGER	180	45	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	5.2	5.2	5.2	9.9	9.9	12.0
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.0	4.1	5.2	5.2	6.8	8.9

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 17** CAPACITY: FOR 10-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180050124	JOIST HANGER	180	50	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	6.3	7.3	7.3	13.9	13.9	16.8
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.7	5.0	6.5	7.3	9.5	12.4

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 18** CAPACITY: FOR 10-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 6-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG180050124	JOIST HANGER	180	50	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	7.1	8.6	8.6	16.0	16.3	19.8
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.1	5.6	7.2	8.6	11.2	14.6

### REMARKS

- Use only Bremick nails with shank a close fit in all of the nail holes.
- The supported member must sit in the base of the joist hanger and the maximum permissible gap between supported member and face of supporting member 2mm
- 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
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Technical Data

## JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 19** CAPACITY: FOR 11-3.15mm DIAMETER x35mm NAILS USED IN EACH WING AND 7-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG220050124	JOIST HANGER	220	50	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	5.7	5.7	5.7	10.9	10.9	13.2
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.3	4.5	5.7	5.7	7.4	9.7

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 20** CAPACITY: FOR 5-3.15mm DIAMETER NAILS USED IN EACH WING AND 3-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG220050124	JOIST HANGER	220	50	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	6.9	8.0	8.0	15.3	15.3	18.5
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.0	5.5	7.1	8.0	10.5	13.7

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 21** CAPACITY: FOR 5-3.15mm DIAMETER NAILS USED IN EACH WING AND 3-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJHG220050124	JOIST HANGER	220	50	1.2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	7.7	9.4	9.4	17.6	17.9	21.7
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.5	6.1	7.9	9.4	12.3	16.1

### REMARKS

- Use only Bremick nails with shank a close fit in all of the nail holes.
- The supported member must sit on the base of the joist hanger and the maximum permissible gap between supported member and face of supporting member 2mm
- 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
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Heavy Duty Joist Hangers

## GALVANISED

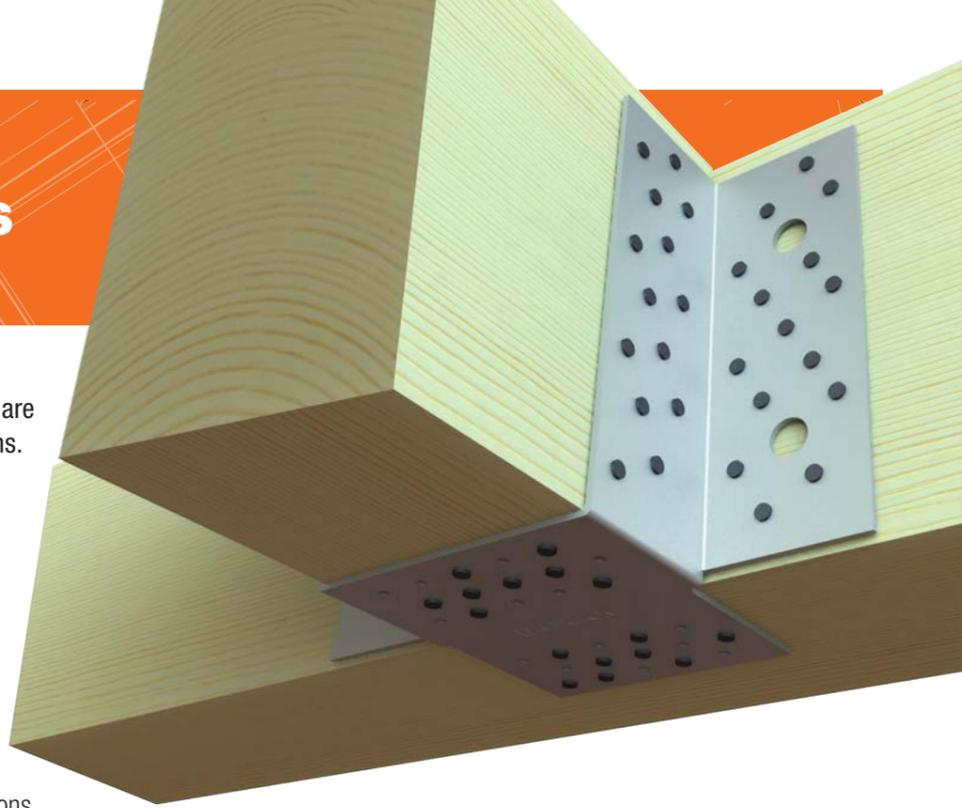
### Application

The Bremick® Heavy Duty Joist Hangers are designed to support heavily loaded beams.

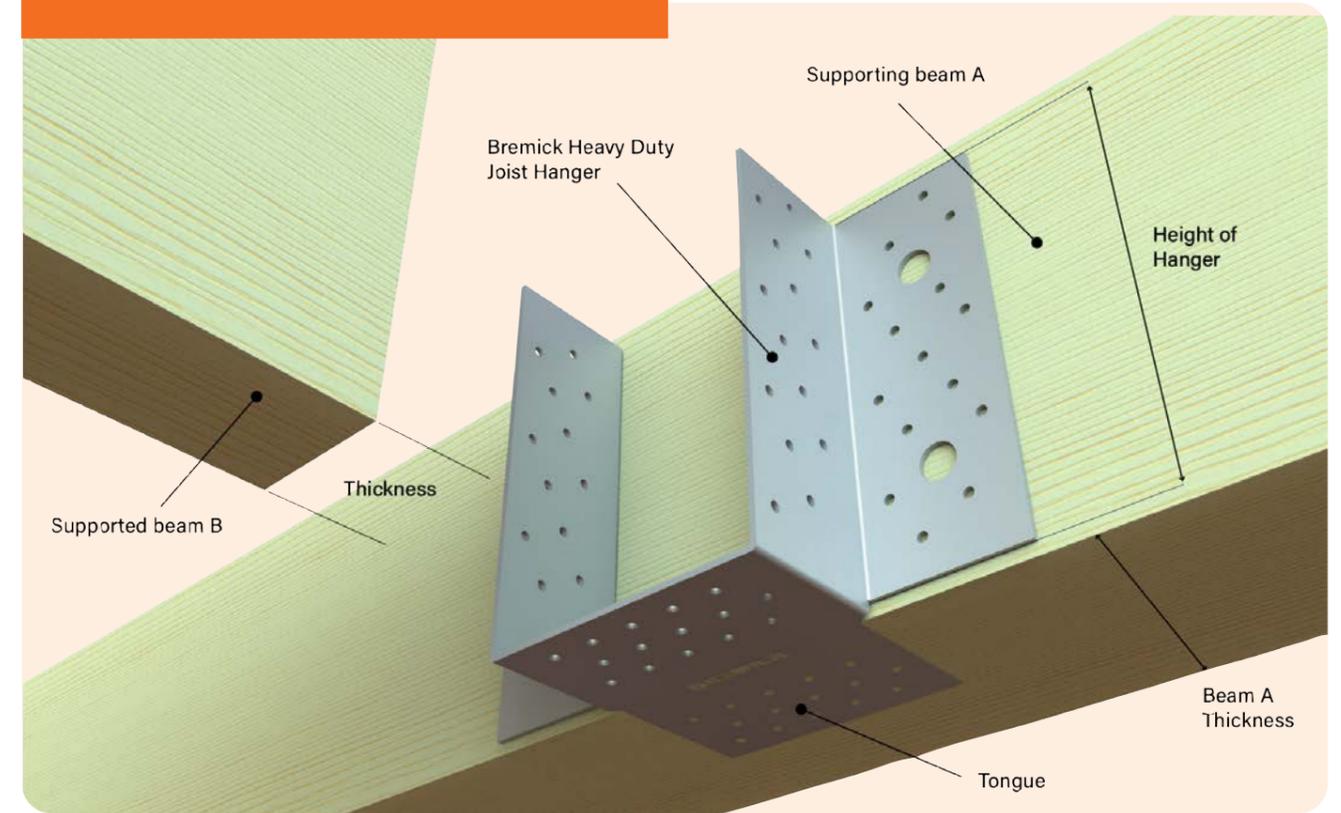
### Advantages

The Bremick® Heavy Duty Joist Hangers provides numerous benefits including:

- **Cost effective.** Simple method of connecting two heavily loaded timber members while achieving the required design loads, without the need for costly onsite skilled labour constructing special jointing connections.
- **Efficient.** Quickly and easily connects the two timber members into a structurally sound application using either Bremick Timber Connector Nails or Bremick Type 17 12-gauge screws.
- **Designed for common applications.** 100mm width and 140mm bracket length accommodates typical applications including double heavy beams, i-joists, roof trusses or heavily loaded floor trusses.
- **Tongue extending out from base of hanger.** For fixing to the supporting beam to resist twisting and rotation.

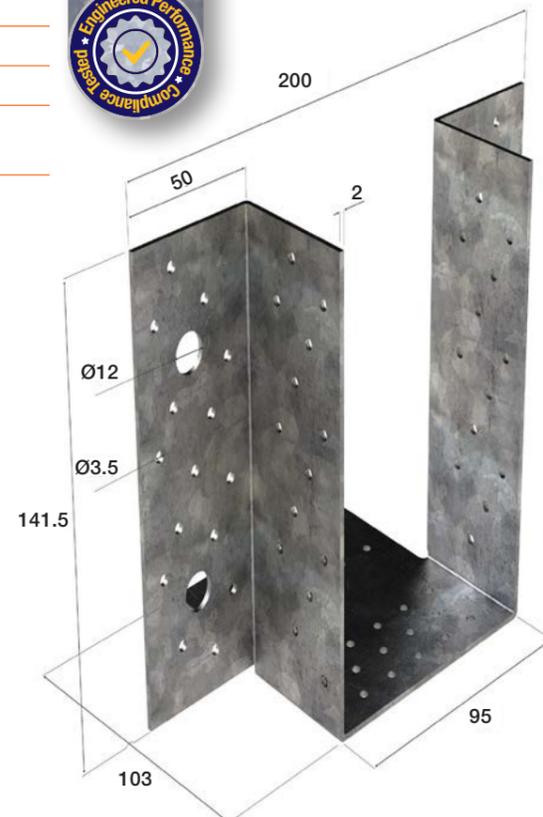


## Installation Instructions



### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	2.0mm
Width	100mm
Length	140mm
Fasteners	Bremick® 35 x 3.15mm Timber Connector Nails Bremick® Type 17, 12g x 35mm/65mm Screws



### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TJDG140100124	140mm x 100mm x 2.0mm	Z275 – Galvanised	10

1

Fix the tongue to the underside of the supporting beam (Beam A) using 4 x Bremick 3.15 x 35mm timber connector nails or 4 x 12-gauge Type 17 screws. For double laminated beams, at least 3 nails or screws should be fixed into each laminate.

2

Using Bremick Timber Connector Nails or Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's two flanges with the fasteners and fix off into the supporting beam (Beam A). When fastening into double laminated beams, use fasteners of at least 65mm.

3

Locate supported beam (Beam B) into the heavy-duty joist hanger, so that it is sitting firmly against the supporting beam (Beam A). Note the beam must be at least 140mm depth. The bracket must cover at least 60% of the beam's depth.

4

Using Bremick Timber Connector Nails or Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes with the fasteners and fix off into the supported timber member (Beam B).

### Fixing Table

Joist Hanger Length (mm)	Fixing To			
	Supporting Member		Supported Member	
	35 x 3.15mm Timber Connector Nail	Type 17, 12 Gauge Screw	35 x 3.15mm Timber Connector Nail	Type 17, 12 Gauge Screw
140mm	30	12	18	8

### Notes

Do not nail or screw within 30mm of the ends of the timber beams or within 6mm of the beam edges.

# Technical Data

## HEAVY DUTY JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 1** CAPACITY: 15-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 13-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJDG140100124	JOIST HANGER	141	95	2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	5.2	7.1	7.9	11.9	14.9	18.1
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.0	4.1	5.3	7.5	10.2	13.4

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 2** CAPACITY: 15-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 13-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJDG140100124	JOIST HANGER	141	95	2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	6.3	8.6	10.3	14.4	18.3	24.3
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.7	5.0	6.5	9.1	12.8	16.3

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 3** CAPACITY: 15-3.15mm DIAMETER x 35mm NAILS USED IN EACH WING AND 13-3.15mm DIAMETER NAILS TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	WIDTH (mm)	THICKNESS (mm)	
	TJDG140100124	JOIST HANGER	141	95	2	
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	7.1	9.6	11.5	16.0	20.4	27.1
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.1	5.6	7.2	10.2	14.3	18.2

### REMARKS

- Use only Bremick nails with shank a close fit in all of the nail holes.
- The supported member must sit on the base of the joist hanger and the maximum permissible gap between supported member and face of supporting member 2mm
- 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
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

## Split Joist Hangers GALVANISED

### Application

The Bremick® Split Joist Hangers are typically used to provide a heavy-duty connection for non-standard solid timber beam widths to supporting beams. Common applications include beam to beam, waling plate to stud and corner beam connections, where clearance is required.

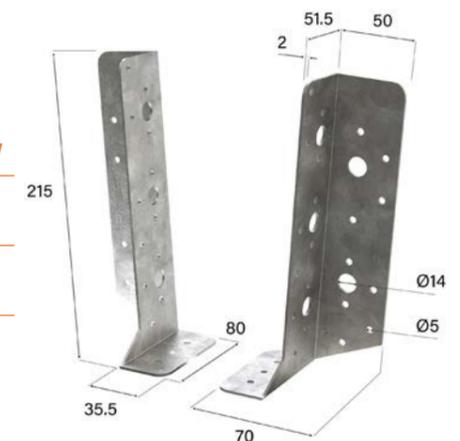
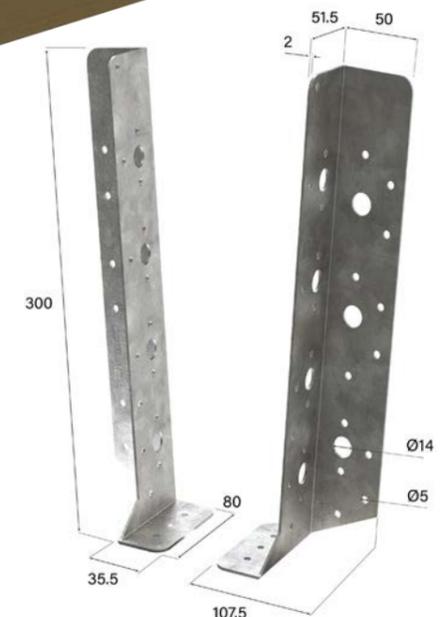
### Advantages

The Bremick® Joist Hangers provides numerous benefits including:

- **Cost effective.** Simple method of connecting two heavily loaded timber members while achieving the required design loads, without the need for costly onsite skilled labour constructing special jointing connections.
- **Efficient.** Quickly and easily connects the two timber members into a structurally sound application using Bremick Type 17 12-gauge screws.
- **Flexibility.** 200mm width and 300mm bracket length accommodates typical heavy beams of varying widths.
- **Easy.** No requirement to select a hanger to suit the beam width.

### Specifications

Steel Grade	G300
Coating	Z275 – Galvanised
Thickness	2.0mm
Width A	70mm, 107mm
Width B	80mm
Length	215mm, 300mm
Fasteners	Bremick® Type 17, 12g x 35mm/65mm Screws



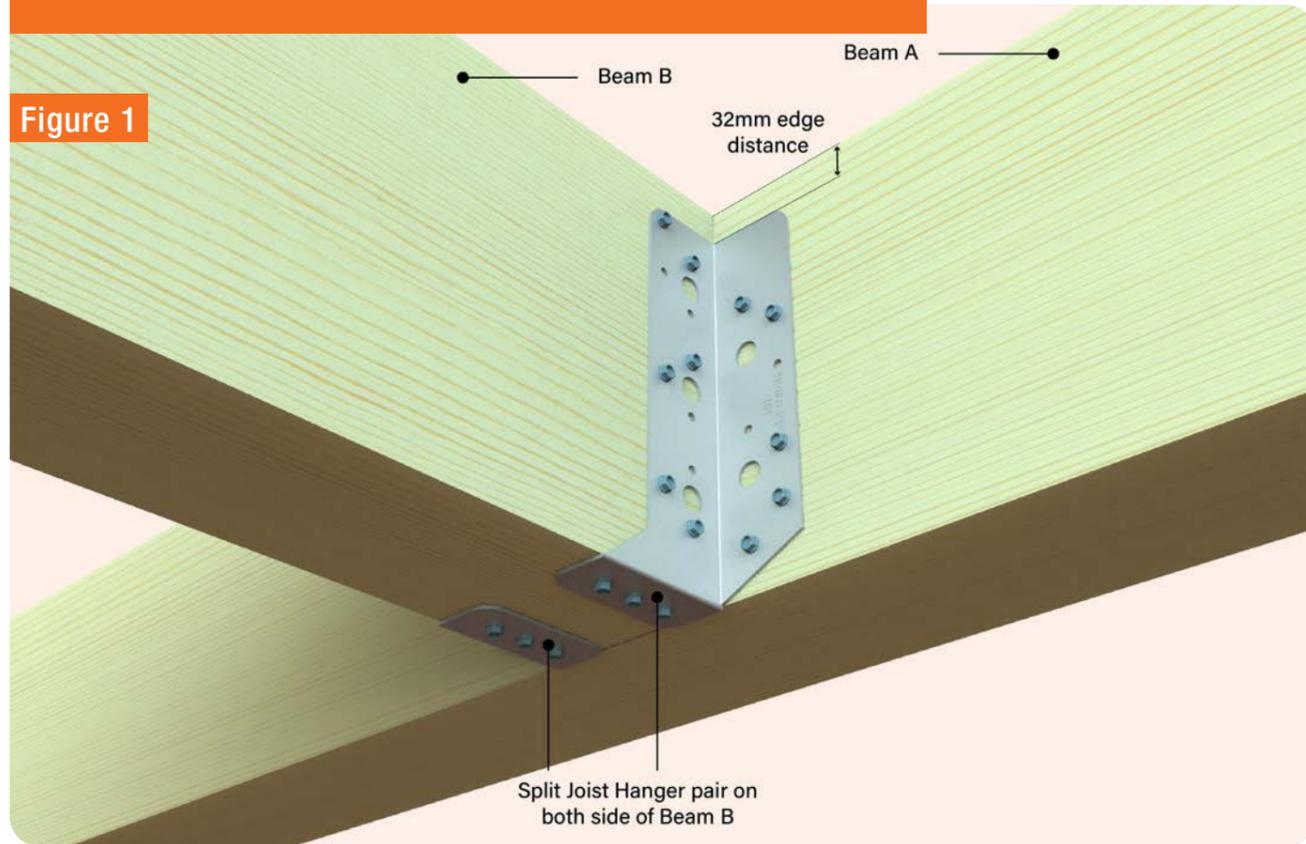
### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TJPG200000204	215mm x 70mm x 80mm x 2.0mm	Z275 – Galvanised	5 pairs
TJPG300000204	300mm x 107mm x 80mm x 2.0mm	Z275 – Galvanised	5 pairs

# Installation Instructions

Standard

Figure 1



1

2

3

Locate the first split joist hanger into position on the supporting beam (Beam A). As per **figure 1**. Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the supporting beam (Beam A).

Measured the required distance between the two split joist hangers. Then locate the second split hanger into position on the supporting beam (Beam A). Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the supporting beam (Beam A).

When fastening into double laminated beams, use fasteners of at least 65mm.

4

5

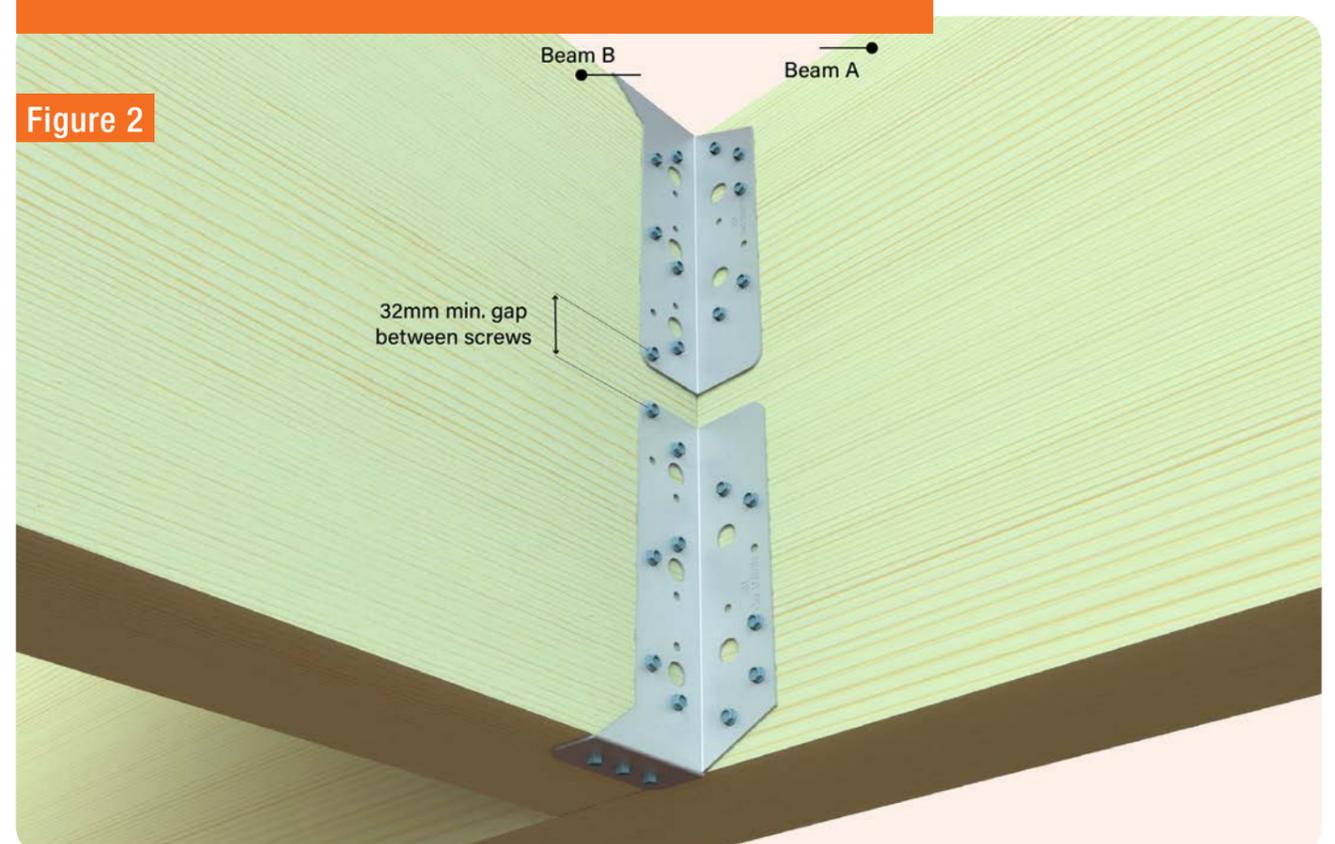
- Locate supported beam (Beam B) into the split joist hanger, so that it is sitting firmly against the supporting beam (Beam A).
- Note the beam must be at least 200mm deep. The bracket must cover at least 60% of the beam's depth.

Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes with the fasteners and fix off into the supported timber member (Beam B).

# Installation Instructions

Stacked on one side

Figure 2



1

2

3

Locate the first split joist hanger into position on the supporting beam (Beam A). As per **figure 2**. Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the supporting beam (Beam A).

Measured the required distance between the two split joist hangers. Then locate the second split hanger into position on the supporting beam (Beam A). As per **figure 2**. Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the supporting beam (Beam A).

When fastening into double laminated beams, use fasteners of at least 65mm.

4

5

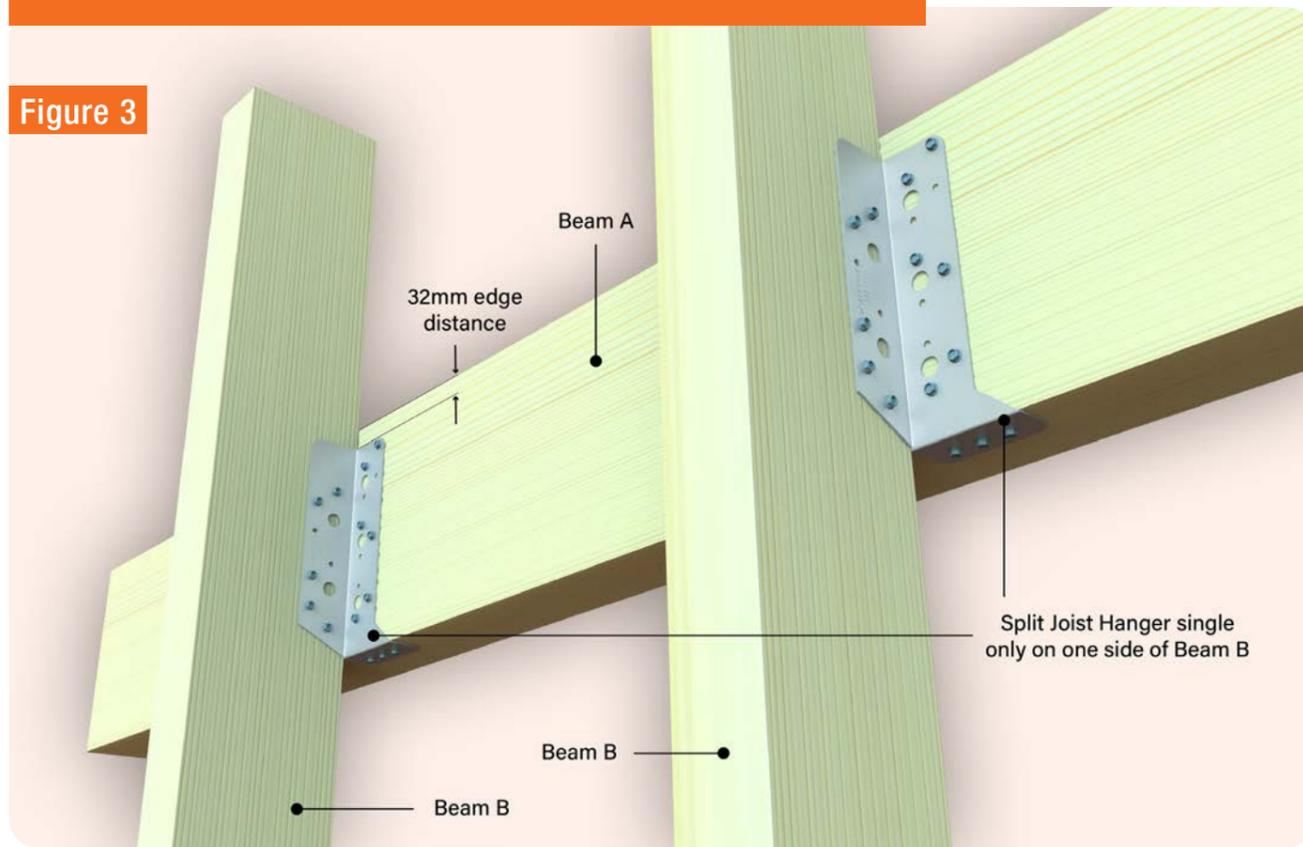
Locate supported beam (Beam B) into the split joist hanger, so that it is sitting firmly against the supporting beam (Beam A) and the tabs of the split joist hangers are sitting snug against the top and bottom of Beam B.

Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes with the fasteners and fix off into the supported timber member (Beam B).

# Installation Instructions

## Waling Plate Connection

**Figure 3**



**1**

**2**

**3**

Locate the first split joist hanger into position on the waling plate (Beam A) and the second flange sits against the stud (Beam B). As per figure 3.

Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the waling plate.

Then, using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the stud.

**4**

Repeat steps above for the second split joist hanger.

### Fixing Table

Joist Hanger Length (mm)	Fixing To	
	Supporting Member (Beam A)	Supported Member (Beam B)
	Type 17, 12 Gauge Screw	Type 17, 12 Gauge Screw
	<b>Standard</b>	
200mm	10	8
300mm	16	12
	<b>Stacked</b>	
200mm	12	10
300mm	18	14
	<b>Waling Plate</b>	
200mm	8	6
300mm	12	10

# Technical Data

## SPLIT JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 1** CAPACITY: FOR 10/12 gauge SCREWS x 50mm USED IN EACH WING AND 11/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	THICKNESS (mm)		
	TJPG200000204	JOIST HANGER	215	2		
	Seasoned Timber Capacity (kN)					
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	3.2	4.4	6.3	8.8	11.2	14.9
	Unseasoned Timber Capacity (kN)					
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.1	3.2	4.4	6.3	8.8	11.2

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 2** CAPACITY: FOR 10/12 gauge SCREWS x 50mm USED IN EACH WING AND 11/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	THICKNESS (mm)		
	TJPG200000204	JOIST HANGER	215	2		
	Seasoned Timber Capacity (kN)					
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	3.9	5.4	7.6	10.7	13.6	18.0
	Unseasoned Timber Capacity (kN)					
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.5	3.9	5.4	7.6	10.7	13.6

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 3** CAPACITY: FOR 10/12 gauge SCREWS x 50mm USED IN EACH WING AND 11/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	THICKNESS (mm)		
	TJPG200000204	JOIST HANGER	215	2		
	Seasoned Timber Capacity (kN)					
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	4.4	6.0	8.5	11.9	15.1	20.1
	Unseasoned Timber Capacity (kN)					
JOINT GROUP	J6	J5	J4	J3	J2	J1
	2.8	4.4	6.0	8.5	11.9	15.1

### REMARKS

- Use only Bremick screws with shank a close fit in all of the screw holes.
- The maximum permissible gap between supported member and face of supporting member 2mm
- 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
- Values for 35mm screws multiply values by 0.84
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Technical Data

## SPLIT JOIST HANGER

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 4** CAPACITY: FOR 12/12 gauge SCREWS x 50mm USED IN EACH WING AND 15/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	THICKNESS (mm)		
	TJPG300000204	JOIST HANGER	300	2		
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	6.1	8.3	11.7	16.5	20.9	27.8
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	3.9	6.1	8.3	11.7	16.5	20.9

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 5** CAPACITY: FOR 12/12 gauge SCREWS x 50mm USED IN EACH WING AND 15/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	THICKNESS (mm)		
	TJPG300000204	JOIST HANGER	300	2		
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	7.3	10.0	14.2	20.0	25.3	33.6
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	4.7	7.3	10.0	14.2	20.0	25.3

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 6** CAPACITY: FOR 12/12 gauge SCREWS x 50mm USED IN EACH WING AND 15/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

	CODE	PRODUCT	HEIGHT (mm)	THICKNESS (mm)		
	TJPG300000204	JOIST HANGER	300	2		
Seasoned Timber Capacity (kN)						
JOINT GROUP	JD6	JD5	JD4	JD3	JD2	JD1
	8.2	11.2	15.8	22.3	28.3	37.5
Unseasoned Timber Capacity (kN)						
JOINT GROUP	J6	J5	J4	J3	J2	J1
	5.3	8.2	11.2	15.8	22.3	28.3

### REMARKS

- Use only Bremick screws with shank a close fit in all of the screw holes.
- The maximum permissible gap between supported member and face of supporting member 2mm
- 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
- Values for 35mm screws multiply values by 0.84
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# Post Supports



Bremick Post Supports are designed primarily for anchoring posts to a concrete foundation. Bremick offers a comprehensive range of market accepted Post Support designs suited for both dry and wet concrete applications.

Heavy Duty T Blade Post Anchor  
& Base Plate Cap **130**

T Blade Bolt Down  
& Base Plate Cap Kit **136**

Heavy Duty U-Cup Bolt Down **140**

Adjustable U-Cup Bolt Down **143**

Full Stirrup **146**

Full Stirrup – Solid Stem **153**

Half Stirrup **156**

Half Stirrup – Solid Stem **160**

Cyclonic/High Wind **163**

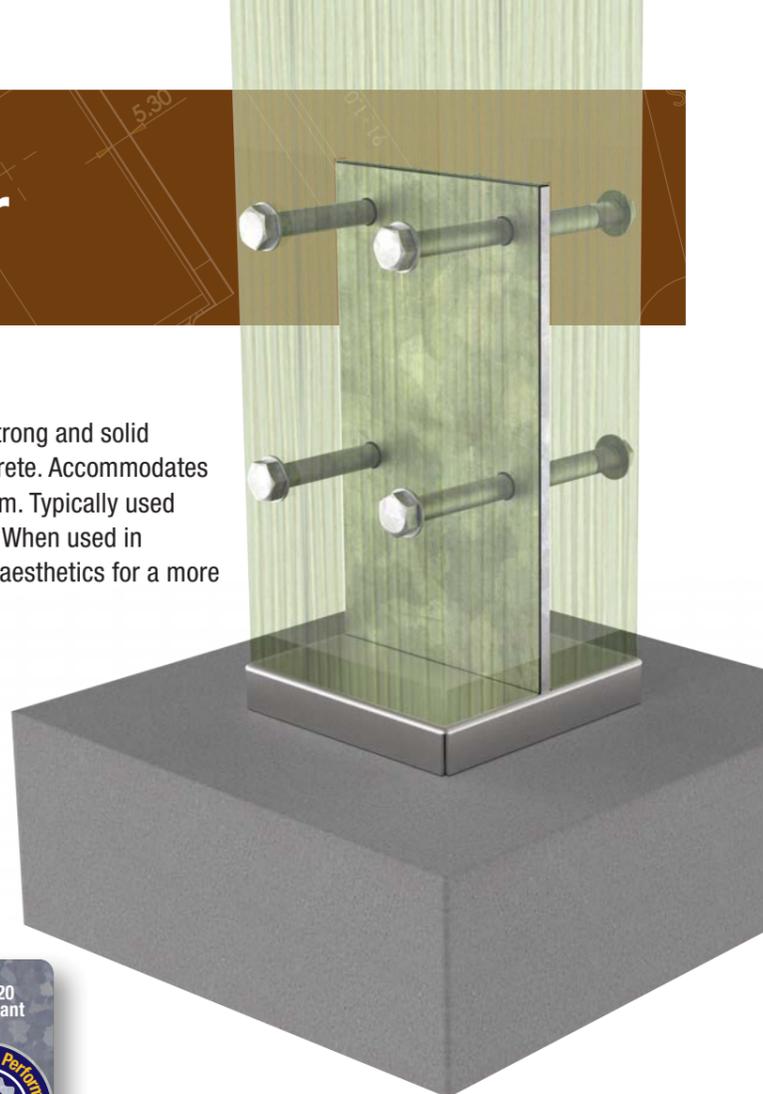
Centre Fix **167**

Centre Pin **171**

Adjustable **175**

# Heavy Duty T Blade Post Anchor

## GALVANISED & SS304



### Application

The Bremick® Heavy Duty T Blade Post Anchor provides a strong and solid connection when used for locating posts onto existing concrete. Accommodates square timber posts ranging in widths from 90mm to 350mm. Typically used during the construction of pergolas, carports, or verandahs. When used in conjunction with the Base Plate Cap they provide improved aesthetics for a more decorative appearance.

### Advantages

The Bremick® Heavy Duty T Blade Post Anchor provides numerous benefits including:

- Hot dipped Galvanised coating for long term protection against corrosion or stainless steel 304 for superior protection against corrosion.
- 10 or 12mm thickness for extra strength.
- Base Plate Cap conceals base plate fixings (sold separately).
- Timber post sits on base plate cap to help prevent the base of the post sitting in pools of water.
- Welded construction for strength.

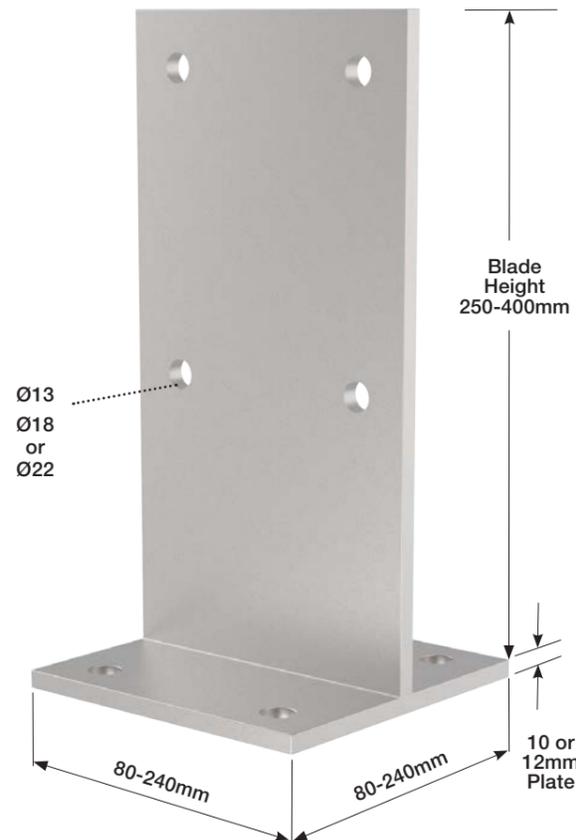


### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG), Stainless Steel (304)
Thickness	10 or 12mm
Blade Height	250 – 400mm
Blade Width	80 – 240mm
Fasteners	M12 – M20 Bolts, Nuts and Washers
Posts	90 – 350mm

### Dimensions

Post Size	Size - Base Plate (mm)	Blade Height (mm)	Thick-ness (mm)	Bolt Size
90 - 100mm	80	250	10	M12
115 - 140mm	110	275	10	M16
150 - 180mm	140	300	10	M16
180 - 250mm	180	350	10	M16
250 - 350mm	240	400	12	M20



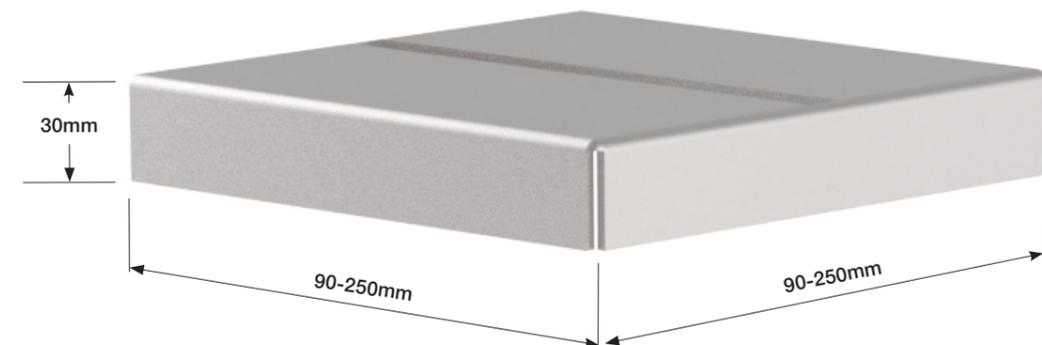
### Bremick® Ranging – Hot Dipped Galvanised & Stainless Steel 304 T Blade Post Anchor

Product Code	Suits Post	Coating	Pack Qty
PTBG080250104	90 - 100mm	HDG	4
PTBG110275104	115 - 140mm	HDG	4
PTBG140300104	150 - 180mm	HDG	4
PTBG180350104	180 - 250mm	HDG	2
PTBG240400104	250 - 350mm	HDG	1

PTB4080250104	90 - 100mm	SS304	4
PTB4110275104	115 - 140mm	SS304	4
PTB4140300104	150 - 180mm	SS304	2
PTB4180350104	180 - 250mm	SS304	2
PTB4240400104	250 - 350mm	SS304	1

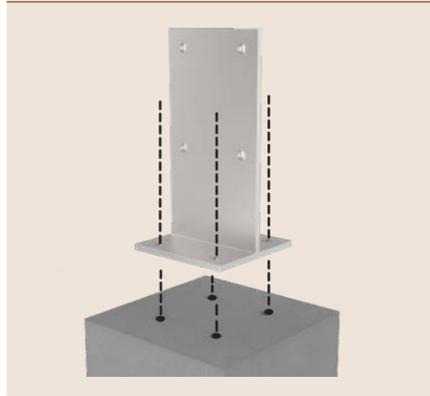
### Bremick® Ranging – Stainless Steel 304 Base Plate Cap (sold separately)

Product Code	Suits Base Plate size	Coating	Pack Qty
PTB4CAP090304	80 x 80mm	SS304	4
PTB4CAP120304	110 x 110mm	SS304	4
PTB4CAP150304	140 x 140mm	SS304	2
PTB4CAP190304	180 x 180mm	SS304	2
PTB4CAP250304	240 x 240mm	SS304	1



## Installation Instructions

1



2



3



- Determine the centerline of the T blade post anchor in both projection and width.
- Place the post anchor back into position and make sure the post anchor is square to both the directions.
- Mark the 4 x holes to be drilled through the bolt holes in the base of the post anchor.
- 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.

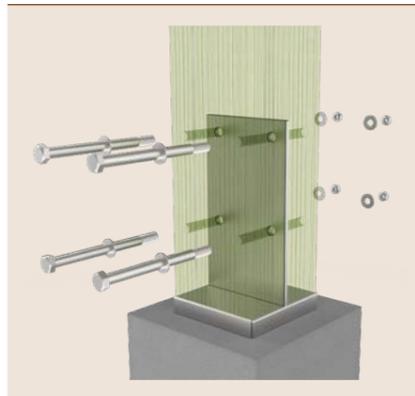
- Relocate the post anchor back into position.
- With a spirit level make sure the post anchor is perpendicular to the patio or concrete slab. If not, washers can be used between the post anchor and concrete to level the post anchor.
- Place the concrete screw-in anchor through the holes in the post anchor base plate and into the pre-drilled holes.

- Tighten the screw-in anchor down onto the post anchor's base plate.
- Place base plate cap over fasteners by sliding the cap over the blade, working the cap into position over the base plate.

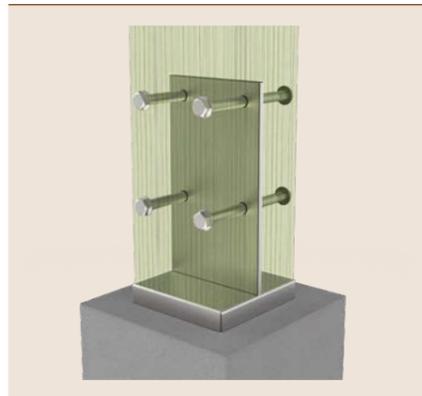
4



5



6

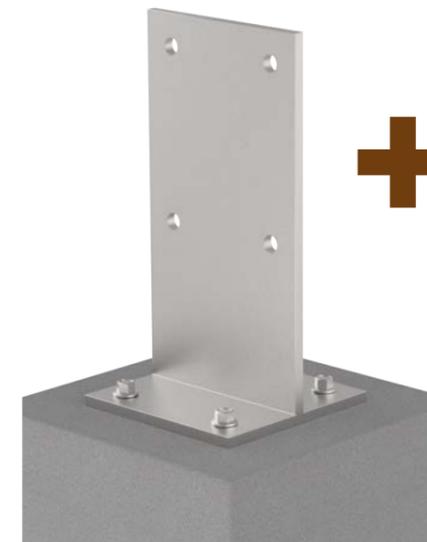


- Use a circular saw to cut a 10mm slot (or a 12mm slot for PTBG240400104, PTB4240400104) through the centre of the post to a depth of blade height.
- Mark side hole locations onto the post using another blade as a stencil.
- Place timber upright over the blade. Ensure the post bears onto the base of the base plate cap and is vertically plumb.

- Drill holes to accommodate appropriately sized bolts 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 the blade.

- Feed the 4 x appropriate sized bolts through the bolt holes of the centre blade 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.

## Installation Instructions



**T BLADE**



**BASE PLATE CAP**

**ASSEMBLED**

# Technical Data

## HEAVY DUTY T BLADE POST ANCHOR

LIMIT STATE UPLIFT CAPACITY (WIND LOAD) - HOT DIPPED GALVANISED					
JOINT GROUP	Seasoned Timber Capacity (kN)				
	JD5	JD4	JD3	JD2	JD1
M12 Bolts x 2	17	19	24	26	31
M12 Bolts x 4	33	38	47	50	50
M16 Bolts x 2	29	33	37	37	37
M16 Bolts x 4	37	37	37	37	37
M20 Bolts x 2	36	36	36	36	36
M20 Bolts x 4	36	36	36	36	36
JOINT GROUP	Unseasoned Timber Capacity (kN)				
	J5	J4	J3	J2	J1
M12 Bolts x 2	13	15	19	21	25
M12 Bolts x 4	26	30	38	42	49
M16 Bolts x 2	23	26	33	36	37
M16 Bolts x 4	37	37	37	37	37
M20 Bolts x 2	28	33	36	36	36
M20 Bolts x 4	36	36	36	36	36

LIMIT STATE UPLIFT CAPACITY (WIND LOAD) - STAINLESS STEEL 304					
JOINT GROUP	Seasoned Timber Capacity (kN)				
	JD5	JD4	JD3	JD2	JD1
M12 Bolts x 2	17	19	24	26	31
M12 Bolts x 4	33	38	41	41	41
M16 Bolts x 2	29	30	30	30	30
M16 Bolts x 4	30	30	30	30	30
M20 Bolts x 2	30	30	30	30	30
M20 Bolts x 4	30	30	30	30	30
JOINT GROUP	Unseasoned Timber Capacity (kN)				
	J5	J4	J3	J2	J1
M12 Bolts x 2	13	15	19	21	25
M12 Bolts x 4	26	30	38	41	41
M16 Bolts x 2	23	26	30	30	30
M16 Bolts x 4	27	30	30	30	30
M20 Bolts x 2	30	30	30	30	30
M20 Bolts x 4	30	30	30	30	30

### 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.
- There must be 4 fixings to the supporting structure (to be designed by others) to achieve the specified uplift capacity.
- Post must be at least as wide as the base plate.
- There must be at least 7 x the bolt diameter end distance in the timber (from the bottom of the timber to the first bolt) to achieve the above wind uplift capacities.

# Technical Data

## HEAVY DUTY T BLADE POST ANCHOR

LIMIT STATE COMPRESSION CAPACITY (DEAD LOAD) - HOT DIPPED GALVANISED					
JOINT GROUP	Seasoned Timber Capacity (kN)				
	JD5	JD4	JD3	JD2	JD1
M12 Bolts x 2	8	9	12	13	15
M12 Bolts x 4	17	19	24	27	31
M16 Bolts x 2	15	17	21	24	28
M16 Bolts x 4	30	35	43	48	56
M20 Bolts x 2	24	27	34	37	44
M20 Bolts x 4	47	55	68	75	88
JOINT GROUP	Unseasoned Timber Capacity (kN)				
	J5	J4	J3	J2	J1
M12 Bolts x 2	6	7	9	10	12
M12 Bolts x 4	13	15	19	21	25
M16 Bolts x 2	12	13	17	19	22
M16 Bolts x 4	24	27	35	38	45
M20 Bolts x 2	18	21	27	29	35
M20 Bolts x 4	36	43	55	59	70

LIMIT STATE COMPRESSION CAPACITY (DEAD LOAD) - STAINLESS STEEL 304					
JOINT GROUP	Seasoned Timber Capacity (kN)				
	JD5	JD4	JD3	JD2	JD1
M12 Bolts x 2	8	9	12	13	15
M12 Bolts x 4	17	19	24	27	31
M16 Bolts x 2	15	17	21	24	28
M16 Bolts x 4	30	35	43	48	56
M20 Bolts x 2	24	27	34	37	44
M20 Bolts x 4	46	55	68	75	88
JOINT GROUP	Unseasoned Timber Capacity (kN)				
	J5	J4	J3	J2	J1
M12 Bolts x 2	6	7	9	10	12
M12 Bolts x 4	13	15	19	21	25
M16 Bolts x 2	12	13	17	19	22
M16 Bolts x 4	24	27	35	38	45
M20 Bolts x 2	17	21	27	29	35
M20 Bolts x 4	34	43	55	59	70

### REMARKS

- Downward values applicable when:
- The T Blade is sitting on a level surface and secure fixed in place.
  - The timber post is securely bolted.
  - The post is centred in the T Blade.
  - The post is sitting down snug into the T Blade (no gap between blade and timber post).
  - Posts must be at least as wide as the base plate.

# T Blade Bolt Down & Base Plate Cap Kit

## GALVANISED

### Application

The Bremick® T Blade Bolt Down & Base Plate Cap Kit provides a strong and solid connection when used for locating posts onto existing concrete. Accommodates square timber posts ranging in widths from 90mm to 150mm. Typically used during the construction of pergolas, carports, or verandahs. The T Blade Base Plate Cap provides improved aesthetics for a more decorative appearance.

### Advantages

The Bremick® T Blade Bolt Down & Base Plate Cap Kit provides numerous benefits including:

- Galvanised coating for superior protection against corrosion.
- 3mm thickness for extra strength.
- Base Plate Cap conceals base plate fixings.
- Powder coated black base plate cap provides a stylish appearance.
- Timber post sits on base plate cap to help prevent the base of the post sitting in pools of water.

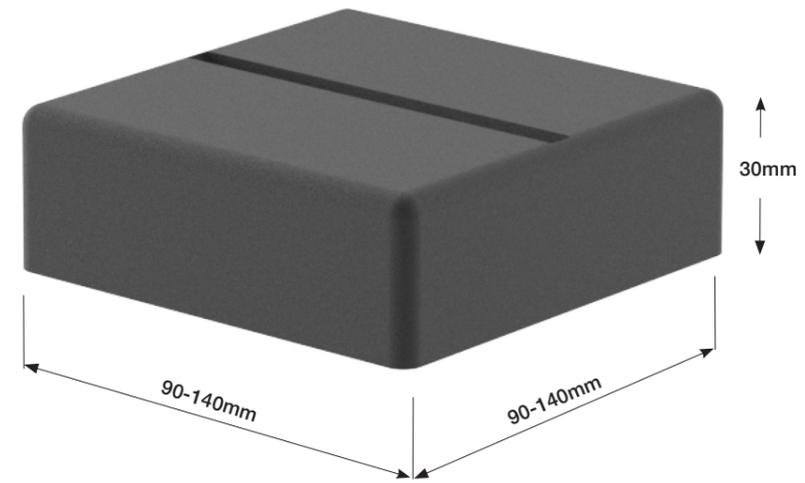
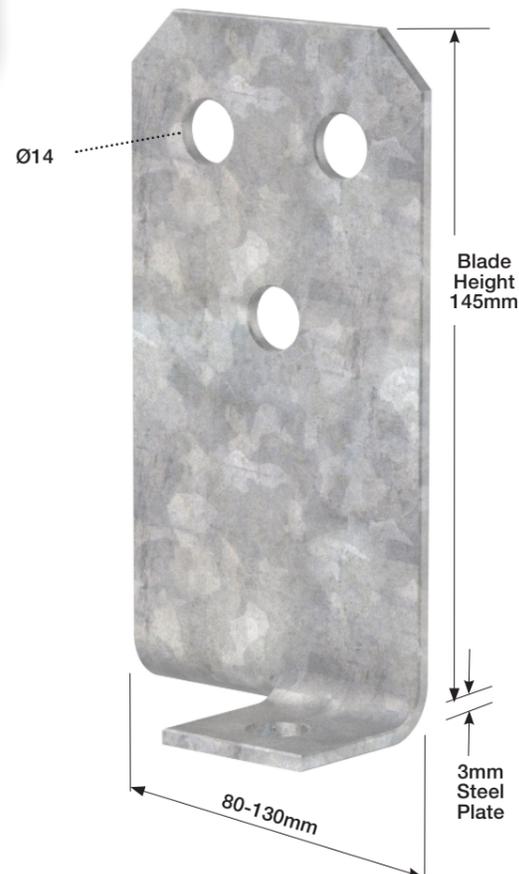
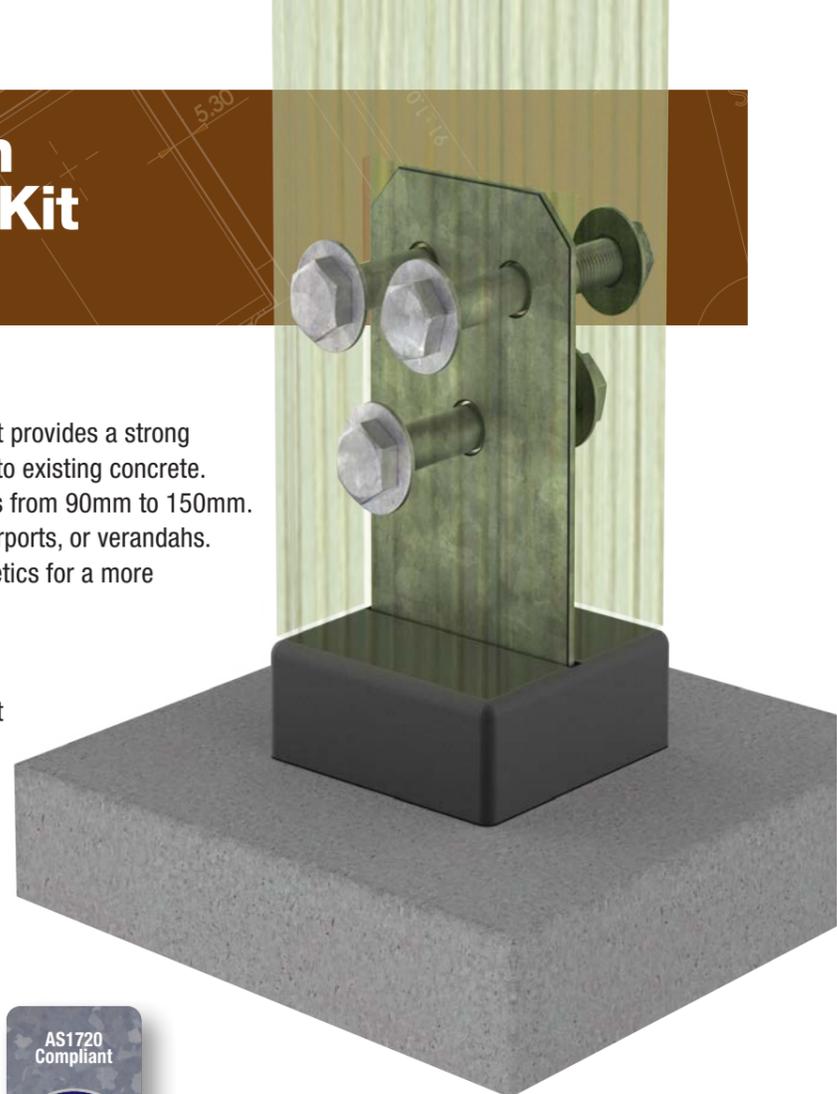


### Specifications

Steel Grade	G350
Coating	Galvanised + Black Powder Coated Base Plate Cap
Thickness	3mm
Blade Height	145mm
Blade Width	80 – 130mm
Fasteners	M12 Bolts, Nuts and Washers
Posts	90 – 150mm

### Dimensions

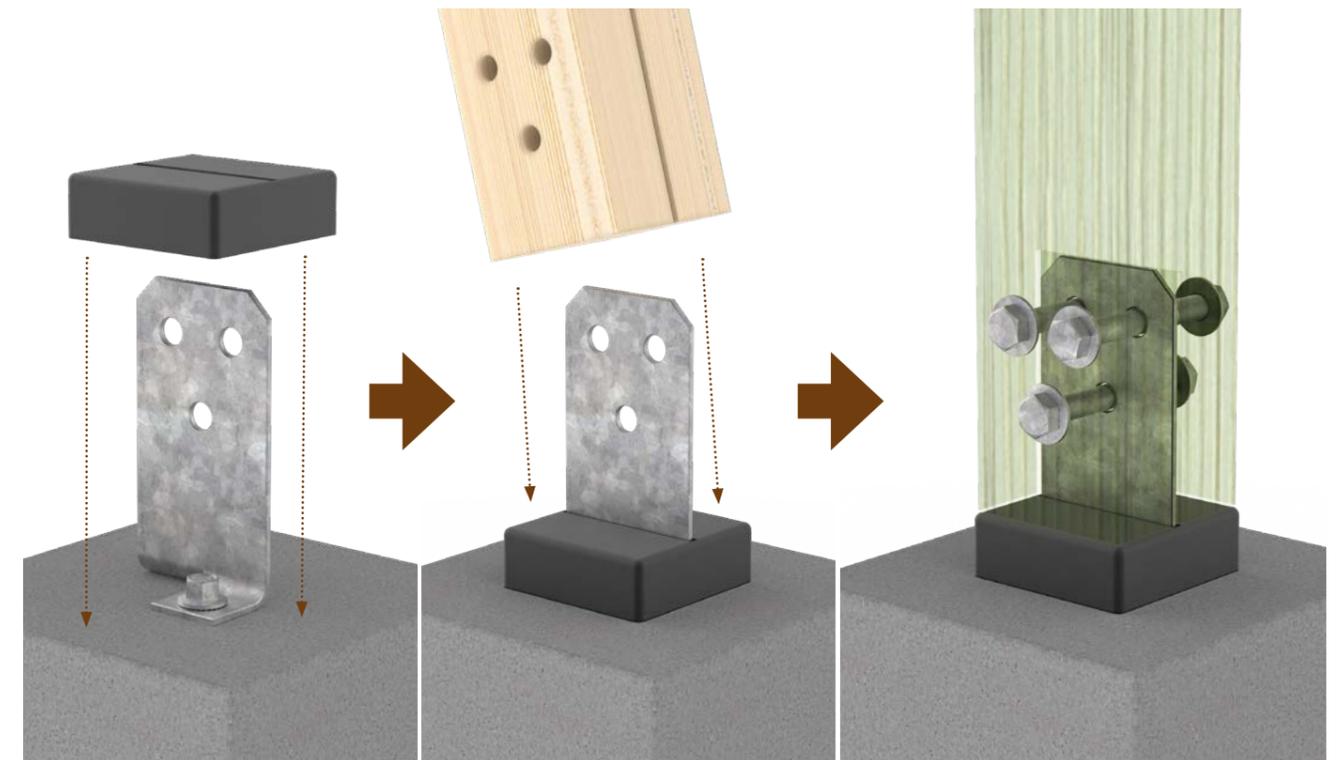
Post Size	Size - Base Plate (mm)	Blade Height (mm)	Thick-ness (mm)	Bolt Size
90 - 100mm	90	145	3	M12
110 - 120mm	110	145	3	M12
115 - 125mm	115	145	3	M12
140 - 150mm	140	145	3	M12



### Bremick® Ranging – Galvanised / Powder Coated Black Base Plate Cap

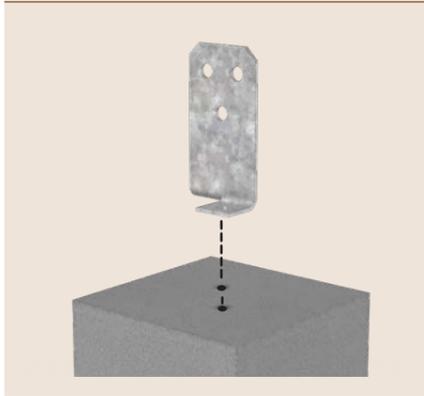
### T Blade Bolt Down & Base Plate Cap Kit

Product Code	Suits Post	Coating	Pack Qty
PTBG090145033	90 - 100mm	Galvanised/Powder Coated Black	6
PTBG110145033	110 - 120mm	Galvanised/Powder Coated Black	6
PTBG115145033	115 - 125mm	Galvanised/Powder Coated Black	6
PTBG140145033	140 - 150mm	Galvanised/Powder Coated Black	6



# Installation Instructions

1



- Determine the centerline of the T Blade Bolt Down in both projection and width.
- Place the T Blade Bolt Down back into position and make sure the T Blade Bolt Down is square to both the directions.
- Mark the 2 x holes to be drilled through the bolt holes in the base of the T Blade Bolt Down.
- Remove the T Blade Bolt Down 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



- Relocate the T Blade Bolt Down back into position.
- With a spirit level make sure the T Blade Bolt Down is perpendicular to the patio or concrete slab. If not, washers can be used between the T Blade Bolt Down and concrete to level the T Blade Bolt Down.
- Place the concrete screw-in anchor through the holes in the T Blade Bolt Down base plate and into the pre-drilled holes.

3



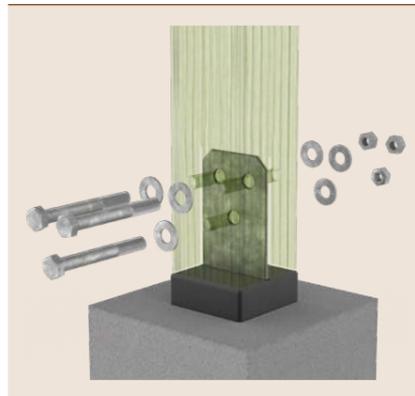
- Tighten the screw-in anchor down onto the T Blade Bolt Down base plate.
- Place base plate cap over fasteners by sliding the cap over the blade, working the cap into position over the base plate.

4



- Use a circular saw to cut a 3mm slot through the centre of the post to a depth of the blade height.
- Mark side hole locations onto the post using another T Blade Bolt Down blade as a stencil.
- Place timber upright over the blade. Ensure the post bears onto the base of the base plate cap and is vertically plumb.

5



- Drill holes to accommodate appropriately sized bolts either side of the timber, meeting at the middle holes of the blade of the T Blade Bolt Down. Ensure drill through holes are horizontally levelled and perpendicular to the blade.

6



- Feed the 3 x appropriate sized bolts through the bolt holes of the centre blade 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.

# Technical Data

## T BLADE BOLT DOWN & BASE PLATE CAP KIT

### LIMIT STATE UPLIFT CAPACITY (WIND LOAD)

JOINT GROUP	Seasoned Timber Capacity (kN)				
	JD5	JD4	JD3	JD2	JD1
PTBG090145033	3.8	3.8	3.8	3.8	3.8
PTBG110145033	4.7	4.7	4.7	4.7	4.7
PTBG115145033	5	5	5	5	5
PTBG140145033	6.1	6.1	6.1	6.1	6.1

JOINT GROUP	Unseasoned Timber Capacity (kN)				
	J5	J4	J3	J2	J1
PTBG090145033	3.8	3.8	3.8	3.8	3.8
PTBG110145033	4.7	4.7	4.7	4.7	4.7
PTBG115145033	5	5	5	5	5
PTBG140145033	6.1	6.1	6.1	6.1	6.1

### 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.
- Post must be at least as wide as the base plate.
- All fastening holes must be utilised - with 12mm diameter bolts.

### LIMIT STATE COMPRESSION CAPACITY

Code	Limit State Dead Load (Down) Capacity (kN)
PTBG090145033	8
PTBG110145033	10
PTBG115145033	10
PTBG140145033	13

### REMARKS

Downward values applicable when:

- The T Blade is sitting on a level surface and secure fixed in place.
- The timber post is securely bolted. All fastening holes must be utilised - with 12mm diameter bolts.
- The post is centred in the T Blade.
- The post is sitting down snug into the T Blade (no gap between blade and timber post).
- Posts must be at least as wide as the base plate.

# Heavy Duty U-Cup Bolt Down

## GALVANISED



### Application

The Bremick® Heavy Duty U-Cup Bolt Down is used for locating posts onto existing concrete or decks. Accommodates square timber posts in 75mm, 90mm, 100mm, 125mm and 140mm dimensions. Typically used during the construction of pergolas, carports, or verandahs.

### Advantages

The Bremick® Heavy Duty U-Cup Bolt Down provides numerous benefits including:

- Hot dipped Galvanised coating for long term protection against corrosion.
- 5mm thickness for extra strength.
- Simple to install.
- Designed for deep timber post placement.
- Timber post sits on bracket to help prevent the base of the post sitting in pools of water.

### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG)
Thickness	5.0mm
Blade Height	164mm
Blade Width	75mm
Fasteners	M10 Bolts, Nuts and Washers
Posts	75mm, 90mm, 100mm, 125mm, 140mm

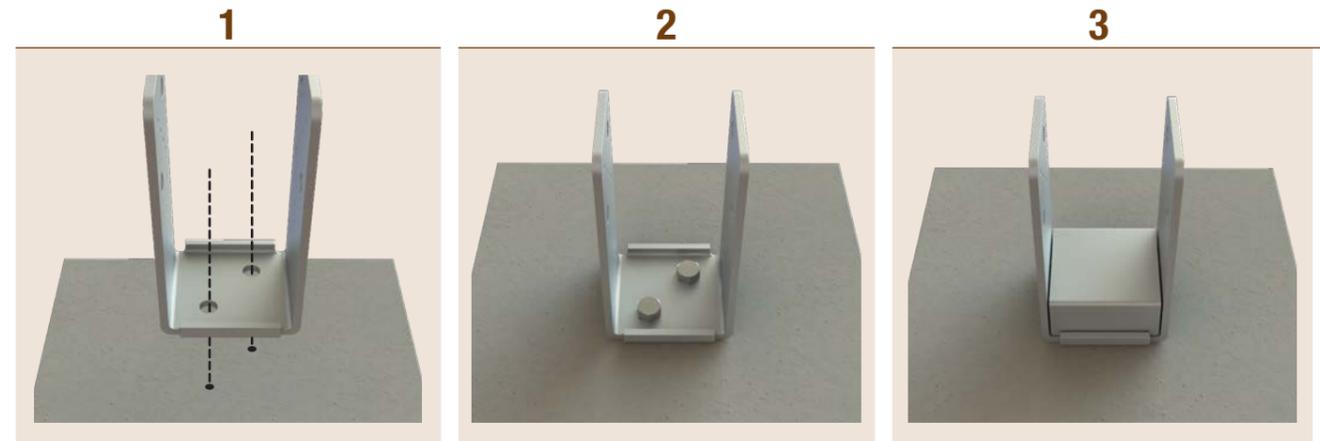


### Bremick® Ranging

Product Code	Suits Post	Coating	Pack Qty
PBHG075075504	For 75mm Post	HDG	6
PBHG090075504	For 90mm Post	HDG	6
PBHG100075504	For 100mm Post	HDG	6
PBHG125075504	For 125mm Post	HDG	6
PBHG140075504	For 140mm Post	HDG	6



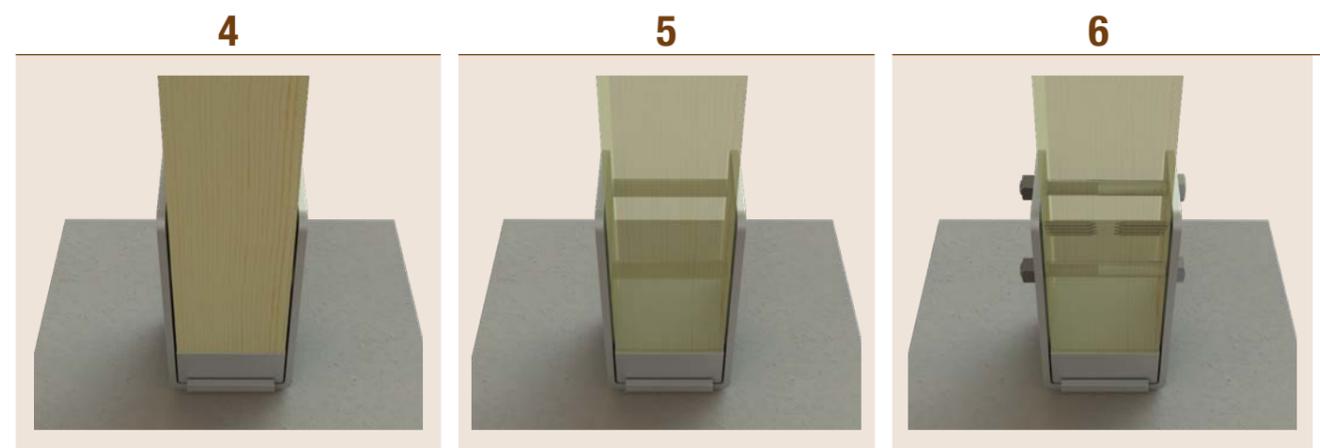
## Installation Instructions



- Determine the centerline of the posts in both projection and width.
- Place the post anchor back into position and make sure the post anchor is square to both the directions.
- Mark the 2 x holes to be drilled through the bolt holes in the base of the post anchor.
- 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.

- Relocate the post anchor back into position.
- 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.
- Place cover plate over fasteners.



- 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 bolts. Ensure the drilled holes are horizontally level and perpendicular to the saddle.
- If using coach screws, pilot drill to the length of the selected fastener. Then install coach screw. Alternatively fasten with 18G x 45mm construction screws.

- Feed the 2 x M10 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.

# Technical Data

## POST SUPPORT HEAVY DUTY U-CUP BOLT DOWN

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

**Table 1** CAPACITY: FOR 4-M10 x 50mm COACH SCREWS USED

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	6.4	9.6	13.9	19.7	21.7	22.0
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	4.6	5.5	7.7	12.1	15.1	17.9

**Table 2** CAPACITY: FOR 2-M10 4.6/s BOLT

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	20.5	22.0	22.0	22.0	22.0	22.0
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	16.7	18.8	21.7	22.0	22.0	22.0

### 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**

Code	WIDTH (MM)	Nd,c (KN)
PBHG075075504	76	13
PBHG090075504	91	16
PBHG100075504	101	18
PBHG125075504	126	23
PBHG140075504	141	26

### 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 the post stirrup (no gap between stirrup and timber post).

# Adjustable U-Cup Bolt Down

## GALVANISED & SS316

### Application

The Bremick® Adjustable U-Cup Bolt Down is used for locating posts onto existing concrete or decks. Accommodates square timber posts in 90mm, 100mm, 115mm and 125mm dimensions. Typically used during the construction of pergolas, carports, or verandahs.

### Advantages

The Bremick® Adjustable U-Cup Bolt Down provides numerous benefits including:

- Hot dipped Galvanised coating or marine grade 316 stainless steel for long term protection against corrosion.
- 3mm thickness for extra strength.
- With knockout adjustable washer to facilitate position adjustment after the anchor hole has been drilled into the concrete or timber base.
- Timber post sits on bracket to help prevent the base of the post sitting in pools of water.

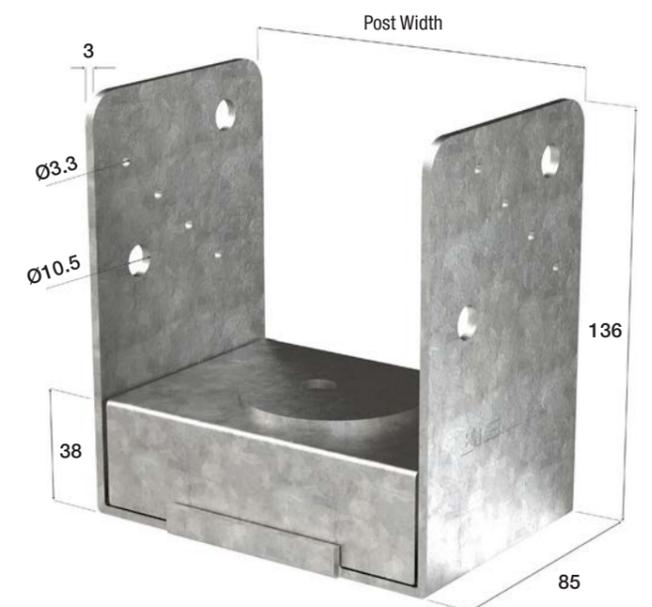
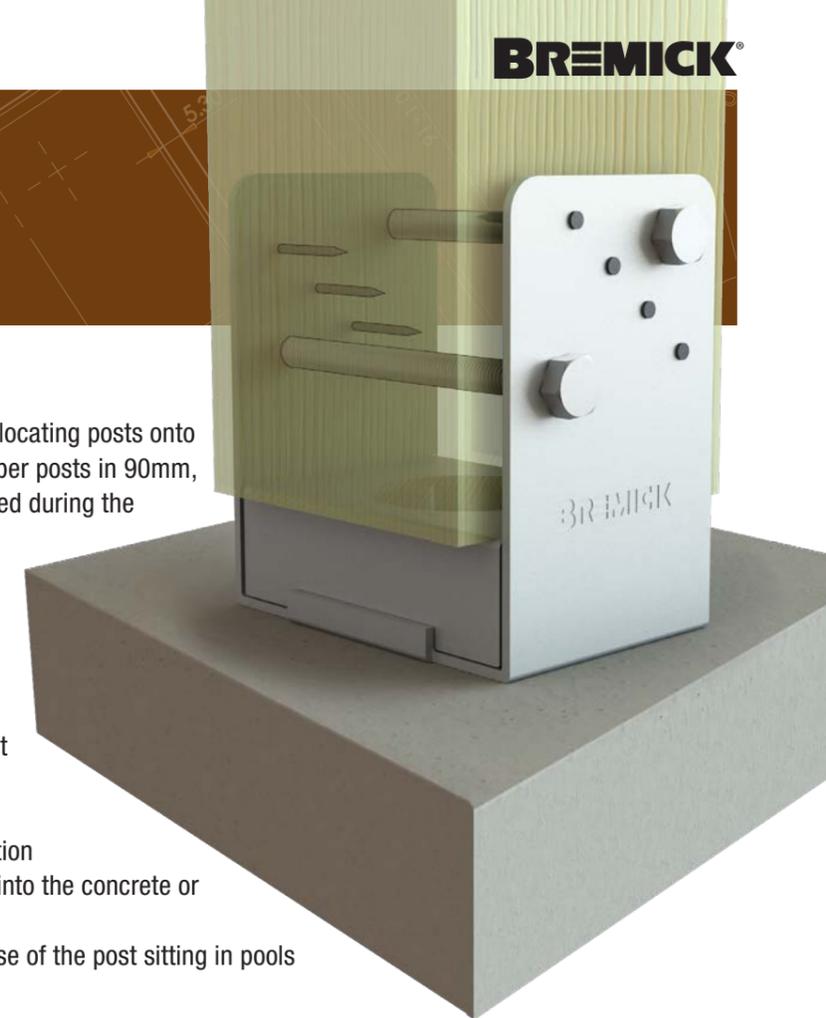
### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG) Stainless Steel (SS316)
Thickness	3mm
Blade Height	136mm
Blade Width	85mm
Fasteners	M10 Bolts, Nuts and Washers
Posts	90mm, 100mm, 115mm, 125mm



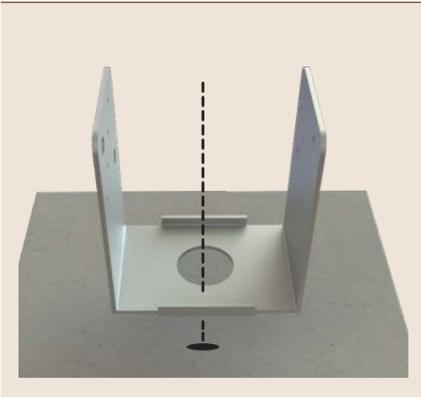
### Bremick® Ranging

Product Code	Suits Post	Coating	Pack Qty
PBAG090075304	For 90mm Post	HDG	6
PBAG100075304	For 100mm Post	HDG	6
PBAG115075304	For 115mm Post	HDG	6
PBAG125075304	For 125mm Post	HDG	6
PBA6090075304	For 90mm Post	SS316	4
PBA6100075304	For 100mm Post	SS316	4
PBA6115075304	For 115mm Post	SS316	4
PBA6125075304	For 125mm Post	SS316	4

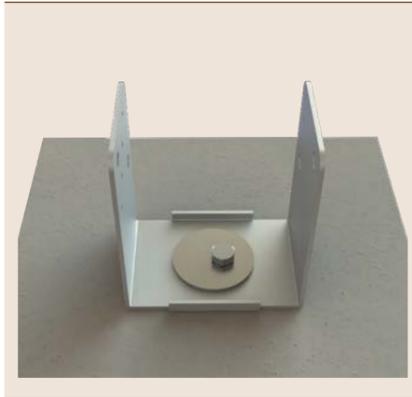


# Installation Instructions

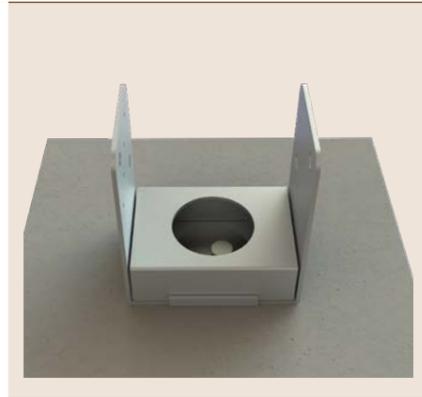
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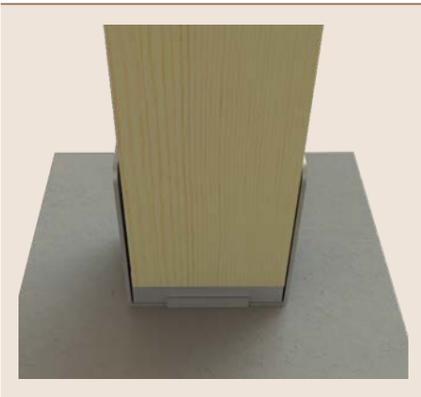


- Determine the centerline of the posts in both projection and width.
- Knock out the washer from the bracket and remove the bracket from the saddle.
- Place the post anchor back into position and make sure the post anchor is square to both the directions identified in step 1.
- Mark the hole location of the post anchor via the bolt hole in the knock washer whilst it is sitting in the base of the saddle
- Remove the post anchor and drill the hole where the mark is. 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.

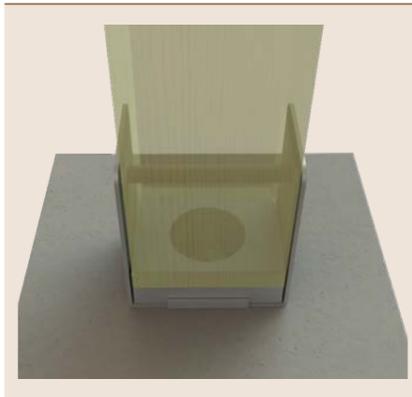
- Fit the washer over the pre-punched hole in the base of the saddle.
- With a spirit level make sure the post anchor is perpendicular to the patio or concrete slab. If not, washers can be used between the post anchor and concrete to level the post anchor.
- Place the concrete screw-in anchor through the holes in the post anchor base plate and into the pre-drilled holes.

- Tighten the screw-in anchor down onto the face of the washer and ensure it pulls the post anchor firmly onto the concrete slab.
- Place cover plate over fasteners.

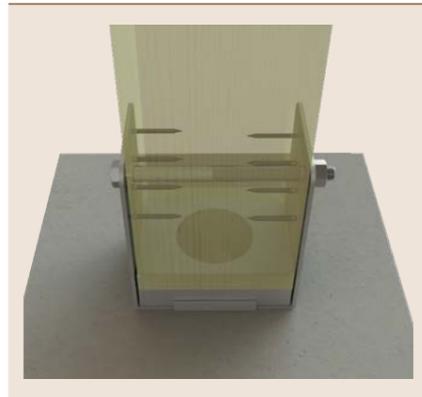
4



5



6



- Position the timber post into the post anchor saddle. Ensure the post bears onto the base of the bracket and is vertically plumb.
- Using the pre-punched nail holes, hammer 8 nails into the post, 4 on each side of the post support.

- Drill through the bolt holes located in the side of the post anchor to accommodate M10 bolts. Ensure the drilled holes are horizontally level and perpendicular to the saddle.
- If using coach screws, pilot drill to the length of the selected fastener. Then install coach screw. Alternatively fasten with 18G x 45mm construction screws.

- Feed the 2 x M10 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.

# Technical Data

## POST SUPPORT ADJUSTABLE U-CUP BOLT DOWN

### LIMIT STATE COMPRESSION CAPACITY (ALL LOAD COMBINATIONS)

Table 1

Code	WIDTH (mm)	Nd,c (KN)
PBAG090075304	91	8.6
PBAG100075304	101	9.5
PBAG115075304	116	12.0
PBAG125075304	126	13.1
PBA6090075304	91	7.2
PBA6100075304	101	8.0
PBA6115075304	116	9.2
PBA6125075304	126	10.0

### REMARKS

No multiplying factors for structure category or load combination are to be applied. Downward values applicable when:

- \* Stainless products.
- 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 the post stirrup (no gap between stirrup and timber post).

# 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.

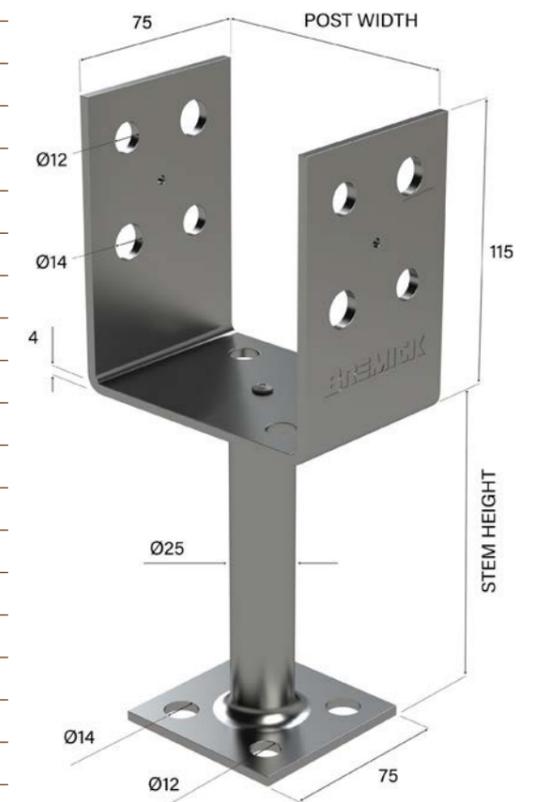
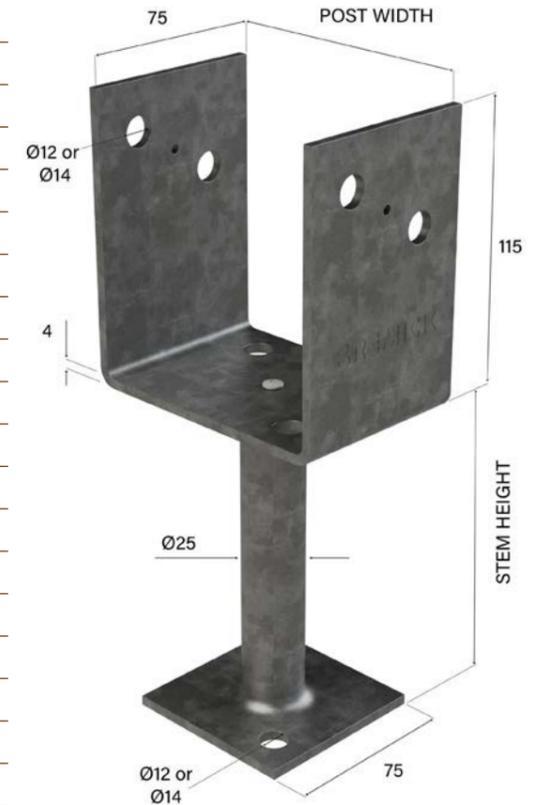
### Specifications

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

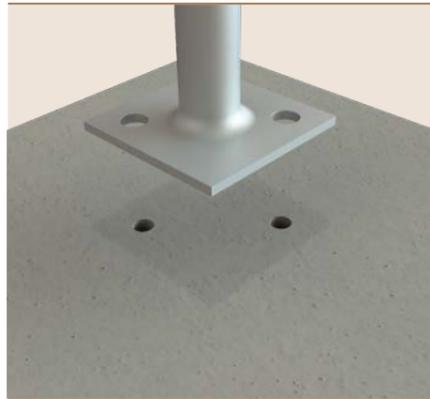
Product Code	Suits Post	Coating	Pack Qty
PF0G065090404	65mm x 90mm (Suits M10 bolts)	HDG	6
PF0G065100404	65mm x 100mm (Suits M10 bolts)	HDG	6
PF0G075090404	75mm x 90mm (Suits M10 bolts)	HDG	6
PF0G075100404	75mm x 100mm (Suits M10 bolts)	HDG	6
PF0G130090404	130mm x 90mm (Suits M10 bolts)	HDG	6
PF0G130100404	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



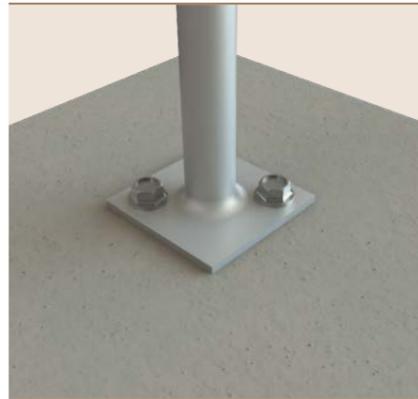
# Installation Instructions

Fixing to existing concrete slab or patio

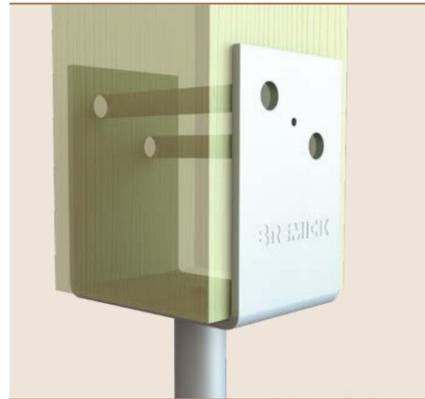
1



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

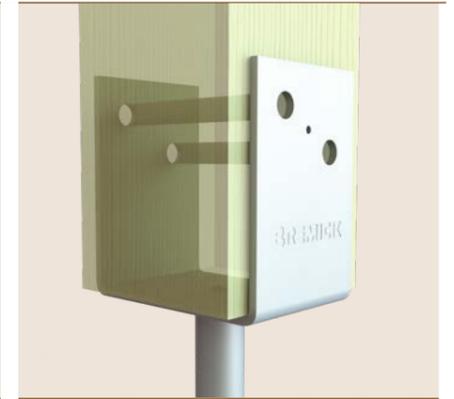
1



2



3

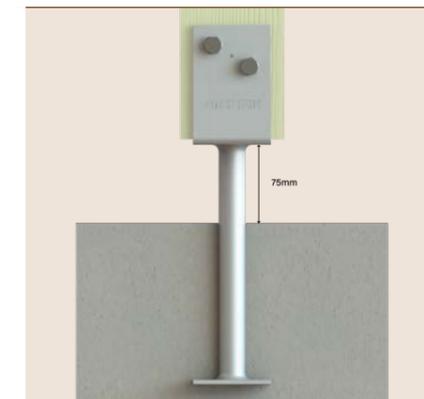


- Determine the centerline of the posts in both projection and width.
- Make sure the post anchor is square to both these directions and orientate it as required.
- Measure and mark the location of the post anchor positioning.
- Ensure the location of the footing is on level ground and set into stable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

## 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).

## Full Stirrup with Solid Stem GALVANISED

### Application

The Bremick® Full Stirrup with Solid Stem is used for locating posts when setting the post anchor into concrete. Accommodates 90mm square timber posts. Typically used, during the construction of pergolas, carports, or verandahs.

### Advantages

The Bremick® Full Stirrup with Solid Stem provides numerous benefits including:

- Hot dipped Galvanised coating for long term protection against corrosion.
- 4mm thickness in the saddle for extra strength.
- Solid steel, curved leg provides support to the structure and added resistance to uplift forces when embedded in concrete.
- 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.
- Saddle sizes accommodate 90mm common square post sizes and leg lengths from 150mm up to 300mm.

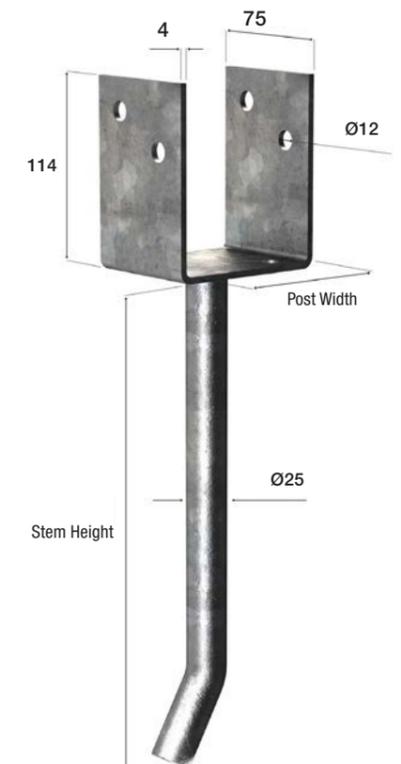
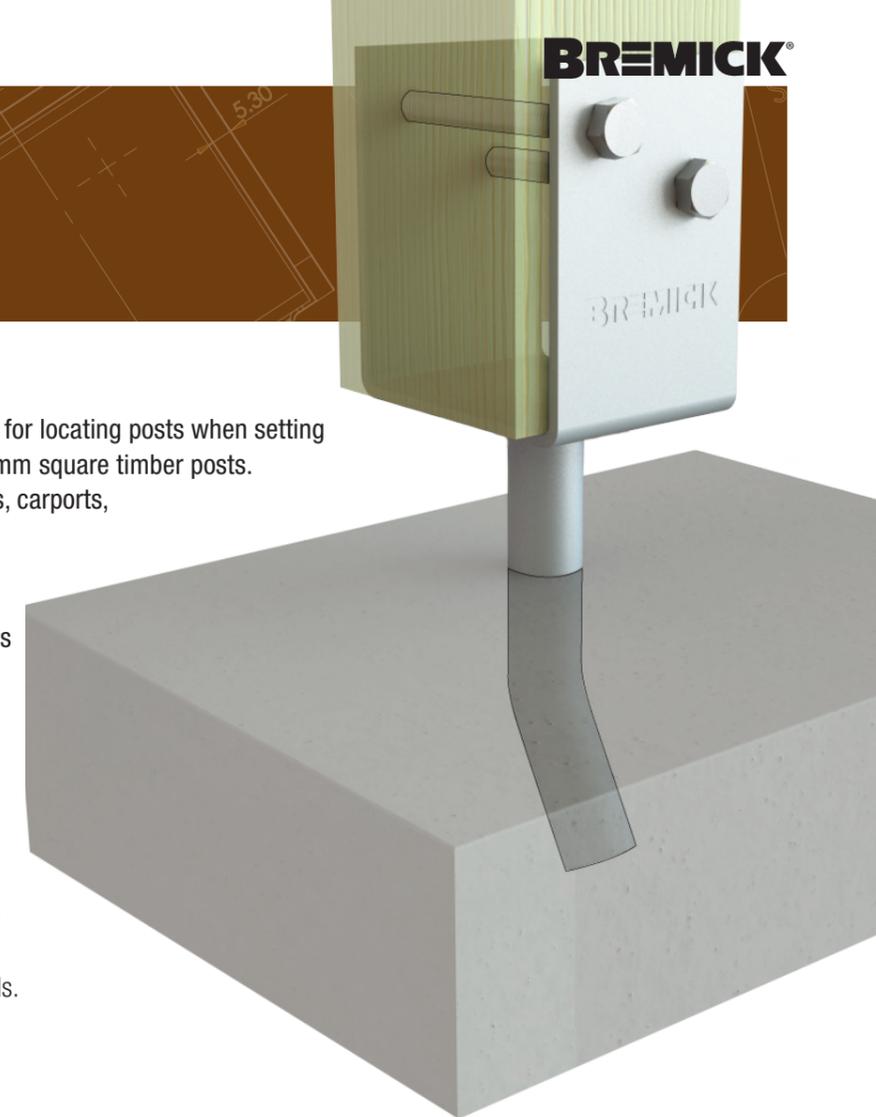
### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG)
Thickness	4mm
Stirrup Blade Height	114mm
Stirrup Blade Width	100mm
Stem Height	150mm, 200mm, 300mm
Stem Diameter	Solid 25mm
Fasteners	M10 Bolts, Nuts and Washers
Posts	90mm



### Bremick® Ranging

Product Code	Suits Post	Coating	Pack Qty
PFWG150090404	150mm x 90mm (Suits M10 Bolts)	HDG	6
PFWG200090404	200mm x 90mm (Suits M10 Bolts)	HDG	6
PFWG300090404	300mm x 90mm (Suits M10 Bolts)	HDG	6



# Installation Instructions

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 bolts. Ensure the drilled holes are horizontally level and perpendicular to the saddle.

4



- Feed the 2 x M10 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 construction screws through the bolt holes or M10 coach screws.

# Technical Data

## POST SUPPORT FULL STIRRUP – SOLID STEM

### 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 - SOLID STEM	11.8

**Table 2** CAPACITY: FOR 4-M10 x 50mm COACH SCREWS USED

Product
POST SUPPORT FULL STIRRUP - SOLID STEM

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	6.9	10.5	11.8	11.8	11.8	11.8
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	4.9	6.0	8.4	11.8	11.8	11.8

### REMARKS

- \*\* The capacities are further limited by the capacity of the stem in the concrete. The designer should independently assess this capacity
- 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

# Half Stirrup Post Support

## GALVANISED & SS316



### Application

The Bremick® Half Stirrup is used for locating posts onto existing concrete or decks or setting into concrete. Ideally suited to uses where the post is located against a wall or step and can only be bolted from one side. Typically used, during the construction of pergolas, carports, or verandahs.

### Advantages

The Bremick® Half 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.
- Accommodates common square post sizes and leg lengths from 65mm up to 300mm.
- Options available to use either M10 or M12 bolts, nuts, and washers.

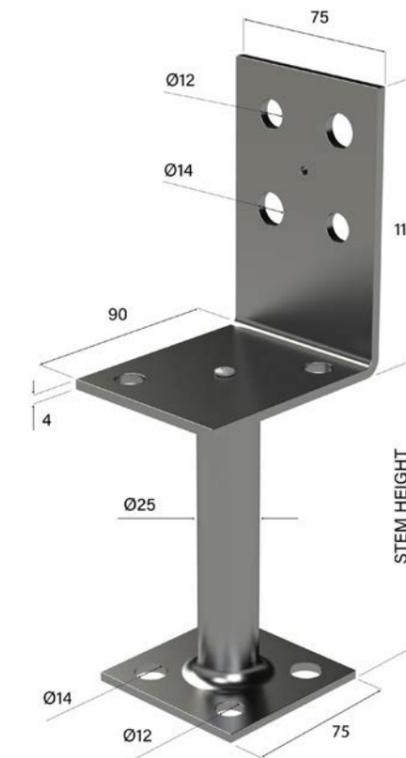
### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG); 316 Stainless Steel (SS316)
Thickness	4mm
Stirrup Blade Height	118mm
Stirrup Blade Width	75mm
Post Height	65mm, 125mm, 130mm, 200mm, 300mm
Post Diameter	25mm
Fasteners	M10 & M12 Bolts, Nuts and Washers
Posts	90mm



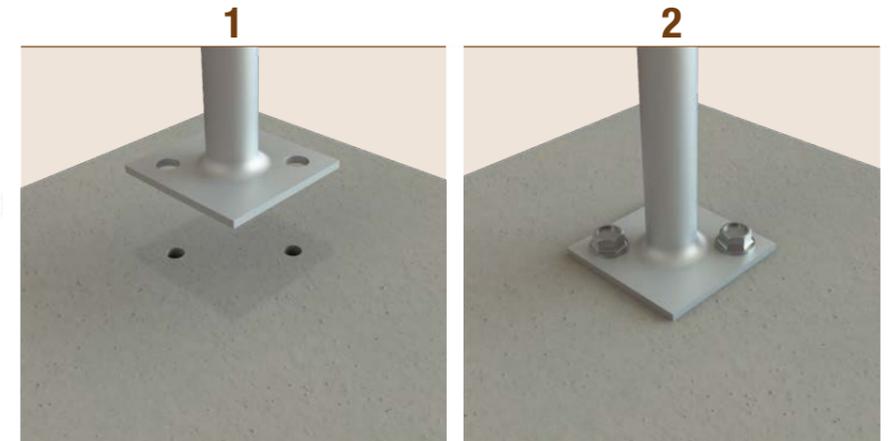
### Bremick® Ranging

Product Code	Suits Post	Coating	Pack Qty
PH0G065XXX404	65mm leg (Suits M10 Bolts)	HDG	6
PH0G130XXX404	130mm leg (Suits M10 Bolts)	HDG	6
PH0G200XXX404	200mm leg (Suits M10 Bolts)	HDG	6
PH0G300XXX404	300mm leg (Suits M10 Bolts)	HDG	6
PH2G130XXX404	130mm leg (Suits M12 Bolts)	HDG	6
PH2G200XXX404	200mm leg (Suits M12 Bolts)	HDG	6
PH2G300XXX404	300mm leg (Suits M12 Bolts)	HDG	6
PH06125XXX404	125mm leg (Suits M10 & M12 Bolts)	SS316	4
PH06200XXX404	200mm leg (Suits M10 & M12 Bolts)	SS316	4
PH06300XXX404	300mm leg (Suits M10 & M12 Bolts)	SS316	4

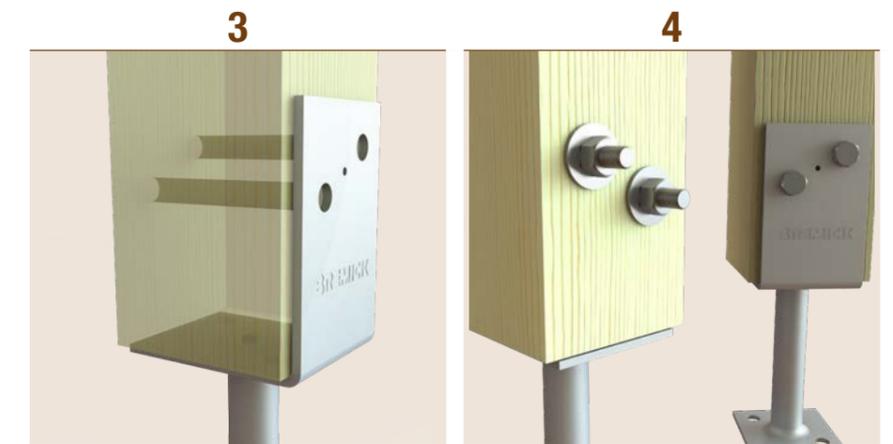


## Installation Instructions

Fixing to existing concrete slab or patio



- 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 your chosen 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.
- 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

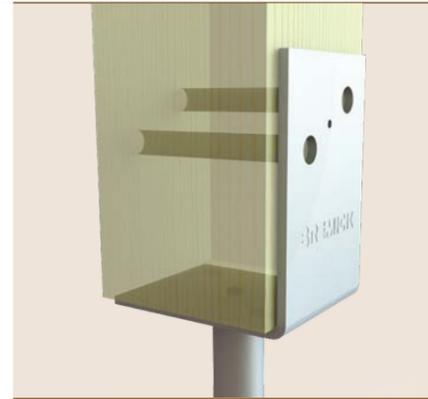
**1**



**2**



**3**

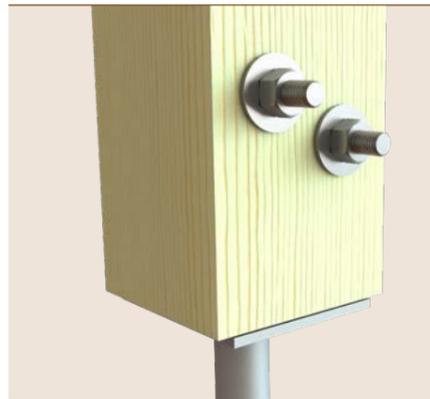


- Determine the centerline of the posts in both projection and width.
- Make sure the post anchor is square to both these directions and orientate it as required.
- Measure and mark the location of the post anchor positioning.
- Ensure the location of the footing is on level ground and set into stable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

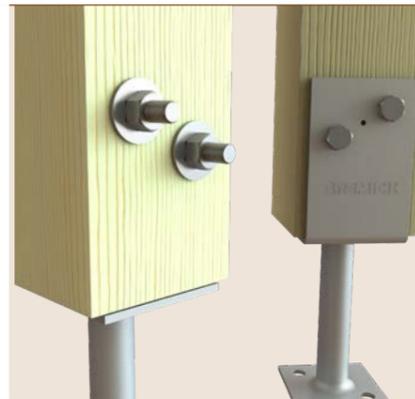
- Position the post anchor in the dugout and suspend using the temporary framing. Ensure the post anchor is vertically plumb and level. Ensure the clearance between underside of post to concrete slab finish surface is at least 75mm.
- Pour the concrete and allow to set.

- 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

## POST SUPPORT HALF STIRRUP – GALVANISED & STAINLESS STEEL 316

### LIMIT STATE COMPRESSION CAPACITY (ALL LOAD COMBINATIONS)

Table 1

G300		SS316	
Leg Height (mm)	1.2G+1.5Q (KN)	Leg Height (mm)	1.2G+1.5Q (KN)
65	20	125	16
130	19	200	15
200	17	300	12
300	13		

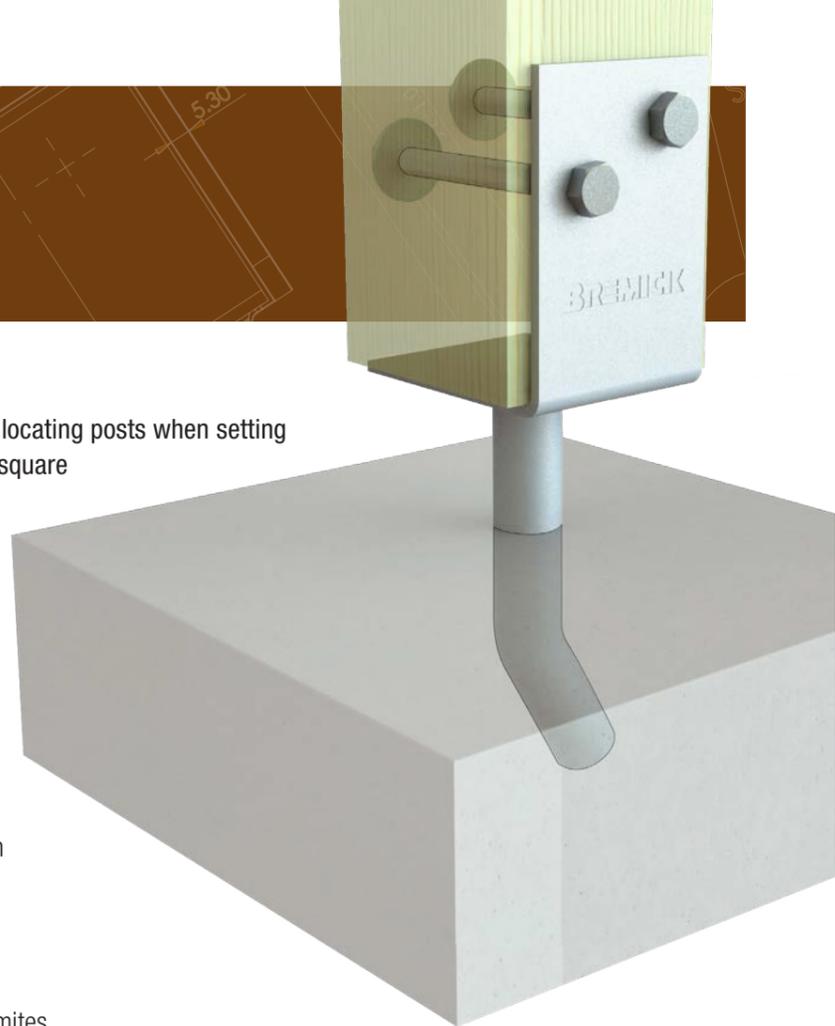
### REMARKS

Uplift values may be limited by the capacity of the fixings to the base material. See appropriate Bremick fastener capacities. 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.)

# Half Stirrup with Solid Stem

## GALVANISED



### Application

The Bremick® Half Stirrup with Solid Stem is used for locating posts when setting the post anchor into concrete. Accommodates 90mm square timber posts. Typically used, during the construction of pergolas, carports, or verandahs.

### Advantages

The Bremick® Half Stirrup with Solid Stem provides numerous benefits including:

- Hot dipped Galvanised coating for long term protection against corrosion.
- 4mm thickness in the saddle for extra strength.
- Solid steel, curved leg provides support to the structure and added resistance to uplift forces when embedded in concrete.
- 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.
- Accommodates common square post sizes and 150mm & 300mm leg lengths.

### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG)
Thickness	4mm
Stirrup Blade Height	114mm
Stirrup Blade Width	75mm
Stem Height	150mm, 300mm
Stem Diameter	Solid 25mm
Fasteners	M10 Bolts, Nuts and Washers



### Bremick® Ranging

Product Code	Suits Post	Coating	Pack Qty
PHWG150090404	150mm leg (Suits M10 Bolts)	HDG	6
PHWG300090404	300mm leg (Suits M10 Bolts)	HDG	6



## Installation Instructions

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 bolts. Ensure the drilled holes are horizontally level and perpendicular to the saddle.

4



- Feed the 2 x M10 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 construction screws through the bolt holes or M10 coach screws.

# Technical Data

## POST SUPPORT HALF STIRRUP – SOLID STEM

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

**Table 1** CAPACITY: FOR 2 x M10 BOLTS

Product	Capacity (All joint groups) (kN)
HALF STIRRUP - SOLID STEM	5

**Table 2** CAPACITY: FOR 4-M10 x 50mm COACH SCREWS USED

Product	
HALF STIRRUP - SOLID STEM	
	Seasoned Timber Capacity (kN)
JOINT GROUP	JD6 JD5 JD4 JD3 JD2 JD1
	3.4 5 5 5 5 5
	Unseasoned Timber Capacity (kN)
JOINT GROUP	J6 J5 J4 J3 J2 J1
	2.5 3.0 4.2 5 5 5

### REMARKS

- \*\* The capacities are further limited by the capacity of the stem in the concrete. The designer should independently assess this capacity
- 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

# Cyclonic & High Wind Post Support

## GALVANISED & SS316

### Application

The Bremick® Cyclonic & High Wind Post Support is used for locating posts when setting the post anchor into concrete and achieving maximum hold down values when constructing in high wind zones. Accommodates 90mm, 100mm and 150mm square timber posts. Typically used, during the construction of pergolas, carports, or verandahs.

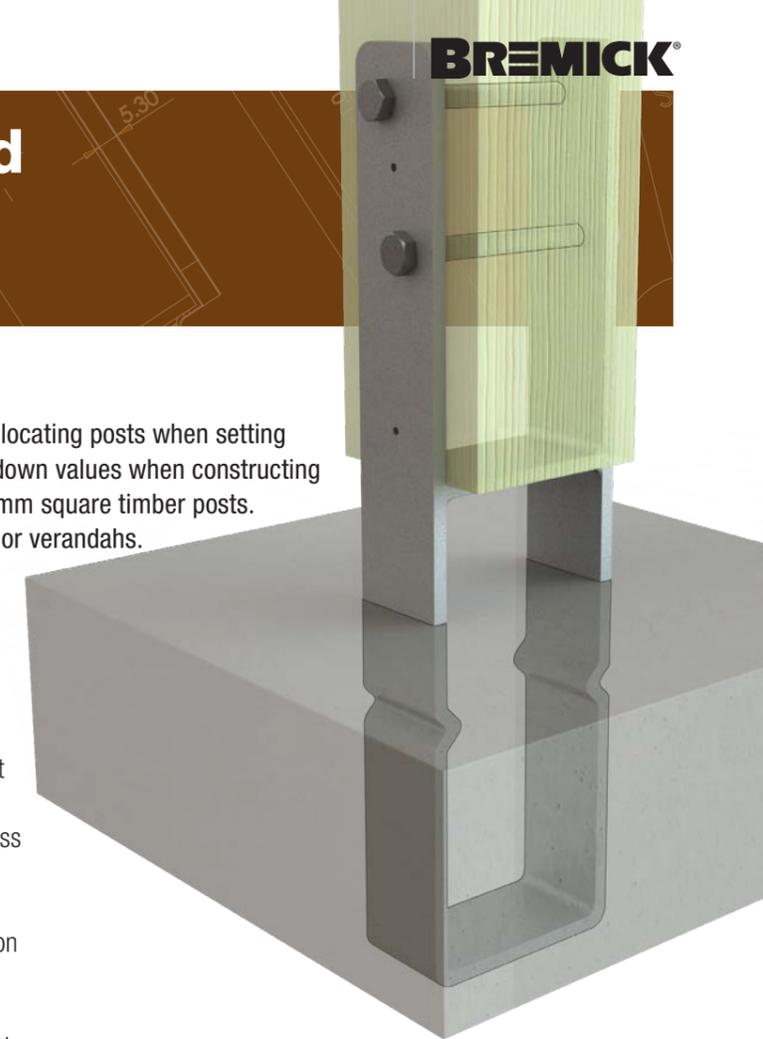
### Advantages

The Bremick® Cyclonic & High Wind Post Support provides numerous benefits including:

- Engineered for high wind zones, including cyclonic regions. The U-shape is designed for maximum hold down when set into concrete.
- Hot dipped Galvanised coating or marine grade 316 stainless steel for long term protection against corrosion.
- 6mm thickness in the stirrup 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, when installed with a 75mm gap between the bottom of the post and the concrete base.
- AS1397 -2021 for Steel Grade 250
- Welded construction for strength.
- Accommodates common square post sizes, 90mm, 100mm and 150mm.

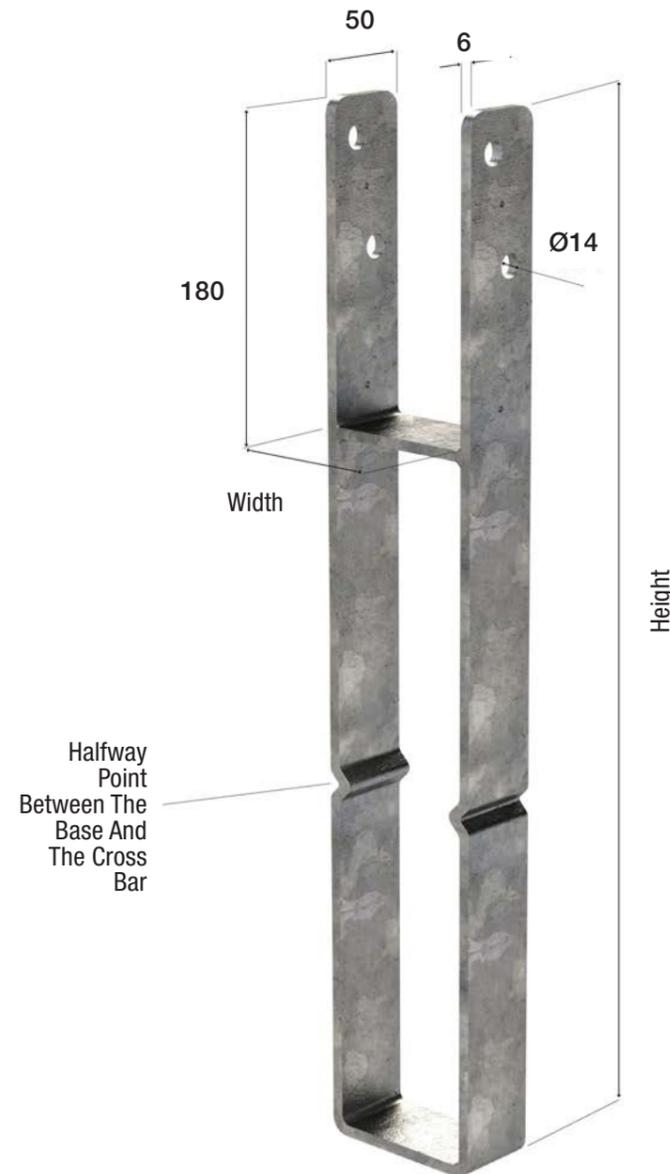
### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG); 316 Stainless Steel
Thickness	6mm
Overall Height	300mm, 450mm, 600mm
Stirrup Height from Post Base	180mm
Stirrup Blade Width	150mm, 300mm
Fasteners	M12 Bolts, Nuts and Washers
Posts	90mm, 100mm, 150mm



**Bremick® Ranging**

Product Code	Suits Post	Coating	Pack Qty
PCUG300090604	300mm x 90mm (Suits M12 Bolts)	HDG	6
PCUG300100604	300mm x 100mm (Suits M12 Bolts)	HDG	6
PCUG450090604	450mm x 90mm (Suits M12 Bolts)	HDG	6
PCUG450100604	450mm x 100mm (Suits M12 Bolts)	HDG	6
PCUG600090604	600mm x 90mm (Suits M12 Bolts)	HDG	6
PCUG600100604	600mm x 100mm (Suits M12 Bolts)	HDG	6
PCUG600150604	600mm x 150mm (Suits M12 Bolts)	HDG	6
PCU6450090604	450mm x 90mm (Suits M12 Bolts)	SS316	4
PCU6450100604	450mm x 100mm (Suits M12 Bolts)	SS316	4
PCU6600090604	600mm x 90mm (Suits M12 Bolts)	SS316	4
PCU6600100604	600mm x 100mm (Suits M12 Bolts)	SS316	4



# Installation Instructions

Fixing to wet concrete



- 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 so there is a 75mm clearance between underside of post to the 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 support stirrup. Ensure the post bears onto the base of the cross member and is vertically plumb.
- Drill through the bolt holes located in the side of the post anchor to accommodate M12 bolts. Ensure the drilled holes are horizontally level and perpendicular to the saddle.
- Feed the 2 x 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.

# Technical Data

## CYCLONIC & HIGH WIND POST SUPPORT

### LIMIT STATE UPLIFT CAPACITY (WIND LOAD) FOR 90mm POSTS

**Table 1** CAPACITY: FOR 2-M12 4.6 BOLTS

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	33.3	38.8	44.8	55.5	60.0	60.0
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	27.2	30.5	35.3	44.8	48.5	57.7

### LIMIT STATE UPLIFT CAPACITY (WIND LOAD) FOR 90mm POSTS

- 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
- The product is intended to be embedded in concrete up to the mark indicated on the product. Uplift values may be limited by the capacity base material. The designer should assess the capacity based on the geometry, concrete strength, and concrete reinforcement.

# Centre Fix Post Support GALVANISED

### Application

The Bremick® Centre Fix Post Support is used for locating posts onto existing concrete or decks or setting into concrete. Used when installing the post onto the post anchor and the stirrup needs to be concealed. Typically used, during the construction of pergolas, carports, or verandahs.

### Advantages

The Bremick® Centre Fix Post Support provides numerous benefits including:

- Facilitates the ability to conceal the stirrup.
- Hot dipped Galvanised coating for long term protection against corrosion.
- 4mm thickness in the post anchor for extra strength.
- Solid steel leg provides support to the structure and resistance to uplift forces.
- 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.
- Range of post anchors that accommodate common square post sizes and 130mm and 300mm leg lengths.

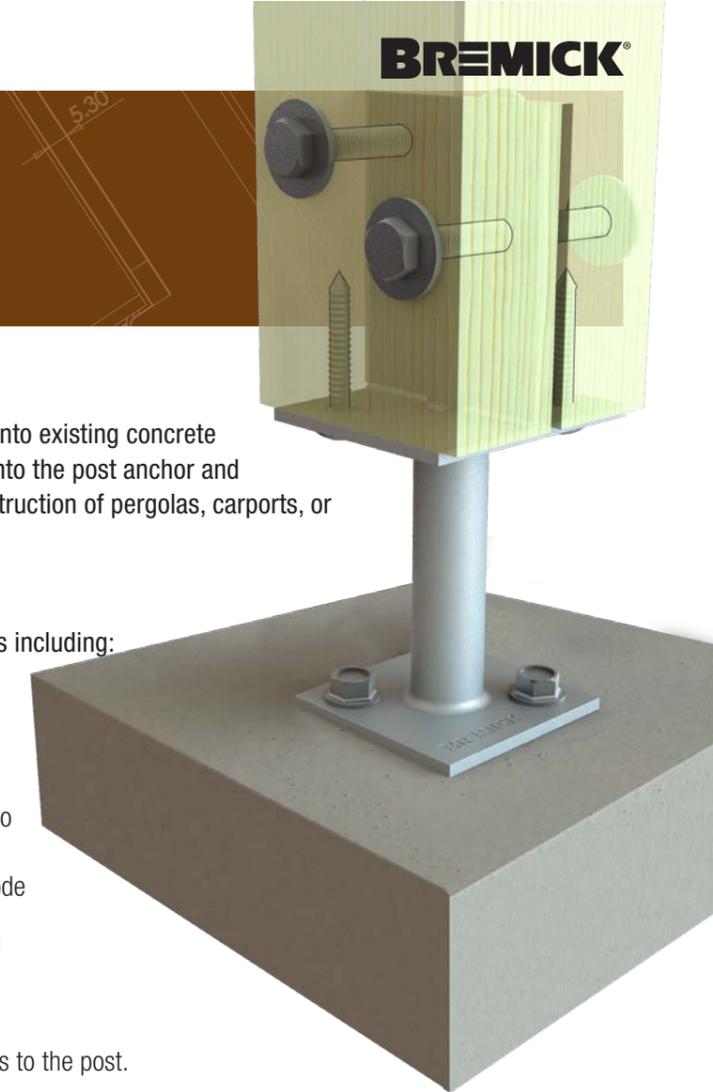
### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG)
Thickness	4mm
Stirrup Blade Height	100mm
Stirrup Blade Width	75mm
Stem Height	130mm, 300mm
Stem Diameter	25mm
Fasteners	M10 Bolts, Nuts and Washers



### Bremick® Ranging

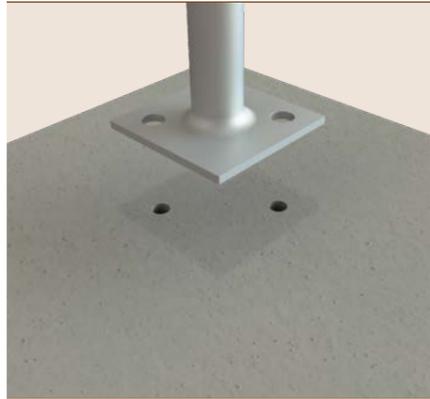
Product Code	Suits Post	Coating	Pack Qty
PCFG130000404	130mm leg (Suits M10 Bolts)	HDG	6
PCFG300000404	300mm leg (Suits M10 Bolts)	HDG	6



## Installation Instructions

Fixing to existing concrete slab or patio

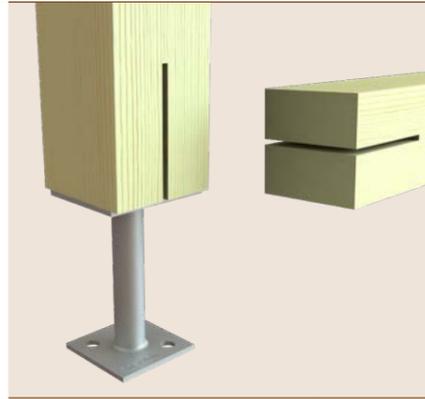
1



2



3

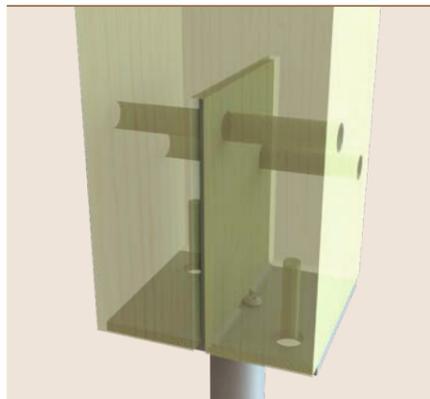


- Determine the centerline of the posts in both projection and width.
- Make sure the post anchor is square to both these directions and mark the hole locations of the post anchor via the bolt holes in the plate at the base of the stem.
- Remove the post anchor and drill the holes where the marks are.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

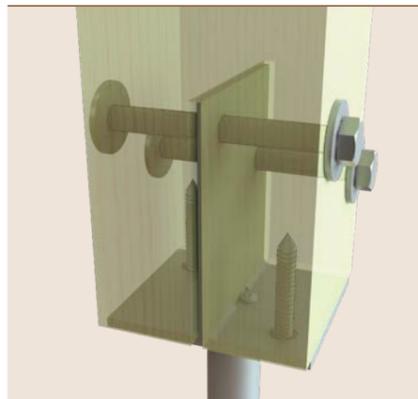
- Replace the post anchor over the drilled holes, ensure the holes within the base plate are over the top of the pre-drilled holes.
- With a spirit level make sure the post anchor is perpendicular to the patio or concrete slab. If not, washers can be used between the post anchor and concrete to level 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.

- Use a circular saw to cut a 5mm slot through the centre of the post to a depth of 100mm.
- Mark side hole locations onto the post using another Centre Fix Post Anchor blade as a stencil.
- Place timber upright over the centre fix flange. Ensure the post bears onto the base of the bracket and is vertically plumb.

4



5



- Drill holes to accommodate M10 bolts 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.

- Feed the 2 x M10 bolts through the bolt holes of the centre blade 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.

## Installation Instructions

Fixing to wet concrete

1



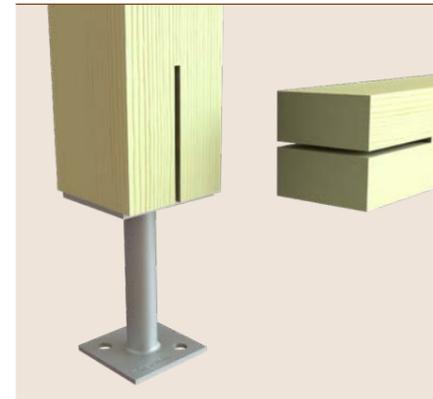
2



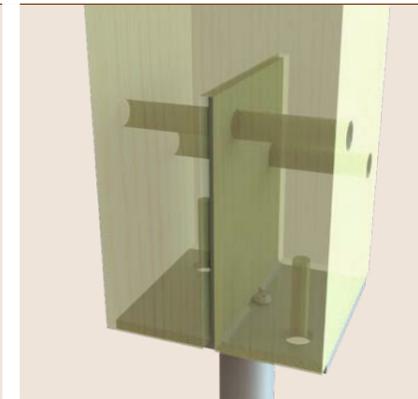
- Determine the centerline of the posts in both projection and width.
- Make sure the post anchor is square to both these directions and orientate it as required.
- Measure and mark the location of the post anchor positioning.
- Ensure the location of the footing is on level ground and set into stable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

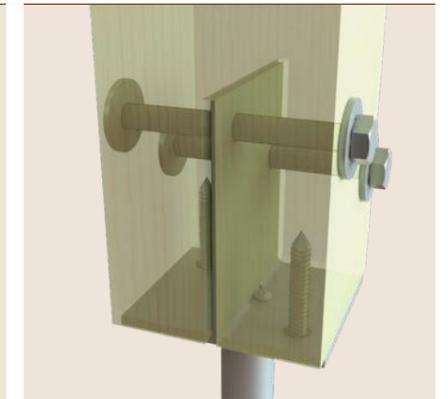
3



4



5



- Use a circular saw to cut a 5mm slot through the centre of the post to a depth of 100mm.
- Mark side hole locations onto the post using another Centre Fix Post Anchor blade as a stencil.

- Place timber upright over the centre fix flange. Ensure the post bears onto the base of the bracket and is vertically plumb.
- Drill holes to accommodate M10 bolts 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.

- Feed the 2 x M10 bolts through the bolt holes of the centre blade 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 M10 x 75mm coach screws can be used to secure the post to the stirrup.

# Technical Data

## CENTRE FIX POST SUPPORT

### LIMIT STATE UPLIFT CAPACITY (WIND LOAD)

Table 1 CAPACITY: FOR 2 x M10 BOLTS

PRODUCT	CAPACITY (ALL JOINT GROUPS) (KN)
POST SUPPORT CENTRE FIXED	11.8

### LIMIT STATE COMPRESSION CAPACITY (ALL LOAD COMBINATION)

Table 3

Leg Height (mm)	1.2G+1.5Q (KN)
130	15
300	10

### REMARKS

- The same capacity applies for all load Category 1 (secondary members.) Category 2 (primary members) and Category 3 (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.

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.)

## Centre Pin Post Support GALVANISED

### Application

The Bremick® Centre Pin Post Support is used for locating posts onto existing concrete or setting into concrete. Used when installing the post onto the post anchor and the stirrup needs to be concealed. Due to the fixing method, it is typically used for small spans or where no roofing is used. Posts greater than 125mm should not be used.

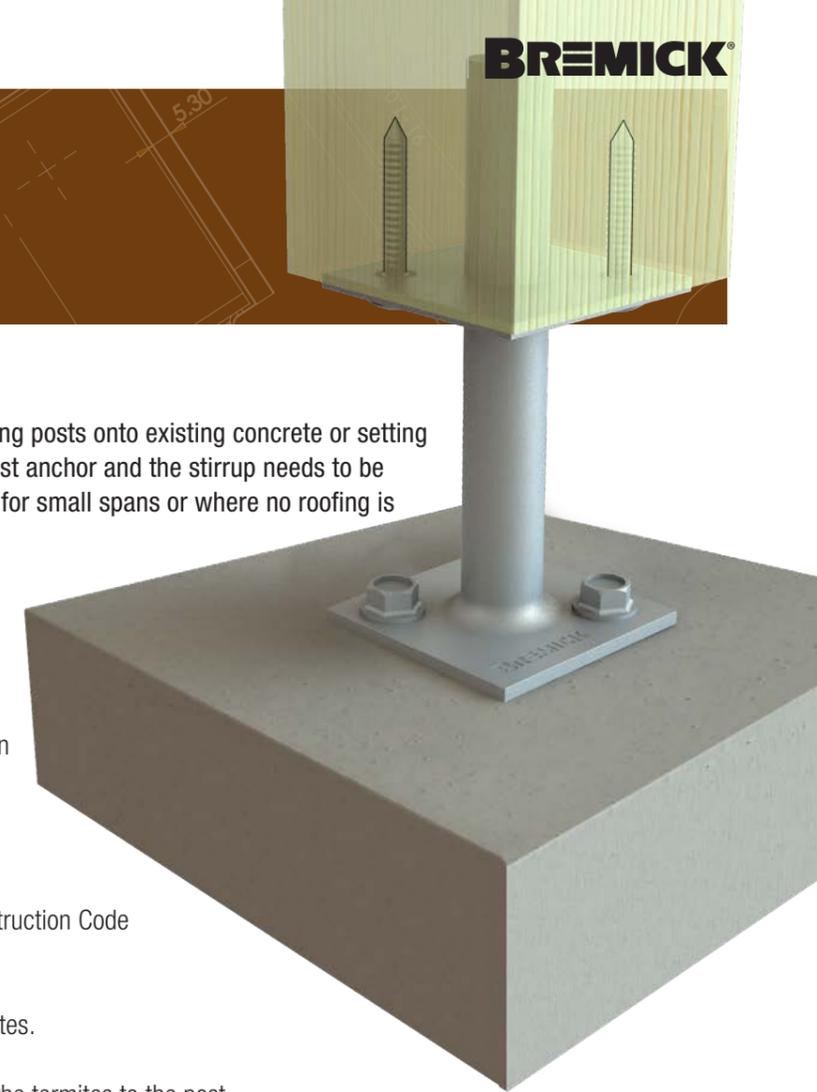
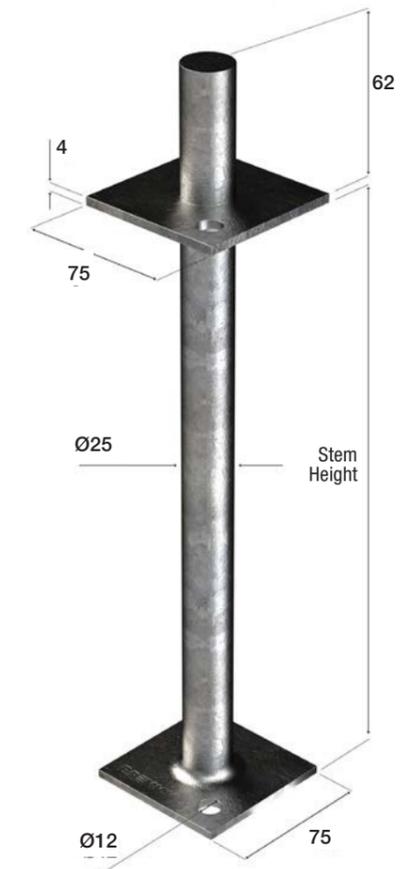
### Advantages

The Bremick® Centre Pin Post Support provides numerous benefits including:

- Facilitates the ability to conceal the stirrup.
- Hot dipped Galvanised coating for long term protection against corrosion.
- 4mm thickness in the post anchor for extra strength.
- Solid steel leg provides support to the structure and resistance to uplift forces.
- 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.
- Range of post anchors that accommodate common square post sizes and 130mm and 300mm leg lengths.

### Specifications

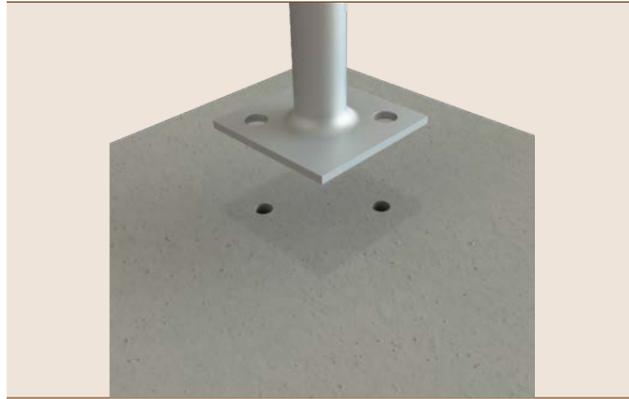
Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG)
Thickness	4mm
Stirrup Blade Height	62mm
Stirrup Blade Width	25mm
Stem Height	130mm, 300mm
Stem Diameter	Solid 25mm
Fasteners	M10 Bolts, Nuts, Washers and Coach Screws



## Installation Instructions

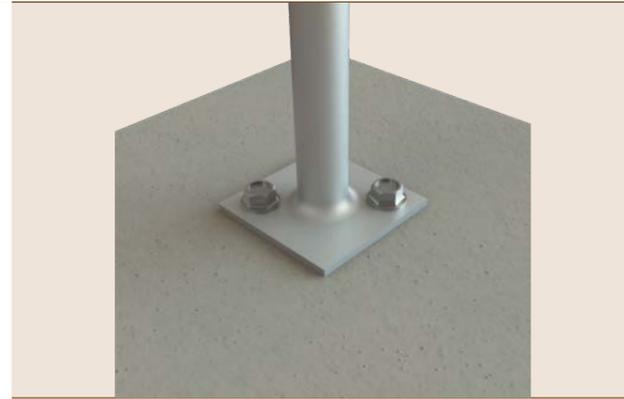
Fixing to existing concrete slab or patio

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



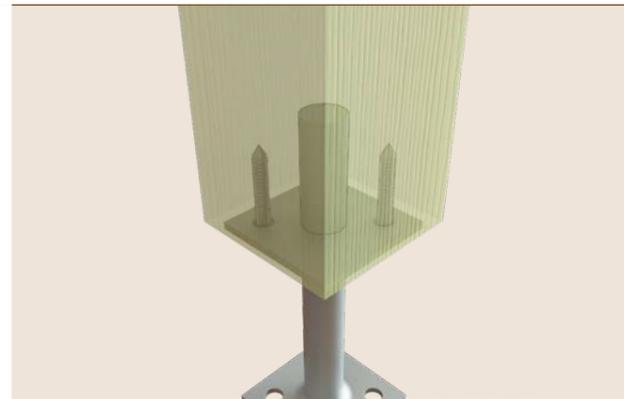
- Replace the post anchor over the drilled holes, ensure the holes within the base plate are over the top of the pre-drilled holes.
- With a spirit level make sure the post anchor is perpendicular to the patio or concrete slab. If not, washers can be used between the post anchor and concrete to level 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



- Drill a hole 26mm in diameter and 65mm in depth central to the timber post.
- Place timber upright over the centre pin. Ensure the post bears onto the base of the bracket and is vertically plumb.

4



- Using the base holes of the Centre Pin Post Anchor as a guide, drill 75mm pilot holes.
- Drill M10 x 75mm coach screws and securely fasten.

## 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



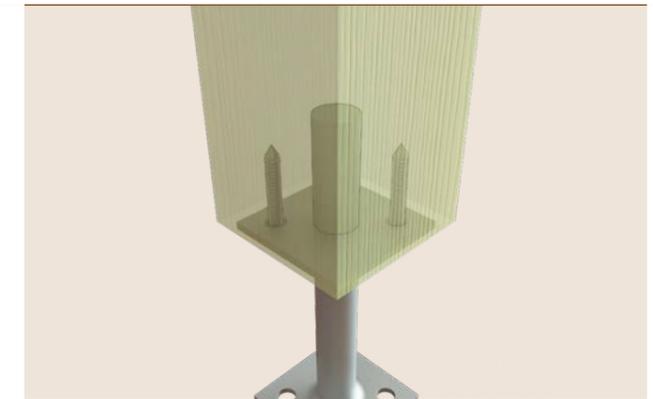
- Position the post anchor in the dugout and suspend using the temporary framing. Ensure the post anchor is vertically plumb and level. Ensure the clearance between underside of post to concrete slab finish surface is at least 75mm.
- Pour the concrete and allow to set.

3



- Drill a hole 26mm in diameter and 65mm in depth central to the timber post.
- Place timber upright over the centre pin. Ensure the post bears onto the base of the bracket and is vertically plumb.

4



- Using the base holes of the Centre Pin Post Anchor as a guide, drill 75mm pilot holes.
- Drill M10 x 75mm coach screws and securely fasten.

# Technical Data

## POST SUPPORT CENTRE PIN

### LIMIT STATE UPLIFT CAPACITY (WIND LOAD)

**Table 1** CAPACITY: FOR 2-M10 x COACH SCREWS WITH 50mm MINIMUM OF THREAD

JOINT GROUP	Seasoned Timber Capacity (kN)					
	JD6	JD5	JD4	JD3	JD2	JD1
	2.8	3.7	4.9	7.2	9.7	11.8
JOINT GROUP	Unseasoned Timber Capacity (kN)					
	J6	J5	J4	J3	J2	J1
	2.1	3.0	3.9	5.7	7.8	9.6

### 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.

**Table 2**

Leg Height (mm)	1.2G+1.5Q (KN)
130	16
300	6

### 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 securely fixed in place or cast in.
- 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.)

# Adjustable Post Support GALVANISED

### Application

The Bremick® Adjustable Post Support is used for locating posts onto existing concrete or decks. Used when installing both common and uncommon sized posts up to 150mm onto the post anchor. Typically used, during the construction of pergolas, carports, or verandahs.

### Advantages

The Bremick® Adjustable Post Support provides numerous benefits including:

- Two-piece design avoids the need to check the timber post.
- Hot dipped Galvanised coating 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.
- AS1397 -2021 for Steel Grade 250
- Welded construction for strength.
- Accommodates common and uncommon square post sizes from 90mm up to 150mm and 85mm and 160mm leg lengths.

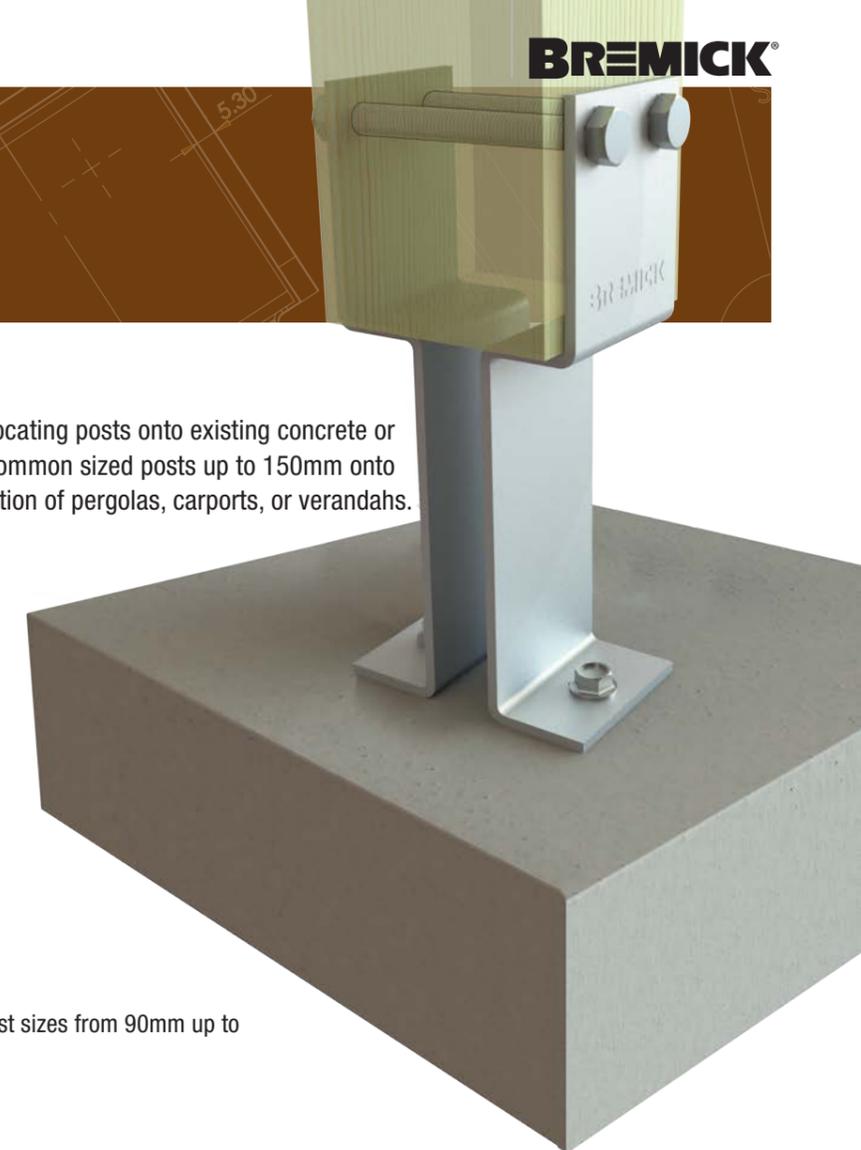
### Specifications

Steel Grade	G250
Coating	Hot Dipped Galvanised (HDG)
Thickness	4mm
Stirrup Blade Height	96mm
Stirrup Blade Width	75mm
Stem Height	85mm, 160mm
Fasteners	M10 Bolts, Nuts and Washers



### Bremick® Ranging

Product Code	Suits Post	Coating	Pack Qty
PADG085000404	85mm leg (Suits M10 Bolts)	HDG	6
PADG160000404	160mm leg (Suits M10 Bolts)	HDG	6



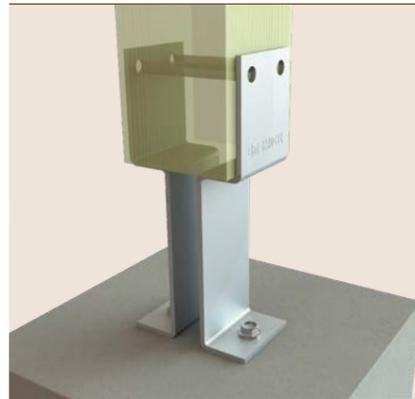
# Installation Instructions

Fixing to existing concrete slab or patio

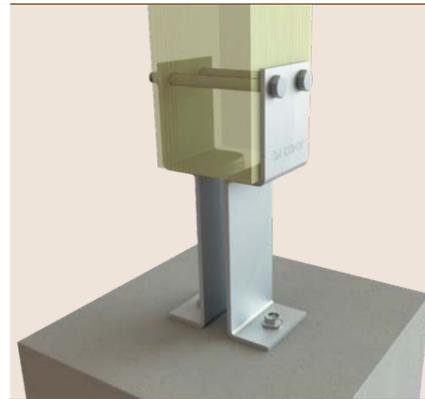
1



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.

- Position the timber post into the post anchor saddle. Ensure the post bears onto the base of the bracket and is vertically plumb.

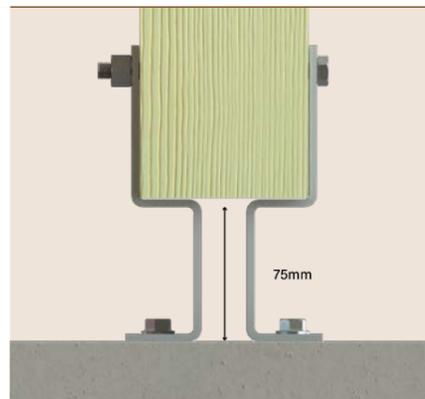
4



5



6



- Drill through the bolt holes located in the side of the post anchor to accommodate M10 bolts. Ensure the drilled holes are horizontally level and perpendicular to the saddle.

- Feed the 2 x M10 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 construction screws through the bolt holes or M10 coach screws.

# Technical Data

## POST SUPPORT – ADJUSTABLE

### LIMIT STATE UPLIFT CAPACITY (WIND LOAD)

**Table 1** CAPACITY: FOR 2 x M10 BOLTS or 4 x M10 x 50mm COACH SCREW

Product	Capacity (All joint groups) (kN)
ADJUSTABLE POST SUPPORT	6.1

### DESIGN CAPACITIES - STEEL STRENGTH ONLY

**Table 2** DESIGN CAPACITIES - STEEL STRENGTH ONLY

Code	Axial Compression	Axial Tension
	Ø Nc (kN)	Ø Nt (kN)
PADG160000404	12	6.1
PADG085000404	14	6.1

### REMARKS

- 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.
- 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).



# Fasteners

Bremick Fasteners designed specifically for either Timber Connectors or Post Supports have been engineered to meet and exceed the relevant building requirement and enhance the overall structural integrity of the connection.

Timber Connector Nails **180**

Connector Screws **181**

Type 17 Hex Head  
Timber Screws – No Seal **182**

Timber Post Screws **183**

Hex Head Bolts **184**

Hex Head Coach Screws **186**

Masonry Screw Anchors **188**

Masonry Sleeve Anchors **189**

# Timber Connector Nails

## GALVANISED & SS316

### Application

Bremick® Timber Connector Nails are designed specifically for fastening connectors such as joist hangers, bracing, triple grips etc to timber substrates.

When fastening galvanised connectors use galvanised nails and stainless steel 316 nails when fastening stainless steel connectors.

Clouts are not recommended for the fastening of timber connectors.

### Advantages

Bremick® Timber Connector Nails provides numerous benefits including:

- Reinforced tapered head for structural applications.
- 3.15mm diameter for greater strength.
- Hot dipped galvanised coating in according with relevant building codes and standards.

### Bremick® Ranging

Product Code	Dimensions	Coating	Weight
NTCPG310353	Timber Connector Nail Gal 35 x 3.15mm (500g)	Hot Dipped Galvanised	500g
NTCPG31035A	Timber Connector Nail Gal 35 x 3.15mm (1Kg)	Hot Dipped Galvanised	1Kg
NTCPG31035C	Timber Connector Nail Gal 35 x 3.15mm (5Kg)	Hot Dipped Galvanised	5Kg
NTCP6310353	Timber Connector Nail SS316 35 x 3.15mm (500g)	<b>SS316</b>	500g



## Installation Instructions

**1**

Place tip of nail in correct fastening location.

**2**

Hammer until head of nail is firmly against connector with a carpenters hammer.

**3**

Ensure an adequate number of nails have been used to provide the necessary connection strength.



# Connector Screws

## GALVANISED - CLASS 3

### Application

Bremick® Connector Screws are designed specifically for fastening connectors such as joist hangers, multi grips, triple grips etc to timber or metal substrates.

The Bremick® Connector Screws must be used with Bremick Connectors to ensure the design values and strength properties are met.

### Advantages

Bremick® Connector Screws provides numerous benefits including:

- Self-drilling for quick installation.
- Hex Head offers positive engagement for ease of installation.
- Coloured head for easy on-site identification and certification.

### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
SUHC3PU2350	SDMT 12-11 x 35mm HEX CLASS 3 PK50	Class 3 - Galvanised	50
SUHC3PU2356	SDMT 12-11 x 35mm HEX CLASS 3 PK250	Class 3 - Galvanised	250



## Installation Instructions

**1**

Insert driver bit into cordless tool and select low speed setting.

**2**

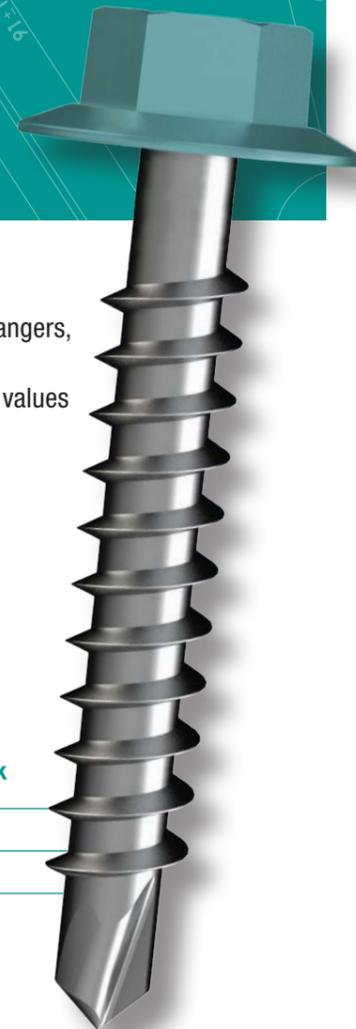
Place tip of screw in correct fastening location.

**3**

Apply firm pressure, until head of screw is firmly against connector.

**4**

DO NOT overdrive.



# Type 17 Hex Head Timber Screws – No Seal

## B8 COATING

### Application

Bremick® Type 17 Hex Head Timber Screws are suitable for fastening connectors such as joist hangers, multi grips, triple grips etc to timber substrates.

The Bremick® Type 17 Timber Screws must be used with Bremick Connectors to ensure the design values and strength properties are met.

### Advantages

Bremick® Type 17 Timber Screws provides numerous benefits including:

- Self-drilling for quick installation.
- Hex Head offers positive engagement for ease of installation.
- High resistance to pull out

### Bremick® Ranging (Galvanised)

Product Code	Dimensions	Coating	Pack Qty
STHC8120358	T17 12-11 x 35mm HEX CL4 (B8) PK100	B8	100
STHC8120352	T17 12-11 x 35mm HEX CL4 (B8) PK500	B8	500
STHC8120652	T17 12-11 x 65mm HEX CL4 (B8) PK500	B8	500



## Installation Instructions

**1**

Insert driver bit into cordless tool and select low speed setting.

**2**

Place tip of screw in correct fastening location.

**3**

Apply firm pressure, until head of screw is firmly against connector.

**4**

DO NOT overdrive.

# Timber Post Screw

## CLASS 3 - GALVANISED & SS316

### Application

Bremick Timber Post Screws are designed for fastening metal hardware with metric holes such as post supports to timber posts. Designed with an enlarged shank to accommodate holes designed for M8, M10 or M12 fasteners. These screws offer a stronger connection point and are designed to withstand greater shear forces.

### Advantages

- Self-drilling functionality provides a fast and hassle-free installation.
- Enlarged shank for greater shear strength.
- Large washer head for greater clamping force.

### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
SQWRTC3160402M	Timber Construction Screw 16-9x40mm M8 SHANK	Class 3 - Galvanised	25
SQWRTC3160402T	Timber Construction Screw 16-9x40mm M8 SHANK	Class 3 - Galvanised	100
SQWRTC3180452M	Timber Construction Screw 18-8x45mm M10 SHANK	Class 3 - Galvanised	25
SQWRTC3180452T	Timber Construction Screw 18-8x45mm M10 SHANK	Class 3 - Galvanised	100
SQWRTC3240502M	Timber Construction Screw 24-7x50mm M12 SHANK	Class 3 - Galvanised	25
SQWRTC3240502T	Timber Construction Screw 24-7x50mm M12 SHANK	Class 3 - Galvanised	100
SQWRTC6180452M	Timber Construction Screw 18-8x45mm M10 SHANK	<b>SS316</b>	25



## Installation Instructions

**1**

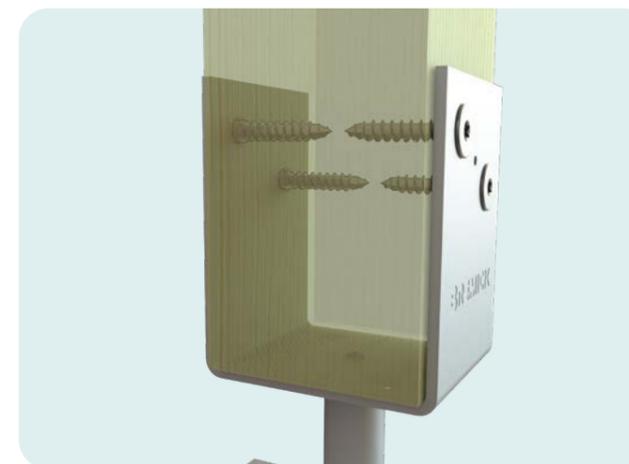
Place correct sized driver bit into the drive recess of the screw.

**2**

Position the screw through the metric hole and onto the timber post.

**3**

Drive firmly until the head is flush on the metal surface.



# Hex Head Bolts Metric GALVANISED & SS316

## Application

Bremick® Hex Head Bolts are a heavy-duty fastening connection for fixing metal to metal, metal to timber, e.g. brackets, post supports, metal framing

The Bremick® post supports will accommodate either M10 or M12 bolts/coach screws.

When fastening hot dipped galvanised post supports use hot dipped galvanised bolts/coach screws and stainless steel 316 bolts/coach screws when fastening stainless steel 316 post supports.

## Advantages

Bremick® Hex Head Bolts provides numerous benefits including:

- Six-sided head which sits above the material surface.
- Can easily be fastened with a spanner or hex socket.
- Enlarged shank for greater strength.

## Bremick® Ranging (Galvanised)

Product Code	Dimensions	Coating	Pack Qty
B46MG101103	HEX BOLT/NUT GAL M10 X 110	Hot Dipped Galvanised	50
B46MG101203	HEX BOLT/NUT GAL M10 X 120	Hot Dipped Galvanised	50
B46MG101303	HEX BOLT/NUT GAL M10 X 130	Hot Dipped Galvanised	50
B46MG101503	HEX BOLT/NUT GAL M10 X 150	Hot Dipped Galvanised	50
B46MG101701	HEX BOLT/NUT GAL M10 X 170 (non barcoded)	Hot Dipped Galvanised	100
B46MG101801	HEX BOLT/NUT GAL M10 X 180 (non barcoded)	Hot Dipped Galvanised	100
B46MG121103	HEX BOLT/NUT GAL M12 X 110	Hot Dipped Galvanised	25
B46MG121203	HEX BOLT/NUT GAL M12 X 120	Hot Dipped Galvanised	25
B46MG121303	HEX BOLT/NUT GAL M12 X 130	Hot Dipped Galvanised	25
B46MG121503	HEX BOLT/NUT GAL M12 X 150	Hot Dipped Galvanised	25
B46MG121803	HEX BOLT/NUT GAL M12 X 180	Hot Dipped Galvanised	25



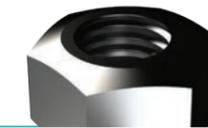
## Galvanised Washers

WFRMG1000P6	WASHER METRIC GAL M10	Hot Dipped Galvanised	500
WFRMG1200P6	WASHER METRIC GAL M12	Hot Dipped Galvanised	200



## Bremick® Ranging (Stainless Steel 316)

Product Code	Dimensions	Suits	Coating	Pack Qty
BHHM6101102	HEX BOLT SS316 — M10 X 110 (non barcoded)	M10 Holes	SS316	25
BHHM6101202	HEX BOLT SS316 — M10 X 120 (non barcoded)	M10 Holes	SS316	25
BHHM6101302	HEX BOLT SS316 — M10 X 130 (non barcoded)	M10 Holes	SS316	25
BHHM6101402	HEX BOLT SS316 — M10 X 140 (non barcoded)	M10 Holes	SS316	25
BHHM6101502	HEX BOLT SS316 — M10 X 150 (non barcoded)	M10 Holes	SS316	25
BHHM6101602	HEX BOLT SS316 — M10 X 160 (non barcoded)	M10 Holes	SS316	25
BHHM6101802	HEX BOLT SS316 — M10 X 180 (non barcoded)	M10 Holes	SS316	25
BHHM6121102	HEX BOLT SS316 — M12 X 110 (non barcoded)	M12 Holes	SS316	25
BHHM6121202	HEX BOLT SS316 — M12 X 120 (non barcoded)	M12 Holes	SS316	25
BHHM6121302	HEX BOLT SS316 — M12 X 130 (non barcoded)	M12 Holes	SS316	25
BHHM6121402	HEX BOLT SS316 — M12 X 140 (non barcoded)	M12 Holes	SS316	25
BHHM6121502	HEX BOLT SS316 — M12 X 150 (non barcoded)	M12 Holes	SS316	25
BHHM6121602	HEX BOLT SS316 — M12 X 160 (non barcoded)	M12 Holes	SS316	25
BHHM6121802	HEX BOLT SS316 — M12 X 180 (non barcoded)	M12 Holes	SS316	25



## Stainless Steel 316 Hex Nuts

NHHM61000N2	HEX NUTS METRIC SS316 M10	M10 Holes	SS316	100
NHHM61200N2	HEX NUTS METRIC SS316 M12	M12 Holes	SS316	100



## Stainless Steel 316 Washers

WFRM610MOW6	FLAT WASHER METRIC SS316 M10	M10 Holes	SS316	200
WFRM612MOW6	FLAT WASHER METRIC SS316 M12	M12 Holes	SS316	100

# Installation Instructions

- Choose a Hex Head Bolt that protrudes approx. 12-15mm beyond the saddle. This will allow for approx. 2 to 3 threads to extend beyond the nut when tightened.
- Drill appropriately sized clearance hole into the base material.
- Place bolt in hole and hammer head into position.
- Place nut on end of bolt and tighten with an appropriately sized spanner.
- When fastening a half stirrup post support utilise a washer on the side that has no saddle to strengthen the connection.



# Hex Head Coach Screws Metric

## GALVANISED & SS316

### Application

Bremick® Hex Head Coach Screws are designed to provide a heavy-duty fastening connection by cutting a thread into timber.

The Bremick® post supports accommodate either M10 or M12 bolts/coach screws.

When fastening hot dipped galvanised post supports use hot dipped galvanised bolts/coach screws and stainless steel 316 bolts/coach screws when fastening stainless steel 316 post supports.

### Advantages

Bremick® Hex Head Coach Screws provides numerous benefits including:

- Enlarged shank for additional strength (pre-drilling required).
- Threads cut into timber to deliver a secure hold.

### Bremick® Ranging (Galvanised)

Product Code	Dimensions	Coating	Pack Qty
SCSMG100404	COACH HEX GAL M10 X 40	Hot Dipped Galvanised	50
SCSMG100504	COACH HEX GAL M10 X 50	Hot Dipped Galvanised	50
SCSMG100754	COACH HEX GAL M10 X 75	Hot Dipped Galvanised	50
SCSMG120504	COACH HEX GAL M12 X 50	Hot Dipped Galvanised	25
SCSMG120754	COACH HEX GAL M12 X 75	Hot Dipped Galvanised	25



### Galvanised Washers

WFRMG1000P6	WASHER METRIC GAL M10	Hot Dipped Galvanised	500
WFRMG1200P6	WASHER METRIC GAL M12	Hot Dipped Galvanised	200



### Bremick® Ranging (Stainless Steel 316)

Product Code	Dimensions	Suits	Coating	Pack Qty
SCSM6100402	COACH HEX SS316 M10 X 40 (non barcoded)	M10 Holes	SS316	50
SCSM6100502	COACH HEX SS316 M10 X 50 (non barcoded)	M10 Holes	SS316	25
SCSM6100752	COACH HEX SS316 M10 X 75 (non barcoded)	M10 Holes	SS316	25
SCSM6120502	COACH HEX SS316 M12 X 50 (non barcoded)	M12 Holes	SS316	25
SCSM6120752	COACH HEX SS316 M12 X 75 (non barcoded)	M12 Holes	SS316	25



### Stainless Steel 316 Washers

WFRM610M0W6	FLAT WASHER METRIC SS316 M10	M10 Holes	SS316	200
WFRM612M0W6	FLAT WASHER METRIC SS316 M12	M12 Holes	SS316	100

## Installation Instructions

**1**

Choose a coach screw that will allow for adequate embedment into the timber post.

**2**

Drill appropriately sized pilot hole into the base material.

**3**

Attach spanner or socket to head of the coach screw and drive until the head is seated.

# Masonry Screw Anchors

## GALVANISED

### Application

Bremick® Masonry Screw Anchors are designed for fixing to concrete, brick and masonry substrates. They are an ideal masonry fastener for fixing post support base plates to existing concrete slabs. The Bremick® post supports base plates accommodate either M10 or M12 Masonry Anchors.

### Advantages

Bremick® Masonry Screw Anchors provides numerous benefits including:

- Self-tapping thread.
- Close to edge fixing – non expansive.
- Removable.

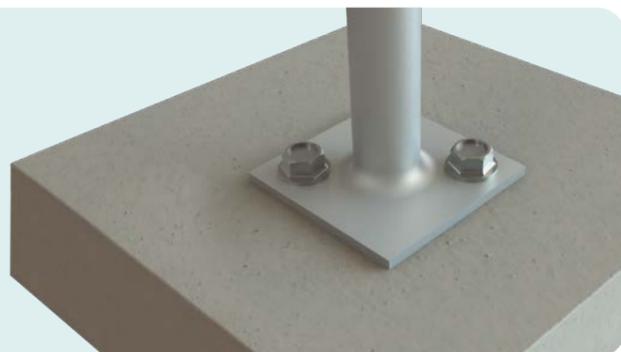
### Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
ASBMG101004	Masonry Screw Anchor Gal M10 X 100	Galvanised	50
ASBMG101504	Masonry Screw Anchor Gal M10 X 150	Galvanised	20
ASBMG121004	Masonry Screw Anchor Gal M12 X 100	Galvanised	50
ASBMG121504	Masonry Screw Anchor Gal M12 X 150	Galvanised	20



## Installation Instructions

When fixing close to the edge of the concrete slab setback post support at least 75mm from the edge.



- 1 Mark out required fastener location.
- 2 Drill hole into base material to depth 20mm greater than the anchor length.
- 3 Blow out dust and drilling fragments.
- 4 Place post anchor base plate over the drilled holes.
- 5 Place anchor through the hole of the post support base plate and at the entry point of the drilled hole in the concrete.
- 6 Using an appropriate socket, drive the anchor into the base material with slight downward force until tight.

# Masonry Sleeve Anchors

## GALVANISED & SS316

### Application

Bremick® Masonry Sleeve Anchors are designed for fixing to concrete, brick and masonry substrates. They are an ideal masonry fastener for fixing post support base plates to existing concrete slabs.

### Advantages

Bremick® Masonry Sleeve Anchors provides numerous benefits including:

- Economical
- Easy to use
- Strong connection

### Bremick® Ranging (Galvanised)

Product Code	Dimensions	Suits	Coating	Pack Qty
ASNMG101004	Masonry Sleeve Anchor - Gal W/Nut M10 X 100	M10 Holes	Galvanised	25
ASNMG121004	Masonry Sleeve Anchor - Gal W/Nut M12 X 100	M12 Holes	Galvanised	20

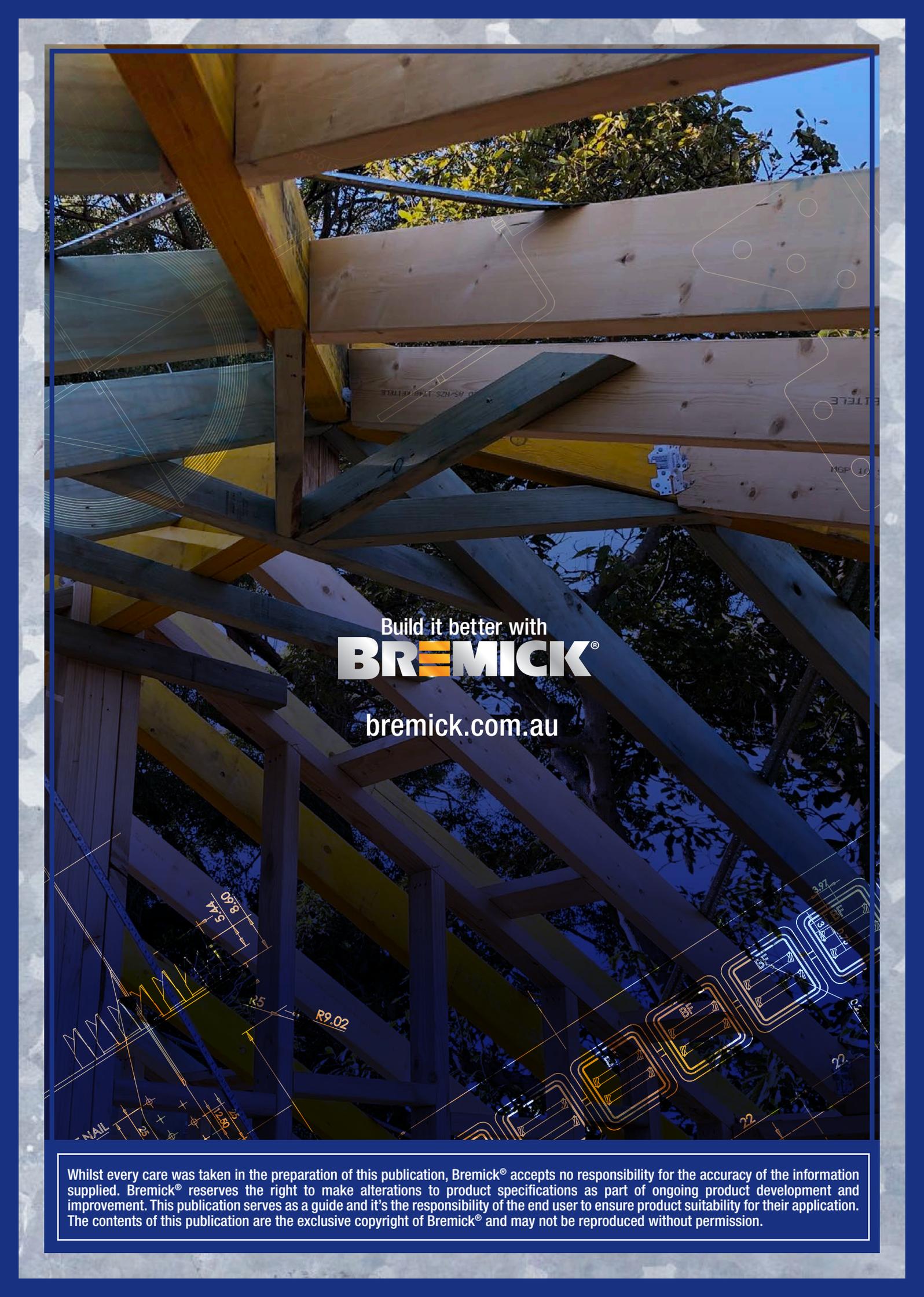
### Bremick® Ranging (Stainless Steel 316)

Product Code	Dimensions	Suits	Coating	Pack Qty
ASNMG6101004	Masonry Sleeve Anchor - SS316 W/Nut M10 X 100	M10 Holes	SS316	25
ASNMG6121004	Masonry Sleeve Anchor - SS316 W/Nut M12 X 100	M12 Holes	SS316	20



## Installation Instructions

- 1 Mark out required fastener location.
- 2 Drill hole into base material to depth 20mm greater than the anchor length.
- 3 Blow out dust and drilling fragments.
- 4 Place post anchor base plate over the drilled holes.
- 5 Place anchor through the hole of the post support base plate and into the drilled hole in the concrete. It may be required to hammer into location.
- 6 Using an appropriate socket, tighten the nut until the sleeve expands in the hole.



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