pryda

NZ DESIGN GUIDE

BRACKETS & FIXES

2024

PRYDA BUILDING GUIDE OVERVIEW

Pryda has developed this guide to accommodate New Zealand building practices. It is important that designers, engineers, builders, inspectors and building authorities are familiar with the benefits and critical requirements of the system. Pryda timber connectors, trusses and beams comply with the New Zealand Building Code, Section B1 Structure and B2 Durability, having been designed in accordance with sound and widely accepted engineering principles to comply with NZS3604:2011.

The capacities reported in this publication are limit state design capacities and not characteristic strengths thereby allowing direct comparison with design reactions reported in Pryda design software and Pryda design reports. This document supersedes and replaces all the previous publications of Builder's Guide.

For further design advice or engineering support regarding the Pryda products discussed in this publication please phone us at **0800 88 22 44** or visit our website - **www.pryda.co.nz.**

The Pryda Design Guide features a Building Consent Documentation Reference for many connection details. This is aimed to encourage designers to align details in the building consent documentation with useful information for easy reference for builders and building officials at the time of inspection. The process is illustrated on the following page. It should be recognised that this is not a requirement, and fabricators may choose to present information in various formats.

The **Building Consent Documentation Reference** should not be confused with the Pryda product code.

The Company

Pryda New Zealand is an autonomous division of USA-based Illinois Tool Works Inc. a Fortune 200 diversified manufacturing company with almost 100 years of history. Other successful ITW brands include Paslode, ITW Proline, Ramset and Reid Construction Systems. Pryda also gains valuable benefits in product, fabrication machinery and software development from its association with other ITW software and truss connector suppliers from around the world.

Who is Pryda?

Pryda was born in Napier, New Zealand in 1964. Pryda has remained an integral part of the building industry in New Zealand for over 50 years, particularly in timber truss and

frame solutions with the development of a diverse range of timber connectors and structural brackets. Today Pryda remains a trusted New Zealand brand on building sites, in trade stores and in offices of architects, engineers and designers.

Pryda utilises world-class technology to provide a total system package to its licensed truss and frame plants, including fully integrated software and production systems, access to world leading manufacturing equipment and the highest levels of technical support.

Our Philosophy

Pryda develops solutions to common construction challenges on the philosophy, **"safer, faster, smarter, easier"**.

Pryda's philosophy is a unique method of looking at the total business needs of its licensed truss and frame fabricators and providing cost effective solutions that not only meet current requirements but also identify and satisfy long term goals.

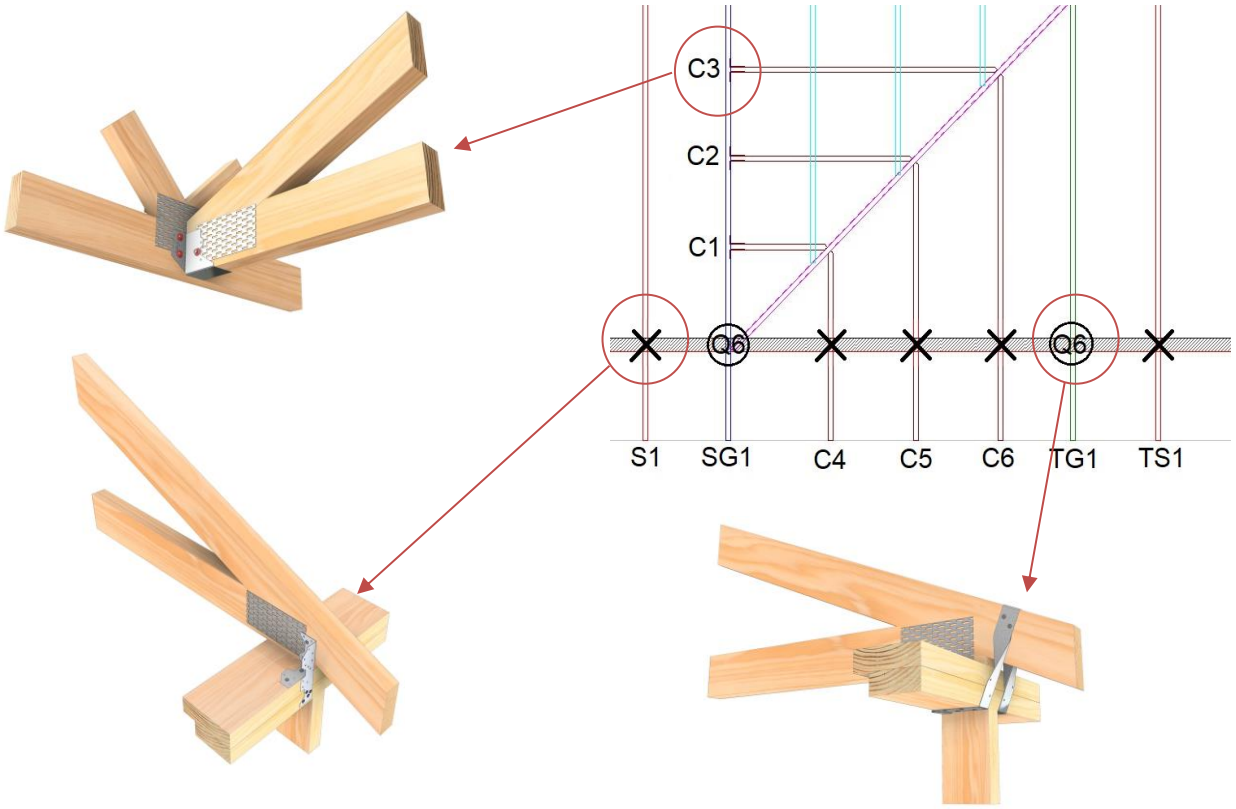
BUILDING CONSENT DOCUMENTATION REFERENCE INDEX

FOUNDATION & SUBFLOOR	Subfloor Fixing	P6	6kN Pile Bearer Kit
		P12	12kN Pile Bearer Kit
	Foundation Strengthening	LB1	10kN Load Foundation slab strengthening
		LB2	20kN Load Foundation slab strengthening
		LB3	30kN Load Foundation slab strengthening
WALL	Bottom Plate Fixing	BP1	Sheet Brace Strap 6kN
		BP2	Sheet Brace Strap 12kN
		BP3	Stud Anchor 6kN
		BP4	Stud Anchor 12kN
		BP6	Bottom Plate Anchor
	Timber Lintel Fixing system	L1	1.4kN lintel fixing
		L2	2.8kN lintel fixing
		L3	8.0kN lintel fixing
		L4	14.0kN lintel fixing
	Top Plate to Stud Connection	TPO	0.7kN Top Plate to Stud
		TP1	1.7kN Top Plate to Stud
		TP2	2.5kN Top Plate to Stud
		TP3	4.7kN Top plate to Stud
	Claw Beam Connection System	L9	Claw Beam Lintel Fixing Various
		L10	Claw Beam Lintel Fixing Various
		L11	Claw Beam Lintel Fixing Various
		L12	Claw Beam Lintel Fixing Various
		L13	Claw Beam Lintel Fixing Various
		L14	Claw Beam Lintel Fixing Various
		L15	Claw Beam Lintel Fixing Various
ROOF FRAMING	Roof Component Tie Down Connection	Z	2 / Z nails ZL or ZR
		U	2 / U nails
		CP9	2 / CPH190 Ceiling Purlin /Hanger
		X	1 / MGL (Multigrip long)
		2X	2 / MGL
		NC4	1 / NPPC4 Concealed Purlin Cleat
		NC6	1 / NPPC6 Concealed Purlin Cleat

ROOF FRAMING	Roof Component Tie Down Connection	NC8	1 / NPPC8 Concealed Purlin Cleat
		Q6	1 / MPQHS6 Cyclone Strap
		Q9	1 / QHS9 Cyclone Strap
		Q6*	1 / MPQHS6 Cyclone Strap, wrap legs under support member
		Q9*	1 / QHS9 Cyclone Strap, wrap legs under support member
	Roof Component to Roof Component Connection	VS	Variable Skew Hanger
		MG	Multigrip
		MGL	Multigrip Long
		A	MPFB4590 Joist Hanger
		B	MPFB45120 Joist Hanger
		C	MPFB45180 Joist Hanger
		D	FB94/152 Joist Hanger
		NC8	2 / NPPC8
		NPA	2 / Nail-on Angle

BUILDING CONSENT DOCUMENTATION REFERENCE

The Pryda Builders Guide features **building consent documentation references** for many connection details. This is aimed to encourage designers to align details in the building consent documentation with useful information in the Pryda Builders Guide for easy reference for builders and building officials at the time of inspection. The process is illustrated below.



FRAME & TRUSS MANUFACTURERS ASSOCIATION CODE OF PRACTICE

1 The Code of Practice

1.1 Purpose

The FTMA Code of Practice is intended to provide a means of assurance to consumers, specifiers, and Building Consent Authorities (BCAs) by way of publishing the standards and procedures that members agree to. In this way there is a basis for comparison with non-members as well as an industry-based benchmark from which expectations can be managed.

1.2 Intention

It is intended that:

- Adherence to the Code of Practice will enable a qualifying fabricator to certify and mark their product as compliant to the Code of Practice.
- After a period of implementation and review adherence to the Code of Practice will be audited by a third-party auditor.
- That adherence to the Code of Practice will be required for membership of FTMA.

1.3 Content

The Code of Practice includes:

- Section 2 - Truss Documentation

2Truss documentation

2.1 Introduction

The intention of this section is to describe the documentation required to be produced by a fabricator of nail-plated timber trusses for use by its customer. The information contained in the document may be used by a Building Consent Authority (BCA) to satisfy the provisions of the Building Act 2004 and reasonable BCA processes in the issuing of a Building Consent or Code Compliance Certificate (CCC).

For practical purposes, the production of the documentation is a two-stage process. The first stage is to provide documentation to support the issuing of a building consent.

This can be achieved by providing:

- a 'Buildable' truss layout.
- Fabricator Design Statement.
- a Producer Statement – Design.

These documents show that trusses have been designed by an accredited fabricator[1], licensed to use specific design software, applying the appropriate loads, and using the appropriate materials to ensure compliance with the NZ Building Code (NZBC) as well as giving notification of any resultant loads that may affect the supporting structure.

This documentation is intended to be provided to the “design lead”[2] to then consider when completing the structural design before providing it to the BCA as part of a building consent application. The BCA may then issue a building consent that is subject to receiving further documentation.

The second stage is to support the issuing of the CCC and is required prior to on-site inspection by the BCA.

This can be achieved by providing:

- an 'As Built' truss layout.
- a Fabricator Design Statement.
- a Producer Statement – Design.
- a Manufacturing Statement.

This is similar documentation to that provided for the first stage but ensures that the final construction details of the manufactured trusses accurately reflect what was built, which can then be recorded by the BCA as part of the project documentation. Such further documentation then satisfies the conditions on which the consent had been issued. The documentation is intended to be provided to the builder on-site and to the customer who should make it available to the BCA prior to on-site inspection.

When producing an 'As Built' truss layout and final truss detailing for supply, it is expected that a fabricator shall give consideration to any 'Buildable' truss layout that has been consented by a BCA. The fabricator shall consider any structural implications that may result from a different layout to that consented and if any changes are to be made then these shall be communicated to the customer to pass on to their design team for consideration and approval before proceeding with supply. It is not expected that fabricators should have to follow exactly a consented layout, particularly when a competitive party may have provided it. However, a fabricator will have to produce an 'As Built' truss layout as per 2.3.1. This two stage process is reflected in section 7.5 of the guidance document "Guide to applying for a building consent" published by the Department of Building and Housing. Acknowledgement and support for the COP Section 2 – Truss Documentation is also outlined in the publication from DBH Codewords issue 044. Both publications are available online at www.dbh.govt.nz.

While it is expected that the documentation is going to be provided to assist a BCA in the consent or CCC process it should be noted that the contractual relationship is between a fabricator and its customer and that the responsibility to provide this information to a BCA rests with the applicant for a building consent.

Notes:

1. An accredited fabricator is a company that has a formal agreement with a nail-plate manufacturer to use their products in the manufacture of trusses. The nail-plate manufacturer in turn licenses the fabricator to use specific design software supplied and underwritten by the nail-plate manufacturer.
2. A design lead refers to the architect or draftsperson responsible for the overall design of the building.

PRODUCER STATEMENT PRYDA TIMBER CONNECTORS

August 2024

This Producer Statement is issued by Pryda NZ to cover the use, installation, and durability of Pryda Timber Connectors for both structural application and durability as required by the New Zealand Building Code clauses B1 & B2, respectively.

Description

The Pryda timber connectors are manufactured from either Z275 or Z600 galvanised coil. Some brackets are also available in hot dipped galvanised or stainless steel for use in certain exposed and covered situations.

Application

Pryda timber connectors are designed for specific connections of timber to timber, primarily, as well as masonry, concrete, and steel. Please contact Pryda should you require assistance relating to these connectors.

Installation

Pryda timber connectors should be installed without damage to the finished surfaces. Storage prior to use to be in dry moisture free conditions that would not affect the future durability of the product.

Design Capacity

As timber grades vary the design capacity is derived using the methods in NZS AS1720.2022 and is mostly dependent on the shear values of the nails, screws, and bolts in timber. Most commonly used Timber Connectors have published limit state design strengths published in our literature.

Durability

The durability of Pryda timber connectors is in accordance with the acceptable solutions contained in Table 4.1 and Table 4.2 of NZS3604:2011 to achieve a 50 year life expectancy for the connectors where applicable. Alternative solutions and direct applications are to be found elsewhere in this publication.

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PRODUCER STATEMENT STRUCTURAL BRACKETS

Pryda Structural Brackets

August 2024

This Producer Statement is issued by Pryda NZ to cover the use, installation, and durability of Pryda Structural Brackets for both structural application and durability as required by the New Zealand Building Code clauses B1 & B2, respectively.

Description

Pryda Structural Brackets are fabricated from flat bar steel. They are mostly available in hot dipped galvanised finish with a selection also available in stainless steel for use as an architectural feature or in certain exposed and covered situations as covered in NZS3604:2011. The zinc coating is applied in accordance with AS/NZS 4680:2006. The remaining Pryda Structural Brackets are finished in electro galvanised.

Application

Pryda Structural Brackets are designed to connect timber to masonry, concrete, and steel. The brackets are designed for specific connections of timber to other materials. Please contact Pryda technical service should you require assistance with your intended application.

Installation

The Pryda Structural Brackets should be installed without damage to the finished surfaces. Storage prior to use to be in dry moisture free conditions that would not affect the durability of the product.

Characteristic Strength

When used with timber, the characteristic strength is derived by the verification method in accordance with the NZBC standard NZS3603:1993. The withdrawal strength of the bracket varies with the type of substrate it is installed in, hence the limit state design capacities shall be determined by the design engineer taking into consideration the above point.

Durability

The durability of the Pryda Structural Brackets is more than the acceptable solutions contained in Table 4.1 of NZS3604:2011 in order to achieve a 50-year life expectancy for the brackets. Pryda Structural Brackets are hot-dipped galvanised to a level equal to or exceeding 500g/m^2. Depending on the environmental conditions and exposure conditions, the surface of the stainless-steel brackets can be affected by tea staining. However, tea staining does not affect the structural integrity of the fitting.

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ENVIRONMENT DEFINITIONS & PRODUCT SELECTION

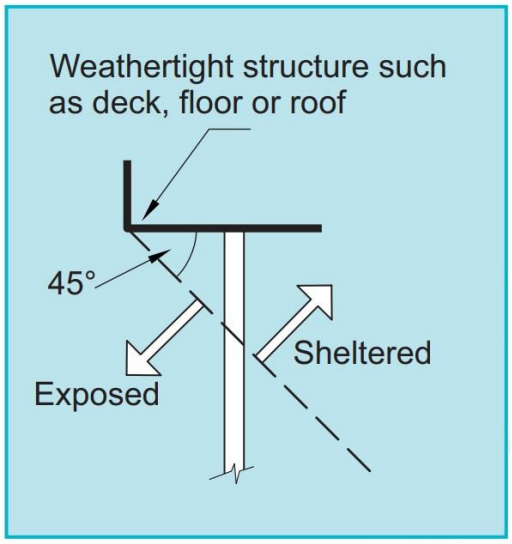
Alternative solution to Table 4.1 NZS3604:2011

Under the building code, Clauses B2 Durability, requirements for steel fasteners are:

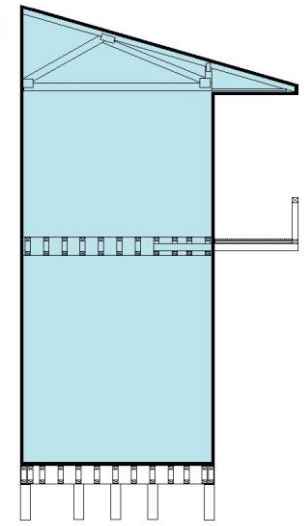
- For structural steel fasteners with difficult access and replacement - 50 years or nominated period
- For structural steel fasteners with moderate ease of access and replacement - 15 years or nominated period

Environment Definitions

Exposed/Sheltered



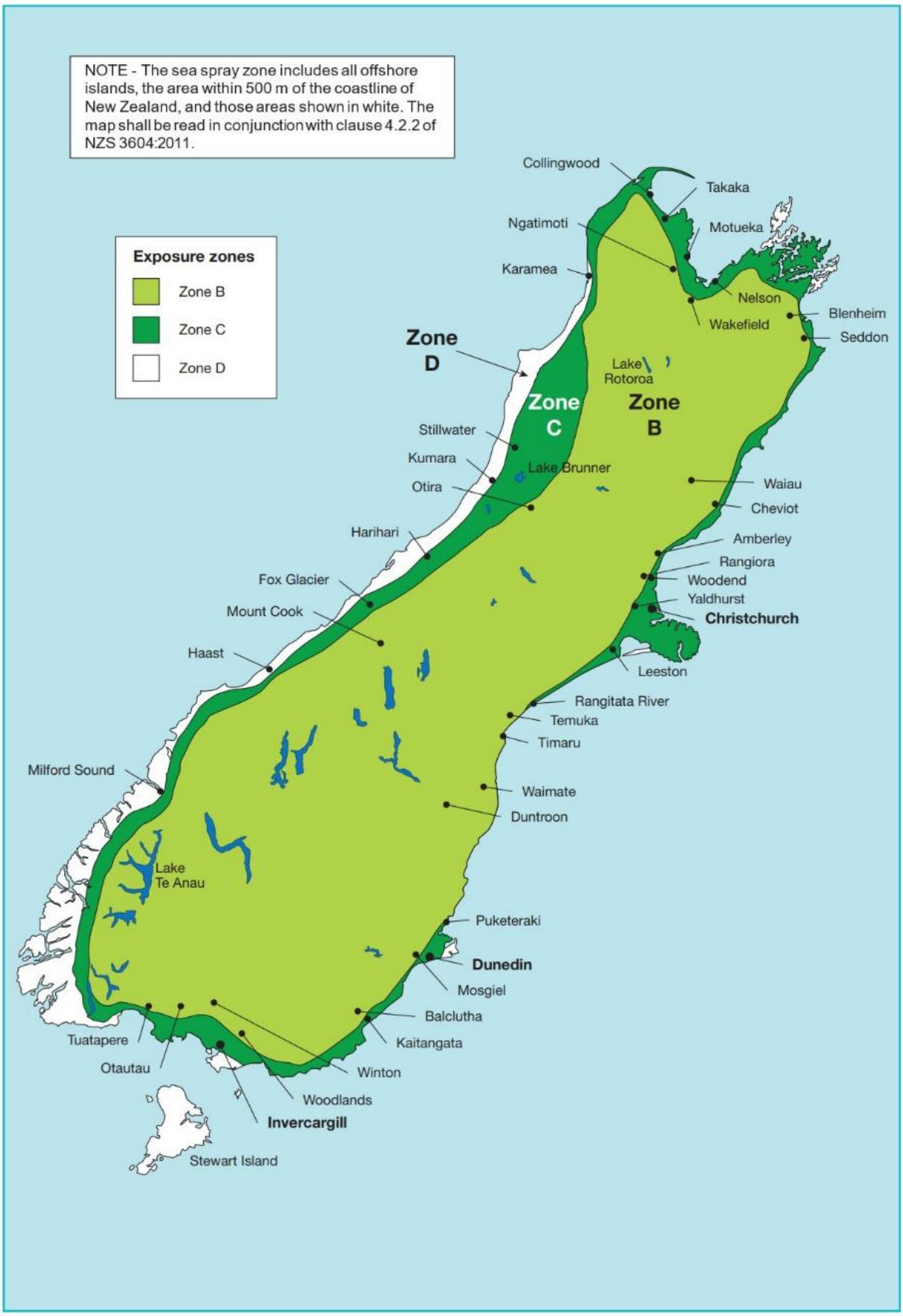
Closed



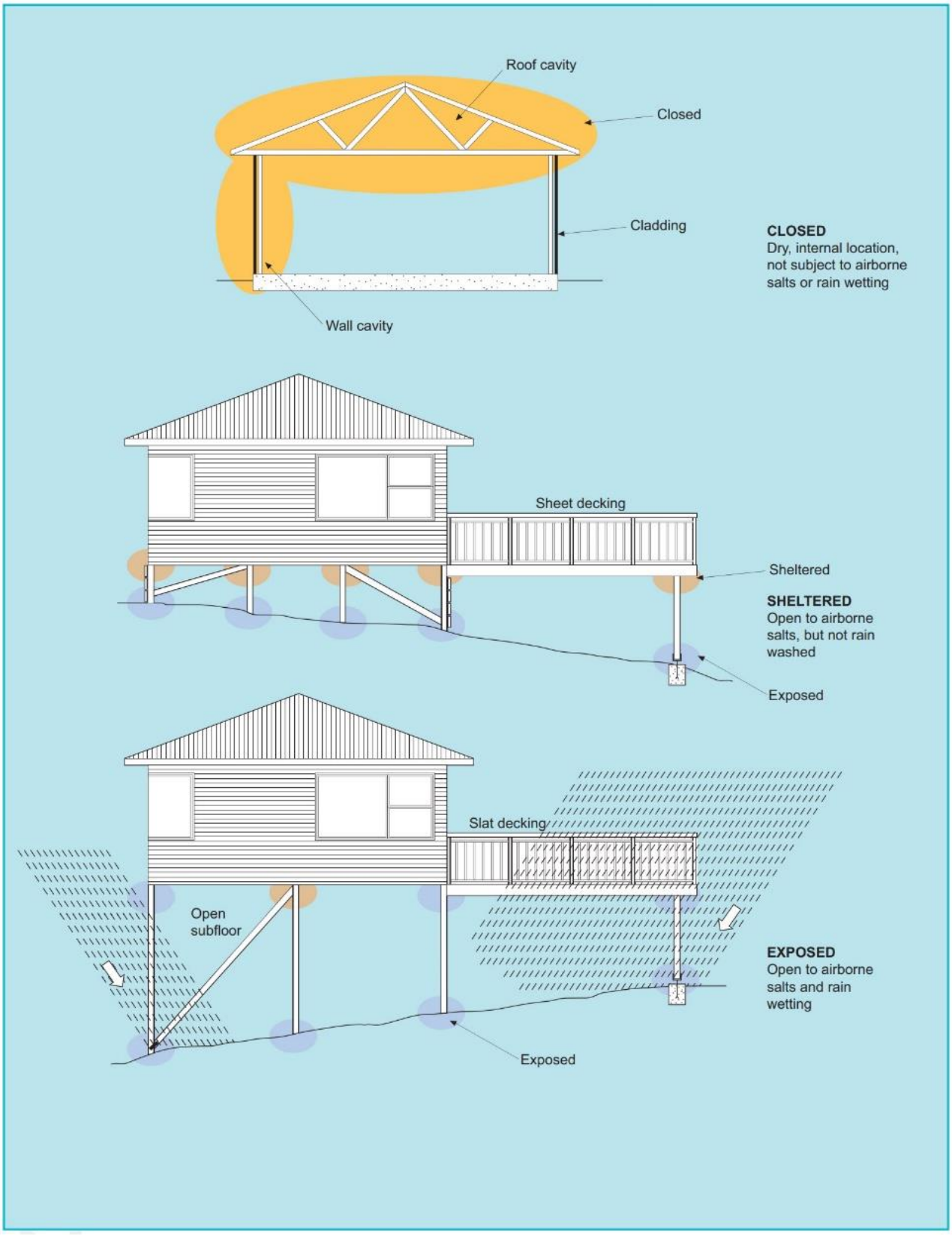
Zone	Location		Environment	Product
All Zones	Fully enclosed walls, floors & roof spaces		Closed	Pryda Zinc Coated Products
Zones B & C	All subfloor fastenings more than 600mm above the ground	Vented 7000mm^2/m^2 or LESS	Sheltered	Pryda Stainless Steel Products
		Vented MORE than 7000mm2/m^2	Exposed	Pryda Stainless Steel Products
	All subfloor fastenings within 600mm of the ground	Sheltered and exposed		Pryda Stainless Steel Products
	All other structural fixings	Sheltered		Pryda Stainless Steel Products
		Exposed		Pryda Stainless Steel Products Pryda SBK HDG Brackets
Zones D	All structural fittings	Sheltered and exposed		Pryda Stainless Steel Products

Notes: All Pryda galvanised products comply with NZS3604:2011 Table 4.2

EXPOSURE ZONES



EXPOSURE DEFINITIONS



PRODUCT DATA SHEET

NZ PRYDA FRAME FIX

Reinforces top plates
and common stud that have been compromised by large holes commonly drilled through for services.
i.e. plumbing pipe, electrical cabling.

Alternative Solution to NZS3604 to Section 8, Clause 8.7.5 Holes in plates.

FEATURES AND BENEFITS

SIMPLE: Stiffens the top plate for areas in the region of the penetrations

FAST: Quick installation to top plate by using Pryda self-drilling screws

DURABLE: Suitable for both single & double top plates. Can be installed before or after service pipe penetration. Made from 1.55mm thick G200 Z275 Steel.

SPECIFICATIONS

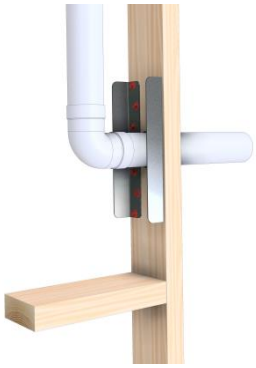
PRODUCT CODE	PFF2
STEEL	G200
THICKNESS	1.55mm
CORROSION RESISTANCE	Z275
FASTENERS	Pryda 12G x 35mm Timber Connector Screw-painted red head.
SIZE	240 x 34 x 31mm Hole Diameter 60mm max.

At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.

Can be installed underside of top plate for full concealment within wall width.

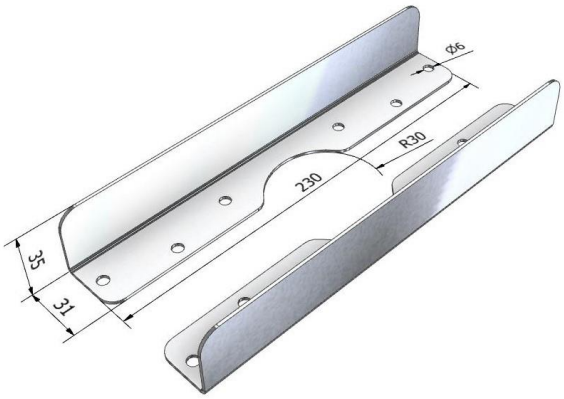
Can be installed on top of top plate with legs facing down if there are no trusses above and face cladding permits.

Can be installed on top of top plate if there are no trusses above.



Can be installed on SG8 common stud.

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



RANGE

PRODUCT CODE	MATERIAL	SIZE (mm)	MINIMUM TIMBER GRADE	SUITABILITY	QUANTITY
PFF2	G200 Z275 Galvanised Steel	240 x 34 x 31	SG8	Top Plate and Common Stud	10

Notes:

1. Design applies for dry (maximum moisture content of 18%) Radiata Pine and Douglas Fir timber grade SG8 and for timber which meets JD5 timber as defined in AS/NZS 1720.
2. Suitable for single or double 90 x 45mm SG8 timber only.
3. Frame Fix must be installed in PAIRS.

DURABILITY

The following table provides an easy guide when selecting a Pryda product corrosion protection finish that will meet and exceeds NZS 3604:2011 table 4.1.

Pryda Frame fix is only available in Z275, therefore suitable for “Closed” environment.

ZONE	LOCATION		Environment	Product
All Zones	Fully enclosed walls, floors, and roof spaces		Closed	Pryda Zinc Coated Products Z275
Zones B and C	All subfloor fastenings more than 600mm above the ground	Vented 7000mm^2/m^2 or LESS	Sheltered	Pryda Stainless Steel 304 Products (3)
		Vented MORE than 7000mm^2/m^2	Exposed	Pryda Stainless Steel 304 Products (3)
	All subfloor fastenings within 600mm of the ground	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)
	All other structural fixings	Sheltered		Pryda Stainless Steel 304 Products (3)
		Exposed		Pryda Stainless Steel 304 Products (3)
Zone D	All structural fixings	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)

Notes:
1.All Pryda galvanised products comply with NZS3604:2011 Table 4.2.
2.Refer to NZS3604:2011 for all environment definitions.
3.Routine inspection and cleaning using soap and fresh warm water is an integral part of the ongoing care and maintenance of stainless steel to preserve its appearance.

STORAGE AND HANDLING

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

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e., B1.3.3 (a), (b), (f), (g), and (h)). Only some may apply for a specific use of the component.
Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.
Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

APPLICATION AND SCOPE OF USE FOR TOP PLATE(S)

Alternative Solution to NZS3604 to Section 8, Clause 8.7.5 Holes in plates.

The PFF2 is intended to re-instate the structural integrity of SG8 90 x 45mm wall frame top plate (including a top plate packer if used) or wall studs that have had a service hole of no greater than 60mm diameter drilled through its center.

Pryda Frame Fix is certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise approved by a certified structural Engineer. Only use the product for its intended applications and the selected product material type within the specified environmental condition as outlined in NZS 3604:2011 Table 4.1. (Refer to Durability section for more details).

Top plate(s) installation conditions :

Pryda Frame Fix is suitable for Residential light timber frame dwellings designed where the maximum loaded dimension of the wall for the respective top plate does not exceed that specified in NZS3604, Table 8.16 – Top plates of loadbearing walls.

Frame Fix must be used in accordance with the installation procedures outlined in this document to provide structural support to 90 x 45mm SG8 single or double top plates for a centrally located hole of max 60mm diameter.

The Frame Fix is suitable for use on 90mm wide frames ONLY.

Only 1 Frame Fix (installed in pairs) is to be installed between a set of studs – multiple penetrations are not permitted. Any further penetrations should
skip at least 1 bay of studs from the existing location.

Any supported truss near the Frame Fix (PFF2) installation shall have a minimum of 100mm clearance. See Figure 1.

If the Frame Fix is installed in accordance with this document, the top plates in the section that the Frame Fix is installed can be considered structurally adequate as originally designed in accordance with NZS3604.

It is important the timber at Frame Fix installment and within 150mm of Frame Fix is free from any timber defects such as knots, splits, checks, wanes or defects that may weaken and compromise the structural integrity of the timber.

The Frame Fix must not be modified in any way, shape or form under any circumstances or conditions.

Note: There should be no large point loads (e.g., from girder trusses, floor beams, etc.) in the top plate sections containing the Frame Fix, or penetrations in general - typically large point loaded elements should be supported directly by studs. The Frame Fix is to be installed on continuous top plates and not over or adjacent to any splice joint.

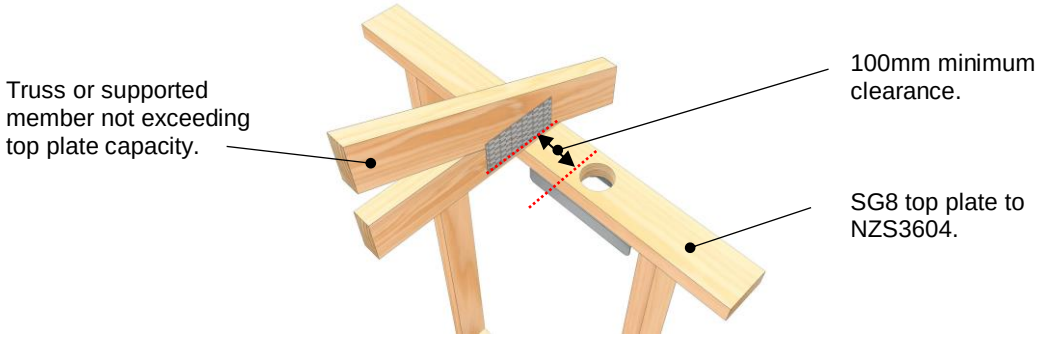
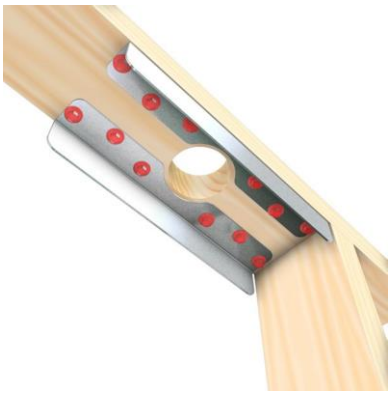


Figure 1 : 100mm minimum truss clearance to penetration with PFF2 reinforcement.

INSTALLATION – TOP PLATE UNDERSIDE

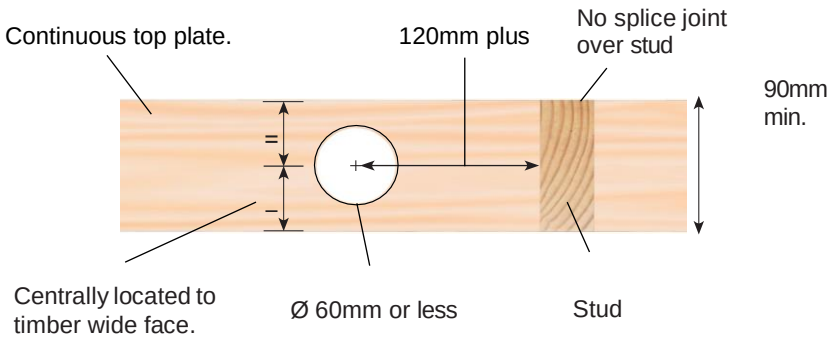
Fixing to underside of top plate where centre of hole is at least 120mm from the nearest stud.



STEP 1

Measure and mark the location on the top plate to be reinforced, ensuring the centre of the hole in no closer than 120mm from the face of the stud. Holes within 120mm of the stud can be reinforced by installing Frame Fix on the top face (see following section). The hole size should be no greater than 60mm diameter and must be centrally located within the 90mm plate width. The Frame Fix can be installed before or after the hole is drilled.

It is important the timber at Frame Fix installment and within 150mm of Frame Fix is free from any timber defects such as knots, splits, checks, wanes or defects that may weaken and compromise the structural integrity of the timber.



STEP 2

Drill a hole through the timber to the required diameter at the marked location, not exceeding 60mm.

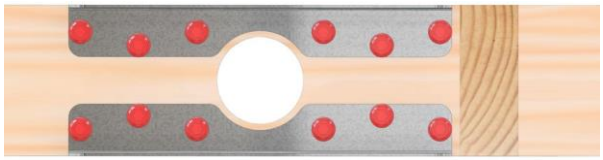
STEP 3

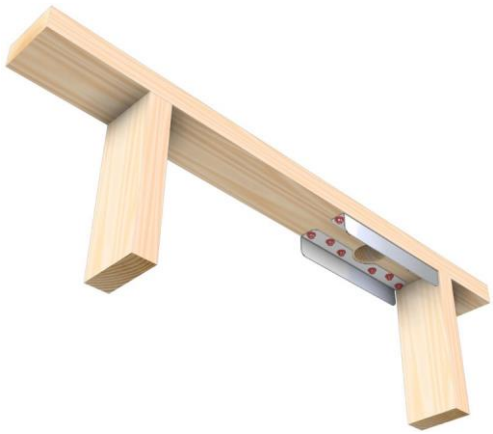
Place the Frame Fix centrally over the hole. The vertical flange should be flush with the edge of the frame. Fix into place using 12 x Pryda 12G x 35mm Timber Connector screws – painted red head. The Frame Fix must always be installed in pairs.
For double top plates, insert an additional 2 x 14G Type 17 Hex Head screws, 70mm from the edge of the hole on both sides. Use 14G x 90mm screws for double 45mm top plates.

Note: the additional screw can be omitted if there is already a wall plate tie-down screw installed on that side of the hole. Double top plates are assumed to be laminated in accordance with NZS3604 or to the Project Engineer's requirements; do not rely on the Frame Fix for this purpose. Top plate(s) to be designed in accordance with and not exceeding NZS3604, Table 8.16.

SINGLE TOP PLATE INSTALL

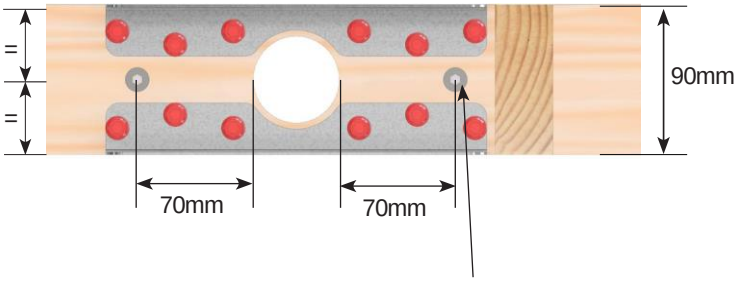
Pryda 12G x 35mm Timber Connector Screws – painted red head.





DOUBLE TOP PLATES INSTALL

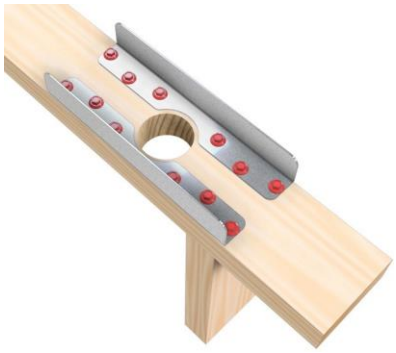
Pryda 12G x 35mm Timber Connector Screws - painted red head, plus
2 x 14G screws to suit double plates depth.

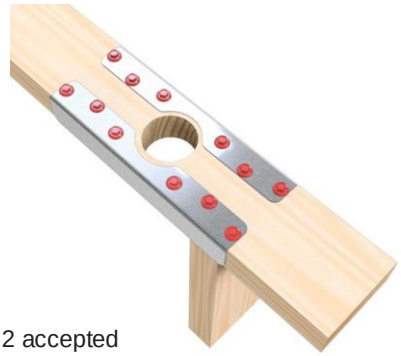


14G screws to suit double top plates overall depth. One on each side of hole is required. Unless an existing top plate to stud tie-down screw is in place. If so, one 14G screw is required.

INSTALLATION – ON TOP OF TOP PLATE

Fixing to top side of top plate where service hole edge is no closer than 45mm from the stud.



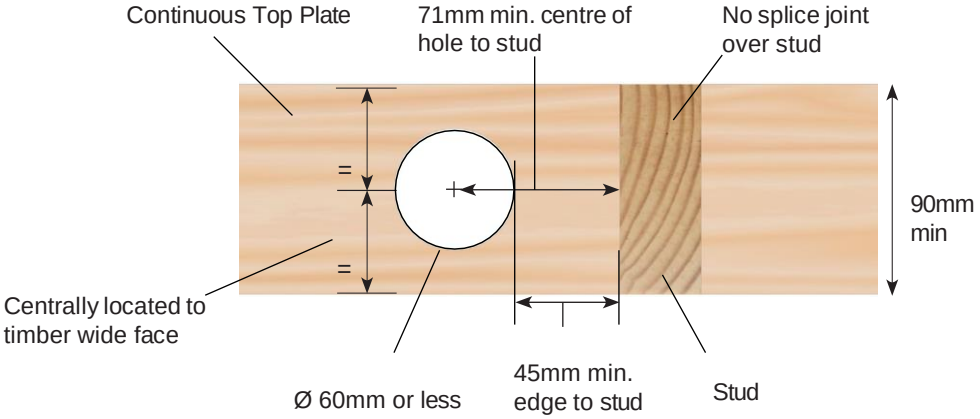


*Single top plate shown with 2 accepted installation orientations.

STEP 1

Measure and mark the location on the top plate to be reinforced, ensuring the centre of the hole in no closer than 120mm from the face of the stud. Holes within 120mm of the stud can be reinforced by installing the Frame Fix on the top face (see following section). Hole size should be no greater than 60mm in diameter and must be centrally located within the 90mm plate width. The Frame Fix can be installed before or after the hole is drilled.

Important Note: Ensure there are no timber defects (i.e., knots, wane, want, resin pockets) within 100mm of the Frame Fix or hole location.



STEP 2

Drill a hole through the timber to the required diameter at the marked location, not exceeding 60mm.

STEP 3

Place the Frame Fix centrally over the hole. The vertical flange should be flush with the edge of the frame. Fix into place using 12 x Pryda 12G x 35mm Timber Connector screws – painted red head. The Frame Fix must always be installed in pairs.

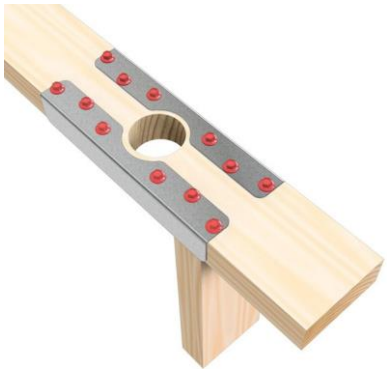
For double top plates, insert an additional 2 x 14G Type 17 Hex Head screws, 70mm from the edge of the hole on both sides. Use 14G x 90mm screws for double 45mm top plates.

Note: the additional screw can be omitted if there is already a wall plate tie-down screw installed on that side of the hole.

Double top plates are assumed to be laminated in accordance with NZS3604 or to the Project Engineer's requirements; do not rely on The Frame Fix for this purpose. Top plate(s) to be designed in accordance with and not exceeding NZS3604, Table 8.16.

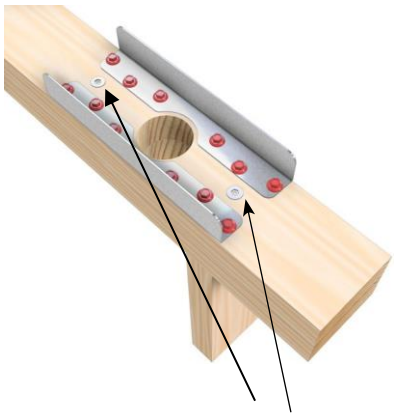
SINGLE TOP PLATE INSTALL

Pryda 12G x 35mm Timber Connector screws- painted red head.

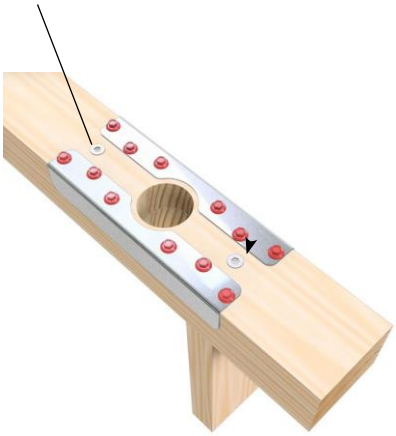


DOUBLE TOP PLATES INSTALL

Pryda 12G x 35mm Timber Connector screws- painted red head plus 2 x 14G screws to suit double plates depth

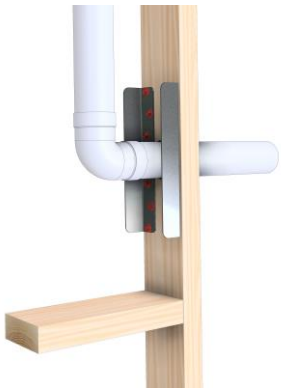


14G screw to suit double top plates overall depth. One on each side of hole is required. Unless an existing top plate to stud tie-down screw is in place. If so, one 14G screw is required.



The overlapping plate edge may interfere with wall cladding. Notching the top plate for a flush finish is NOT RECOMMENDED. It is the builder's responsibility to adopt an appropriate installation orientation to best suit the requirements of the build. Top plate must be continuous and no splice joint over stud.

INSTALLATION – COMMON STUD



Pryda Frame Fix can also be used for common studs up to 3000mm wall heights in residential construction. Pryda Frame Fix is not suited for commercial construction.

APPLICATION AND SCOPE OF USE FOR COMMON STUD

Pryda Frame Fix is certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise approved by a certified structural Engineer. Only use the product for its intended applications and the selected product material type within the specified environmental condition as outlined in NZS 3604:2011 Table 4.1. (Refer to Durability section for more details).

Pryda Frame Fix is suitable for Residential light timber frame dwellings designed in accordance with NZS3604.

The Frame Fix must be used in accordance with the installation procedures outlined in this document to provide structural support to 90 x 45mm SG8 unjointed common studs for a centrally located hole of max 60mm diameter.

The Frame Fix is suitable for use on 90mm wide frames ONLY.

Only 1 Frame Fix is to be installed per common stud – multiple penetrations are not permitted.

If the Frame Fix is installed in accordance with this document, then the stud in the section that the Frame Fix is installed, can be considered structurally adequate if the studs were originally designed in accordance with NZS3604 for 90 x 45mm SG8.

Design values are based on SG8 timber and meets minimum JD5 timber as defined in AS/NZS 1720.

The Frame Fix must not be modified in any way, shape or form under any circumstances or conditions.
There should be no large point loads (e.g., from girder trusses, floor beams, etc.) in the top plate sections directly over or adjacent to the stud containing the Frame Fix, or penetrations in general - typically large point loaded elements should be supported directly by critical studs without any penetrations. The Frame Fix is to be installed on continuous studs and not over or adjacent to any splice joint or jointed stud.

Pryda Frame Fix shall be installed no closer than 300mm from stud end-cut and 120mm from face of noggings / trimmers. Holes size should be no greater than 60mm diameter and must be centrally located within 90mm plate width. The Frame Fix can be installed before or after the hole is drilled.

Common stud installation conditions for external walls :

Penetrations and Frame Fix (PFF2) shall be fixed outside the central third of the stud for common studs for external walls and with a maximum roof load width of 6m. See Figure 2.

PFF2 is NOT suitable for critical studs.

Only install PPF2 to one stud in every 5 to external walls.

Maximum stud height not exceeding 3m and with a maximum wind speed less than or equal to 50m/s.

It is important the timber at Frame Fix installment and within 150mm of Frame Fix is free from any timber defects such as Knots, Splits, Checks, Wanes or defects that may weaken and compromise the structural integrity of the timber by having any penetrations.

Internal Non-load bearing and Non-braced walls :

Pryda Frame Fix can be located at any location along the length of the stud and within the minimum stud end-cut distance. See Figure 3.

It is important the timber at Frame Fix installment and within 150mm of Frame Fix is free from any timber defects such as knots, splits, checks, wanes or defects that may weaken and compromise the structural integrity of the timber.

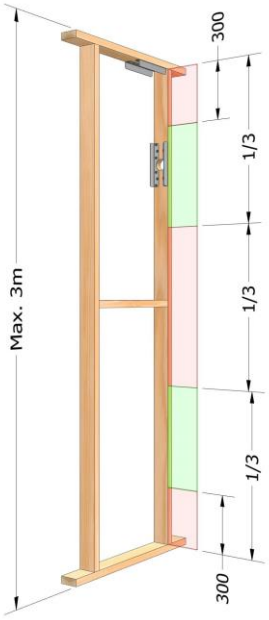


Figure 2, Holes shall be located within green highlighted sections only for external walls.

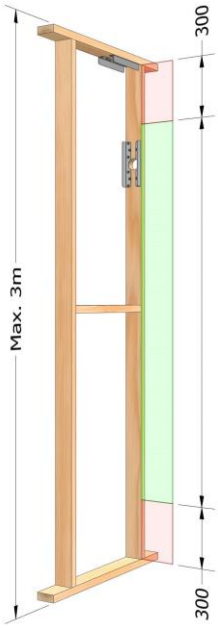
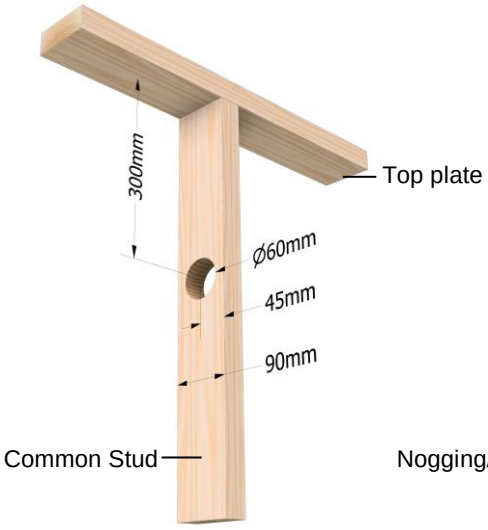
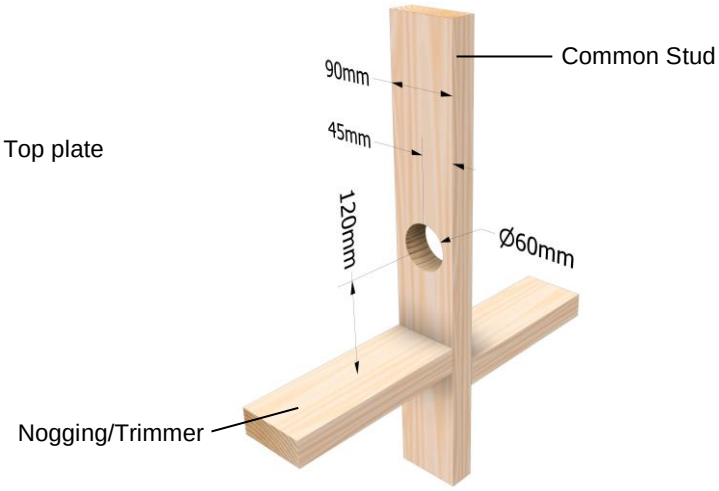


Figure 3, Holes shall be located within green highlighted sections only for internal walls.

STEP 1

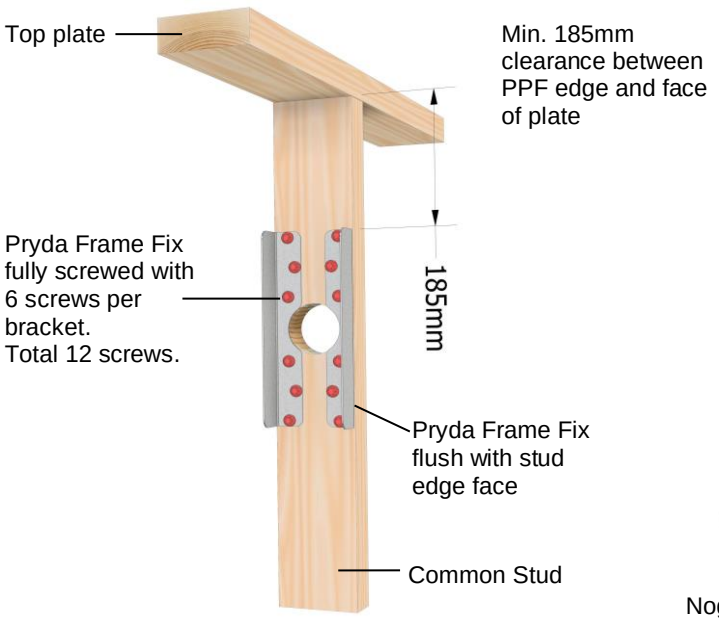
- Check location of the hole top or bottom plate is no less than 300mm.
- If the hole is next to the nogging, ensure the centre of the hole must be a minimum of 120mm from face of nogging/trimmer.
- Stud must be no less than 90mm wide
- The hole must be no greater than 60mm in diameter and located centrally to stud width.
- Common studs only, not supporting any concentrated loads.

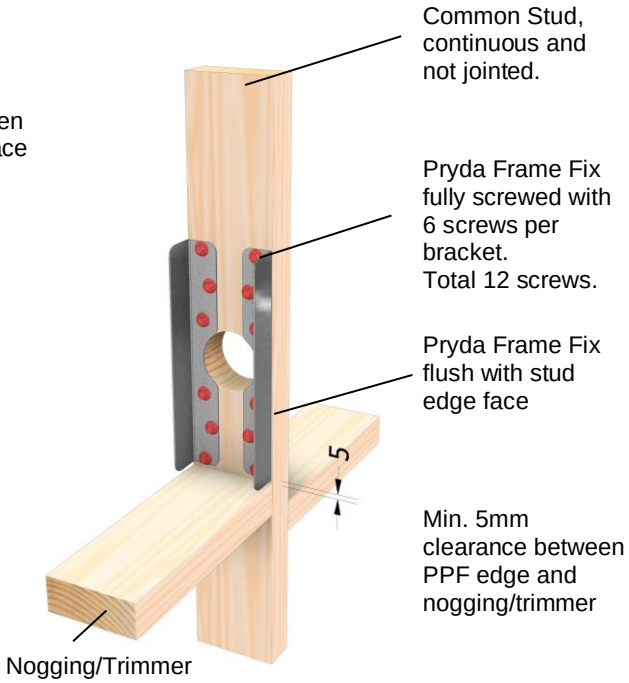




STEP 2

- Install Pryda Frame Fix on either side of the hole and fix each bracket with 6 X No.12 x 35mm Pryda Timber Connector screws -painted red head.
- Ensure Frame Fix is vertically centered to the hole.
- Pryda Frame Fix can be installed before or after drilling hole. If before, mark hole following STEP 1 constraints and install PFF. Then drill hole.
- Ensure Pryda Frame Fix is not overhanging pass stud edge.
- Pryda Frame must be installed in PAIRS as shown.





Contact Details	
Manufacture location	Overseas
Legal and trading name of manufacturer	Wigley Engineering Pty Ltd
Legal and trading name of importer	Pryda New Zealand -a Division of ITW New Zealand
Importer address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Importer website	pryda.co.nz
Importer email	info@prydaanz.com
Importer phone number	0800 88 22 44
Importer NZBN	9429039833129

PRODUCT DATA SHEET

NZ HOLD DOWN BRACKET

Tie down resistance for a variety of applications and with a variety of fasteners.

FEATURES AND BENEFITS

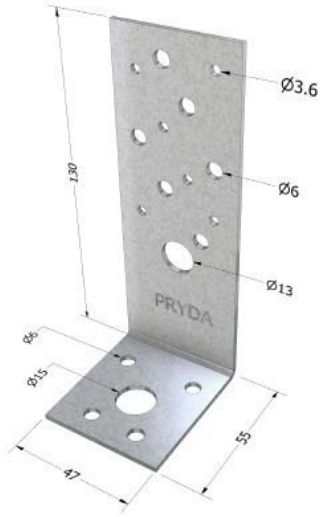
SIMPLE: Can be fixed with nails, screws, and bolts

FAST: Can be used for a variety of applications, such as a tie down for trusses, wall frames and narrow wall bracing units.

DURABLE: Made from 2.0mm G300 Z275 Galvanised Steel.

SPECIFICATIONS

PRODUCT CODE	MPCPAH
STEEL	G300
QUANTITY	75
THICKNESS	2.0mm
CORROSION RESISTANCE	Z275
TIMBER FASTENERS	Pryda 35 x 3.15mm Timber Connector Nails **OR** Pryda 12G x 35mm Timber Connector Screws - painted red head
ANCHORING FASTENER	M12 Tie-down rod or M12 x 150mm Anka Screw AND 40 x 40 x 5mm square washer
SIZE	47 x 55 x 130mm



*All dimensions shown in “mm”.

At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.

DURABILITY

The following table provides an easy guide when selecting a Pryda product corrosion protection finish that will meet and exceeds NZS 3604:2011 table 4.1.

Pryda Hold Down Bracket is only available in Z275, therefore suitable for “closed” environment.

ZONE	LOCATION		ENVIRONMENT	PRODUCT
All Zones	Fully enclosed walls, floors, and roof spaces		Closed	Pryda Zinc Coated Products Z275
Zones B and C	All subfloor fastenings more than 600mm above the ground	Vented 7000mm^2/m^2 or less	Sheltered	Pryda Stainless Steel 304 Products (3)
		Vented MORE than 7000mm^2/m^2	Exposed	Pryda Stainless Steel 304 Products (3)
	All subfloor fastenings within 600mm of the ground	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)
	All other structural fixings	Sheltered		Pryda Stainless Steel 304 Products (3)
		Exposed		Pryda Stainless Steel 304 Products (3)
Zone D	All structural fixings	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)

Notes:
1.All Pryda galvanised products comply with NZS3604:2011 Table 4.2.
2.Refer to NZS3604:2011 for all environment definitions.
3.Routine inspection and cleaning using soap and fresh warm water is an integral part of the ongoing care and maintenance of stainless steel to preserve its appearance.

STORAGE AND HANDLING

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

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e., B1.3.3 (a), (b), (f), (g), and (h)). Only some may apply for a specific use of the component.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.

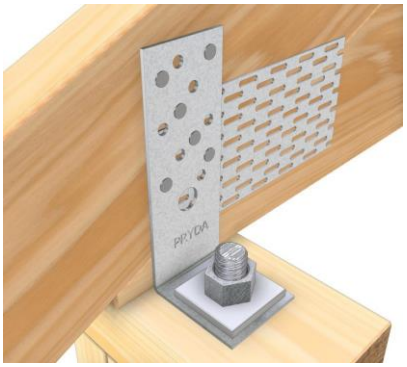
Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

DESIGN CAPACITIES

The design capacities for an MPCPAH bracket are tabulated below for use with both 35 x 3.15mm Pryda Timber Connector nails and Pryda painted hex head screws 12G x 35mm and fixed with an appropriate tie-down anchor. These capacities are also suitable when MPCPAH is used as a tie-down bracket for wall studs.

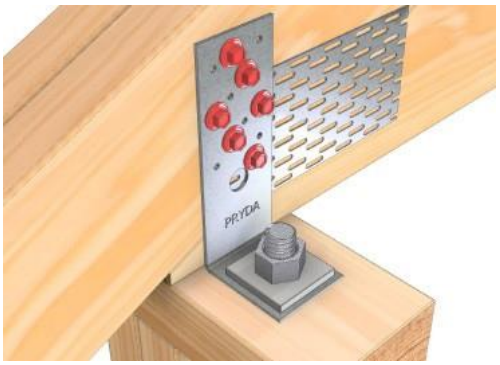
UPLIFT CAPACITIES FOR A SINGLE BRACKET

6/35 x 3.15mm Pryda Timber Connector nails on supported truss or stud.



JOINT GROUP OF TRUSS CHORD	UPLIFT CAPACITY (KN) (USING 6 NAILS INTO TRUSS/STUD)
J5	4.7

6/12G x 35mm Pryda Timber Connector screws - painted red head on supported truss or stud.



JOINT GROUP OF TRUSS CHORD	UPLIFT CAPACITY (KN) (USING 6 SCREWS INTO TRUSS/STUD)
J5	10.9

Notes:

1. Design capacities applies for dry (maximum moisture content of 18%) Radiata Pine and Douglas Fir timber grade SG8 and for timber which meets J5 timber in accordance with NZS3604.
2. For a pair of MPCPAH brackets, double up the tabulated capacities.
3. Limit State Design capacities are shown in the tables for Wind Uplift condition.
4. The above values (for nails or screws) are only applicable: a) if the anchorage into the supporting member has an equivalent or better capacity, b) All screws are set 25mm in from timber edge, c) All nails are set 15mm in from timber edge.

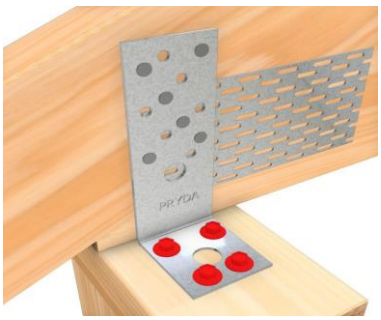
APPLICATION AND SCOPE OF USE

Pryda Hold Down Bracket is certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise approved by a certified structural Engineer. Only use the product for its intended applications and the selected product material type within the specified environmental condition as outlined in NZS 3604:2011 Table 4.1. (Refer to Durability section for more details).

APPLICATION EXAMPLES

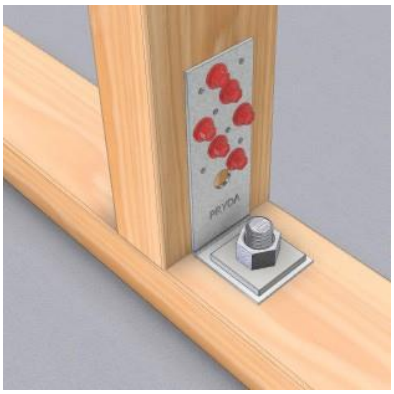
TRUSS TIE DOWN

- Use an M12 tie-down rod with 40x40x5.0 washer anchored into concrete using a suitable epoxy set chemical anchor.
- Alternatively, to resist low uplifts, each bracket may be anchored using 4/ Pryda 12G x 35mm Timber Connector Screws – painted red head, into single wall plate giving capacities of 3.5 kN (J5).



Additional connectors will be required to transfer tie- down forces from wall plate to foundation.

STUD TIE DOWN



- When anchored directly to concrete slab/foundation Pryda recommends using M12 Ramset™ Ankascrew™. However, the designer should ensure the design capacity of the slab tie down connection meets or exceeds the capacity of the connector otherwise the lower of the design values between the connector and the tie down should be adopted.
- Typically, an M12 x 150 Ramset Ankascrew (with a min. 40 x 40 x 5mm washer) would give an anchorage capacity of 14.0 kN in Grade 20 concrete used in an external 90mm wall frame having 35mm bottom plates.
- Using Ankascrews on internal walls can be subject to the depth of the slab – e.g., for 85-100 mm waffle pods 150mm anchors will be too long for the slab thickness and may limit the capacity of the connector.

Contact details	
Manufacture location	Overseas
Legal and trading name of manufacturer	Shanghai Zenith International Trading Company Co LTD
Legal and trading name of importer	Pryda New Zealand -a Division of ITW New Zealand
Importer address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Importer website	Pryda.co.nz
Importer email	info@prydaanz.com
Importer phone number	0800 88 22 44
Importer NZBN	9429039833129

PRODUCT DATA SHEET

NZ 12 kN PILE-BEARER KIT

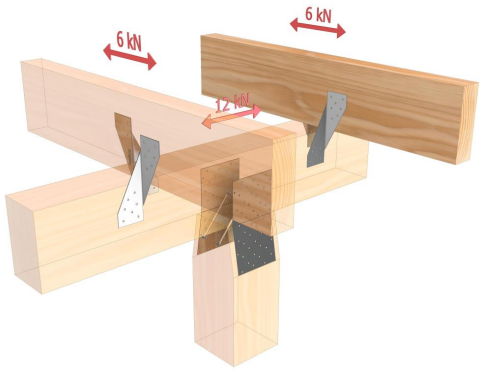
12 kN Capacity Fixing of Cantilever Pile to Bearer and Joists.

FEATURES AND BENEFITS

SIMPLE: All components supplied as one complete package. Allows Anchor/Braced Pile to be in line with and same height as other piles.

FAST: Fix using hammer only. Connection detail covers both Anchor and Braced Piles, with bearers sizes up to 200mm deep, joists up to 250mm deep.

DURABLE: Available in all stainless steel 304 components for use in environments with severe corrosion risk. Suitable for all sea spray zone conditions.



Nails to cleats and skew nails connecting each joist to bearer omitted for clarity. Detail shown complies with NZS 3604:3011, clause 6.8.6.1, where the brace is attached to the pile.

SPECIFICATIONS AND PRODUCT IDENTIFIER

PBK12S KIT			
COMPONENTS	**PRYDA CODE**	**QUANTITY**	**DESCRIPTION**
Nail-on Plates	NPA100/190SS	2	100 x 190 x 1mm Nail-on plate
Cleats	NPD150/63/S LH and RH	4	150 x 50 x 1mm Folded Cleat 2 x Left Hand and 2 x Right Hand
Nails	OSNBCI/SS	72	Pryda 45 x 3.15mm Flat Head Square Twist Nails
		4	100 x 4mm Flat Head

At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.

NPA100/190/S

NPD150/63/S
Left Hand (LH)
Right Hand (RH)

Pryda Nails

100 x 4mm Nails

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

DURABILITY

The following table provides an easy guide when selecting a Pryda product corrosion protection finish that will meet and exceeds NZS 3604:2011 Table 4.1.

Pryda 12 kN Pile-Bearer Kit is only available in Stainless Steel 304, therefore suitable for all environments.

ZONE	LOCATION		ENVIRONMENT	PRODUCT
All Zones	Fully enclosed walls, floors, and roof spaces		Closed	Pryda Zinc Coated Products Z275
Zones B and C	All subfloor fastenings more than 600mm above the ground	Vented 7000mm^2/m^2 or LESS	Sheltered	Pryda Stainless Steel 304 Products (3)
		Vented MORE than 7000mm^2/m^2	Exposed	Pryda Stainless Steel 304 Products (3)
	All subfloor fastenings within 600mm of the ground	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)
	All other structural fixings	Sheltered		Pryda Stainless Steel 304 Products (3)
		Exposed		Pryda Stainless Steel 304 Products (3)
Zone D	All structural fixings	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)

Notes:
1.All Pryda galvanised products comply with NZS3604:2011 Table 4.2.
2.Refer to NZS3604:2011 for all environment definitions.
3.Routine inspection and cleaning using soap and fresh warm water is an integral part of the ongoing care and maintenance of stainless steel to preserve its appearance.

STORAGE AND HANDLING

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

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e., B1.3.3 (a), (b), (f), (g), and (h)). Only some may apply for a specific use of the component.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

APPLICATION AND SCOPE OF USE

Pryda 12 kN Pile-Bearer kit are certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise approved by a certified structural Engineer. Only use the product for its intended applications and the selected product material type within the specified environmental condition as outlined in NZS 3604:2011 Table 4.1. (Refer to Durability section for more details)

PBK12S:

- Severe Corrosion Kit (All Stainless Steel 304 components) - suitable for all sea spray zone conditions.
- 12 kN horizontal capacity fixing of Bearer/Joists to anchor or braced Pile, in accordance with NZS 3604:2011 Clauses 6.8.5,6.8.6.1, and 6.9.3.

INSTALLATION

PBK12S Kit

Connection detail covers bearer sizes up to 200mm deep, joists up to 250mm deep. All components supplied as one complete package for 12 kN Horizontal Capacity Fixing of Bearer to Cantilever Pile and 2 x 6 kN joist to bearer in accordance with NZS 3604:2011 Clauses 6.8.5, 6.8.6.1 and 6.9.3. Available in all stainless-steel components for use in environments with severe corrosion risk.

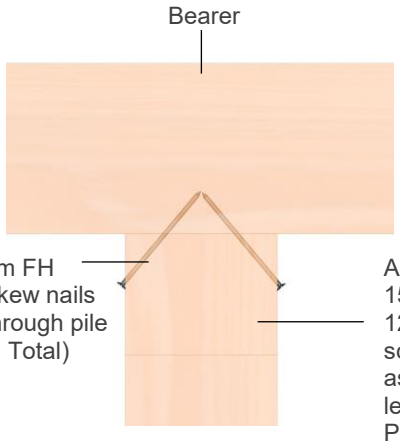
1. On round pile bearer must be central. Bearer may be offset on square pile but must not overhang edge.

2. Nail-on cleats fix to joist closest to pile. At building corner where fixing to boundary joist is precluded, fix cleats to next closest joist along bearer.

3. At external wall where joists do not overhang bearer enough for cleats to be fixed on outside face, they may be fixed to inside face only of that bearer provided a similar detail is used on the other side of the floor system.

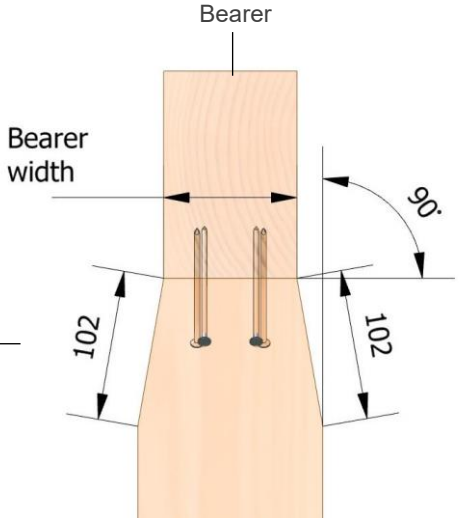
4. Joist must have lateral support (blocking or perimeter joist) within 300mm of bearer in accordance with NZS3604:2011 cl 7.1.2.1.

5. All components must be protected after installation against wind-blown sea salt deposition by coating with 2mm thick grease, Selleys roof and gutter (silicone) sealant, or other approved coating. Routinely check and protect installed products as necessary as frequency will depends on individual site environmental conditions. Seek local council advise for best maintenance practice for the area.



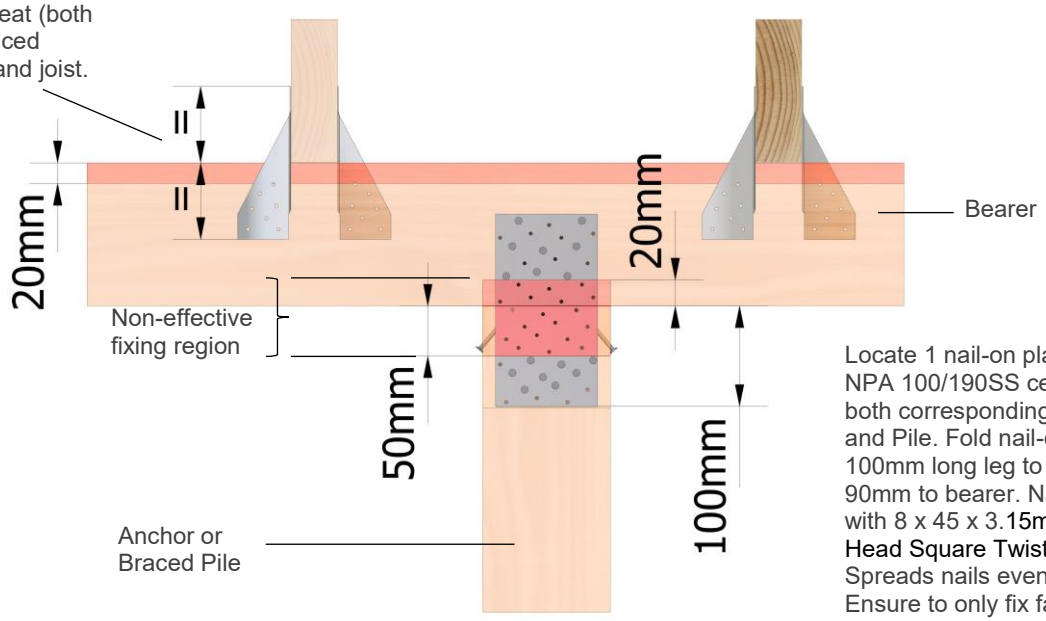
2 x 100 x 4mm FH Galvanised skew nails each side: Through pile into bearer (4 Total)

Anchor or Braced Pile 150mm Ø Round or 125mm x 125mm Square scarf cut to the same width as bearer and having cut length no less than 102mm. Pile shall be plumb.



Locate Nail-on cleat (both face) equally spaced between bearer and joist.

Select nail holes 20mm away from edge for both bearer and joist.

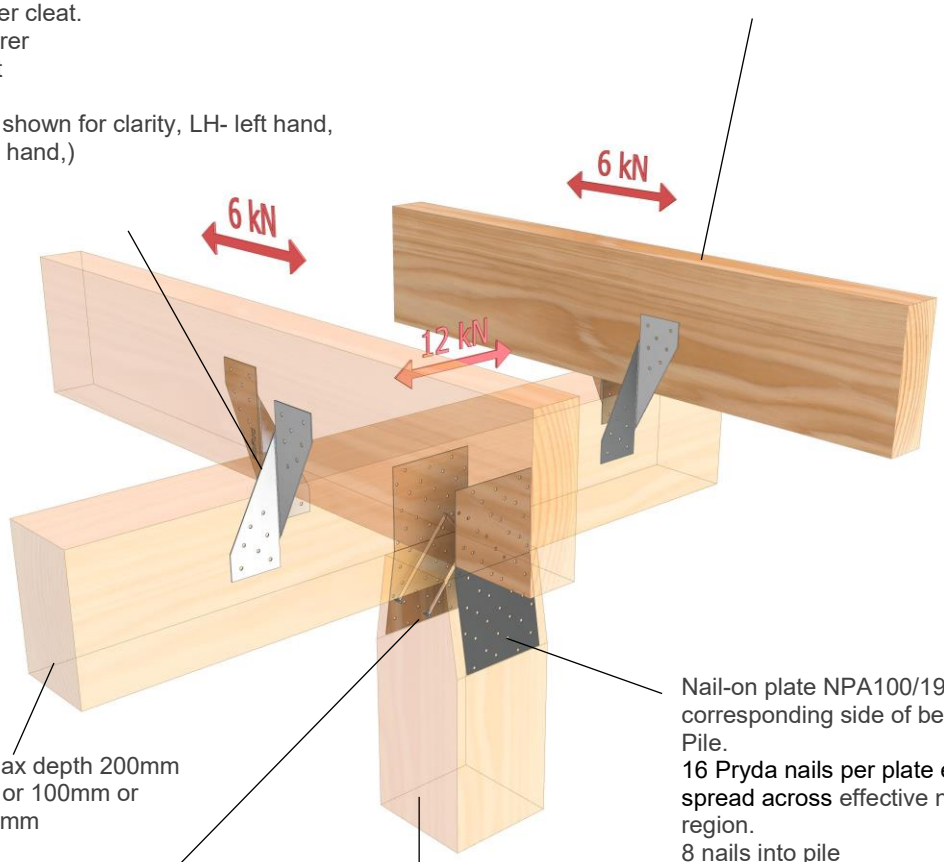


Locate 1 nail-on plate, NPA 100/190SS central to pile on both corresponding face of bearer and Pile. Fold nail-on plate with a 100mm long leg to pile face and 90mm to bearer. Nail each leg with 8 x 45 x 3.15mm Pryda Flat Head Square Twist nails.
Spreads nails evenly.
Ensure to only fix fastener within effective regions: 25mm up from bearer edge and 50mm away from pile end-cut.

2 Nail-on Cleats (NPD150/63/S LH and RH) on joists closest to pile.
10 nails per cleat.
5 into bearer
5 into joist

(Nails not shown for clarity, LH- left hand, RH- Right hand,)

Floor Joist
(Max size 250 x 250mm)



Nail-on plate NPA100/190SS each corresponding side of bearer and Pile.
16 Pryda nails per plate evenly spread across effective nailing region.
8 nails into pile
8 nails into bearer

(Nails not shown for clarity)

Bearer (max depth 200mm widths 75 or 100mm or double 50mm

2 x 100 x 4mm FH Galvanised skew nails each side: Through pile into bearer (4 Total)

Anchor or Braced Pile 150mm Ø Round or 125mm x 125mm Square scarf cut to the same width as bearer and having cut length no less than 102mm. Pile shall be plumb.

DETAIL 1: 12 kN HORIZONTAL CAPACITY FIXING OF BEARER TO CANTILEVER PILE AND 2 X 6 kN JOIST TO BEARER IN ACCORDANCE WITH NZS 3604:2011 CLAUSES 6.8.6.1

Contact details	
Manufacture location	New Zealand
Legal and trading name of manufacturer	Kimberly Tool & Design (NZ) Limited
Legal and trading name of supplier	Pryda New Zealand -a Division of ITW New Zealand
Supplier address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Supplier website	Pryda.co.nz
Supplier email	info@prydaanz.com
Supplier phone number	0800 88 22 44
Supplier NZBN	9429039833129

PRODUCT DATA SHEET

NZ 6 kN PILE-BEARER KIT

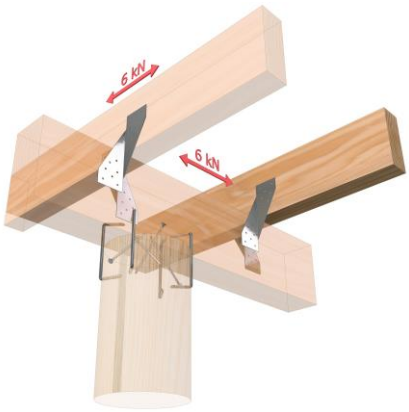
6 kN Capacity Fixing of Cantilever Pile to Bearer and Joists.

FEATURES AND BENEFITS

SIMPLE: All components supplied as one complete package. Allows CANTILEVER Pile to be in line with and same height as other piles.

FAST: Fix using hammer only. Connection detail covers bearers sizes up to 200mm deep, joists up to 250mm deep.

DURABLE: Available in all stainless-steel 304 components for use in environments with severe corrosion risk.



Nails to cleats and skew nail connecting joist to bearer omitted for clarity.

SPECIFICATIONS AND PRODUCT IDENTIFIER

PBK6S KIT			
COMPONENTS	**PRYDA CODE**	**QUANTITY**	**DESCRIPTION**
"U" Nails	MPZU/S	4	5mm diameter, 105mm shank and 40mm spikes
Cleats	NPD150/63/S LH and RH	2	150 x 50 x 1mm Folded Cleat Left Hand and Right Hand
Nails	OSNBC/SS	22	Pryda 45 x 3.15mm Flat Head Square Twist Nails
		4	100 x 4mm Flat Head

At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.

Pryda U Nails

NPD150/63/S

Pryda Nails

100 x 4mm Nails

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

DURABILITY

The following table provides an easy guide when selecting a Pryda product corrosion protection finish that will meet and exceeds NZS 3604:2011 Table 4.1.

Pryda 6 kN Pile-Bearer Kit is only available in Stainless Steel 304, therefore suitable for all environments.

ZONE	LOCATION		ENVIRONMENT	PRODUCT
All Zones	Fully enclosed walls, floors, and roof spaces		Closed	Pryda Zinc Coated Products Z275
Zones B and C	All subfloor fastenings more than 600mm above the ground	Vented 7000mm^2/m^2 or LESS	Sheltered	Pryda Stainless Steel 304 Products (3)
		Vented MORE than 7000mm^2/m^2	Exposed	Pryda Stainless Steel 304 Products (3)
	All subfloor fastenings within 600mm of the ground	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)
	All other structural fixings	Sheltered		Pryda Stainless Steel 304 Products (3)
		Exposed		Pryda Stainless Steel 304 Products (3)
Zone D	All structural fixings	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)

Notes:
1.All Pryda galvanised products comply with NZS3604:2011 Table 4.2.
2.Refer to NZS3604:2011 for all environment definitions.
3.Routine inspection and cleaning using soap and fresh warm water is an integral part of the ongoing care and maintenance of stainless steel to preserve its appearance.

STORAGE AND HANDLING

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

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e., B1.3.3 (a), (b), (f), (g), and (h)). Only some may apply for a specific use of the component.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

APPLICATION AND SCOPE OF USE

Pryda 6 kN Pile Bearer kit are certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise approved by a certified structural Engineer. Only use the product for its intended applications and the selected product material type within the specified environmental condition as outlined in NZS 3604:2011 Table 4.1. (Refer to Durability section for more details)

PBK6S:

- Severe Corrosion Kit (All Stainless Steel 304 components) - suitable for all sea spray zone conditions.
- 6 kN Horizontal Capacity Fixing of Bearer/Joists to Cantilever Pile in accordance with NZS 3604:2011 Clauses 6.7.3.1, and 6.7.3.3.

INSTALLATION

PBK6S Kit

Connection detail covers bearer sizes up to 200mm deep, joists up to 250mm deep. All components supplied as one complete package in all Stainless Steel 304 for use in environments with severe corrosion risk.

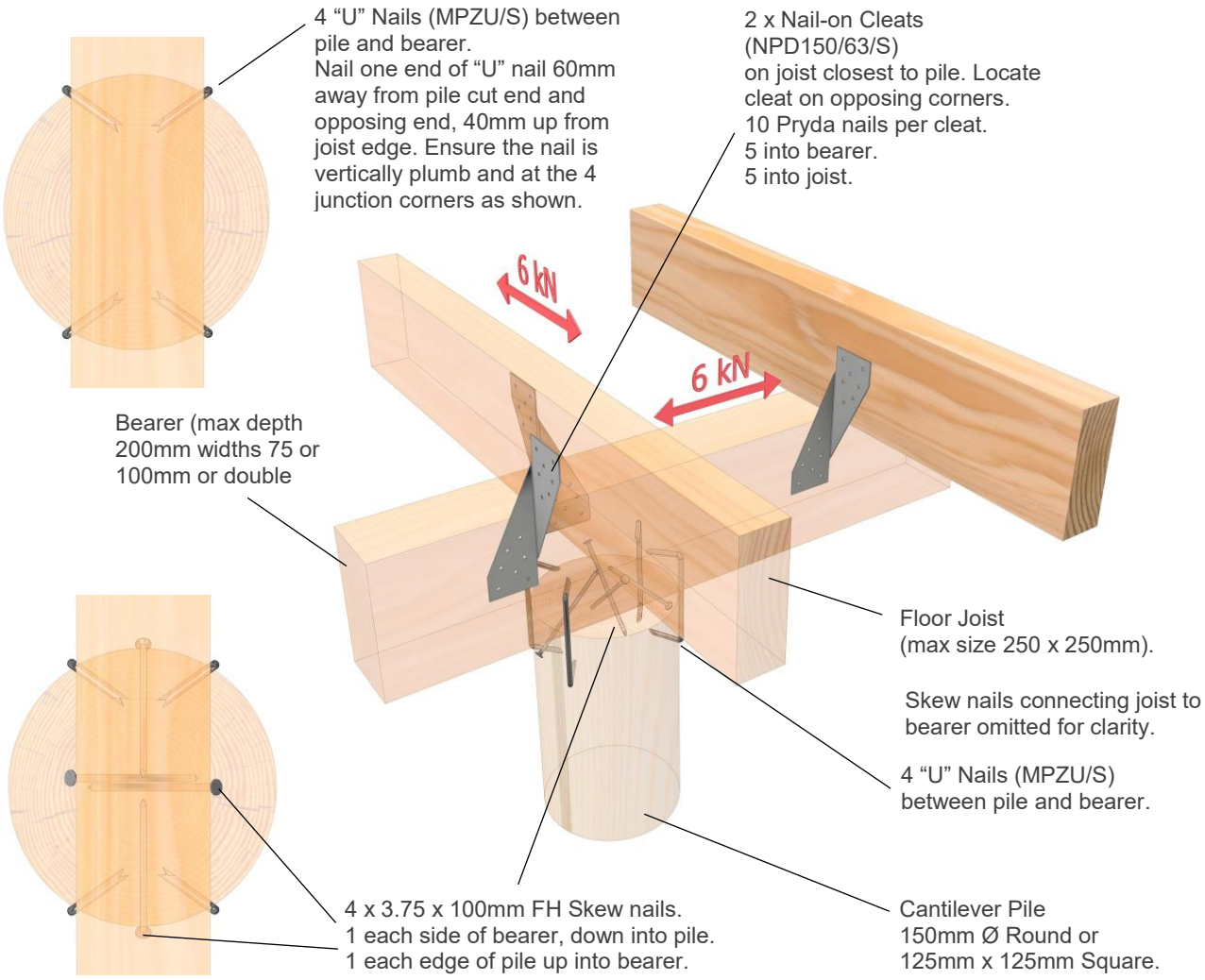
1. On round pile bearer must be central. Bearer may be offset on square pile but must not overhang edge.

2. Nail-on cleats fix to joist closest to pile. At building corner where fixing to boundary joist is precluded, fix cleats to next closest joist along bearer.

3. At external wall where joists do not overhang bearer enough for cleats to be fixed on outside face, they may be fixed to inside face only of that bearer provided a similar detail is used on the other side of the floor system.

4. Joist must have lateral support (blocking or perimeter joist) within 300mm of bearer in accordance with NZS3604:2011 cl 7.1.2.1.

5. All components must be protected after installation against wind-blown sea salt deposition by coating with 2mm thick grease, Selleys roof and gutter (silicone) sealant, or other approved coating. Routinely check and protect installed products as necessary as frequency will depends on individual site environmental conditions. Seek local council advise for best maintenance practice for the area.



DETAIL 1: 6 kN HORIZONTAL CAPACITY FIXING OF BEARER TO PILE, JOIST TO BEARER FOR CANTILEVER PILE IN ACCORDANCE WITH NZS 3604:2011 CLAUSES 6.7.3.1, AND 6.7.3.3.

Contact details	
Manufacture location	New Zealand
Legal and trading name of manufacturer	Kimberly Tool & Design (NZ) Limited
Legal and trading name of supplier	Pryda New Zealand -a Division of ITW New Zealand
Supplier address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Supplier website	Pryda.co.nz
Supplier email	info@prydaanz.com
Supplier phone number	0800 88 22 44
Supplier NZBN	9429039833129

PRODUCT DATA SHEET

NZ POLE TO GIRT BRACKET

CodeMark CMNZ-10028

A robust bracket fixing timber girts to poles.

FEATURES AND BENEFITS

SIMPLE: Butterfly shape design to accommodate connection for both flat and round timber members.

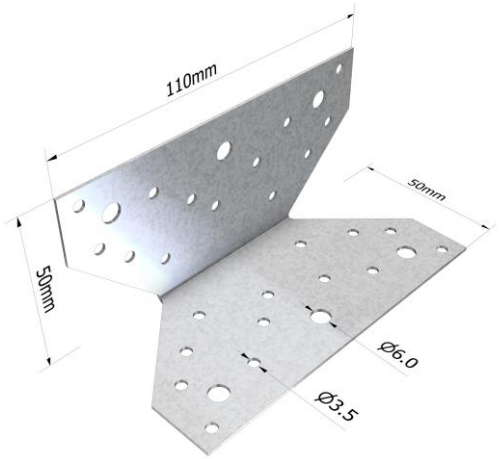
FAST: No checking of timber required when attaching a girt to either a flat or round pole.

DURABLE: The bracket is a one-piece anchor that can be used on either side and galvanised to Z275.For greater protection, Stainless Steel 304 is available.

SPECIFICATIONS

PRODUCT CODE	NPP2G, NPP2G/S
STEEL	G300 or Stainless Steel 304
THICKNESS	0.95mm
CORROSION RESISTANCE	Z275 or Stainless Steel 304
FASTENERS	Pryda 35 x 3.15mm Timber Connector Nails or 12G x 65mm Type 17 Hex Head screws.
SIZE	50/50 x 110mm

At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.



*All dimensions shown in “mm”.

POLE TO GIRT BRACKET

PRODUCT CODE	MATERIAL	SIZE	QUANTITY
NPP2G	G300, Z275	50 x 50 x 110mm	1
NPP2G/S	Stainless Steel 304	50 x 50 x 110mm	1

Notes:

- Pryda CODEMARK certificate CMNZ10028 certifies Pryda Pole to Girt Bracket with use of NZ Pryda Timber Connector Nails or Screws. Other fixing methods are outside the scope of the CODEMARK.

DURABILITY

The following table provides an easy guide when selecting a Pryda product corrosion protection finish that will meet and exceeds NZS 3604:2011 Table 4.1.

<table>
<tr><th>ZONE</th><th colspan="2">LOCATION</th><th>ENVIRONMENT</th><th>PRODUCT</th></tr>
<tr><td>All Zones</td><td colspan="2">Fully enclosed walls, floors, and roof spaces</td><td>Closed</td><td>Pryda Zinc Coated Products Z275</td></tr>
<tr><td rowspan="5">Zones B and C</td><td rowspan="2">All subfloor fastenings more than 600mm above the ground</td><td>Vented 7000mm^2/m^2 or LESS</td><td>Sheltered</td><td>Pryda Stainless Steel 304 Products (3)</td></tr>
<tr><td>Vented MORE than 7000mm^2/m^2</td><td>Exposed</td><td>Pryda Stainless Steel 304 Products (3)</td></tr>
<tr><td>All subfloor fastenings within 600mm of the ground</td><td colspan="2">Sheltered and Exposed</td><td>Pryda Stainless Steel 304 Products (3)</td></tr>
<tr><td rowspan="2">All other structural fixings</td><td colspan="2">Sheltered</td><td>Pryda Stainless Steel 304 Products (3)</td></tr>
<tr><td colspan="2">Exposed</td><td>Pryda Stainless Steel 304 Products (3)</td></tr>
<tr><td>Zone D</td><td>All structural fixings</td><td colspan="2">Sheltered and Exposed</td><td>Pryda Stainless Steel 304 Products (3)</td></tr>
</table>

Notes:
1.All Pryda galvanised products comply with NZS3604:2011 Table 4.2.
2.Refer to NZS3604:2011 for all environment definitions.
3.Routine inspection and cleaning using soap and fresh warm water is an integral part of the ongoing care and maintenance of stainless steel to preserve its appearance.

STORAGE AND HANDLING

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

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e., B1.3.3 (a), (b), (f), (g), and (h)). Only some may apply for a specific use of the component.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

APPLICATION AND SCOPE OF USE

Pryda Pole to Girt are certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise approved by a certified structural Engineer. Only use the product for its intended applications and the selected product material type within the specified environmental condition as outlined in NZS 3604:2011 Table 4.1. (Refer to Durability section for more details). Fastener material type shall match the selected Pryda product. i.e., Galvanised fasteners with galvanised products. Stainless Steel fasteners with stainless steel products.

The Pryda Pole to Girt bracket provides a robust means of fixing timber girts to poles in Pole & Rafter buildings. The bracket is designed in a butterfly shape to easily wrap around the poles. The NPP2G is a variation of the Multigrip but with greater extension into the connected member and with the addition of screw holes provides greater fixing capacity.

The side flange can be bent to closely follow the curvature of a round pole for a Pole to girt connection.

Flat post to girt connection.

DESIGN CAPACITIES

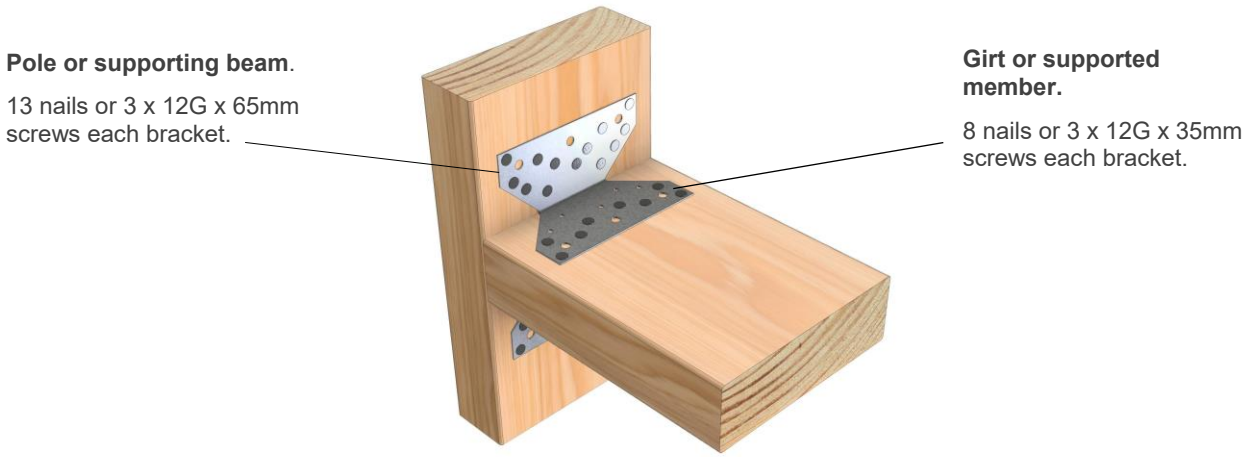
The Pryda Pole - Girt brackets shall be installed in pairs with either:

Nail fix using:

Pryda 35 x 3.15mm Timber Connector Nails per bracket: 13 nails to pole and 8 nails to girt.

Screw fix using:

Pryda 12G x 65mm Timber Connector Screws per bracket: 3 screws to pole.
Pryda 12G x 35mm Timber Connector Screws per bracket: 3 screws to girt.



LOAD CASE (LIMIT STATE DESIGN)	LOAD CAPACITIES(KN) FOR A PAIR OF NPPG2 BRACKETS FOR GIVEN LOAD CASE	
	JD5	
	NPP2G	NPP2G/S
1.35G	7.2	6.1
1.2G+1.5QF	8.7	7.4
1.2G+1.5QR	9.8	8.3
1.2G + Wd or Wind uplift	14.5	12.3

Notes:

1. Design values are based on SG8 timber and for timber (Pole and Girt) which meets minimum JD5 timber as defined in AS/NZS 1720.
2. Minimum timber thickness 45mm.
3. Installed in PAIRS, having one bracket on top and one bracket underside on opposing face.
4. Capacities shown are for vertical loads only.
5. Use stainless steel screws with stainless steel brackets.

INSTALLATION

ROUND POLE TO GIRT CONNECTION

STEP 1:

- Mark location ensuring sufficient end distance from pole cut end is achieved.
- Ensure the Pole is vertically plumb.
- Locate NPP2G or NPP2G/S to underside and central to Girt and fix bracket to pole with 13 x Pryda 35 x 3.15mm Timber Connector nails to small holes when using nails.
- Alternatively fix bracket with 3 x 12G x 65mm Type 17 Hex Head screws.

STEP 2:

- Install girt over bracket.
- Ensure girt plate is hard against pole and central to bracket.
- Fix bracket to girt with 8 x Pryda 35 x 3.15mm Timber Connector nails to small holes when using nails.
- Select nail holes away from girt cut-end.
- Alternatively fix bracket with 3 x 12G x 35mm Type 17 Hex Head screws.

STEP 3:

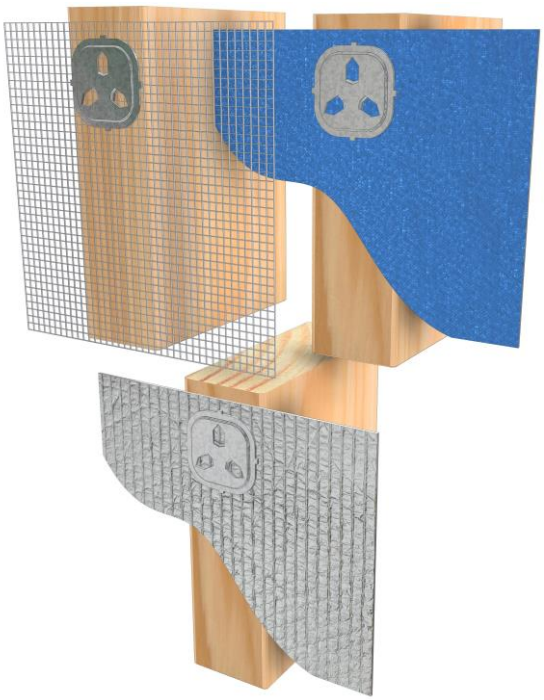
- Install top bracket directly over girt and against pole.
- Ensuring sufficient end distance from pole cut end is achieved.
- Fix bracket to pole with 13 x Pryda 35 x 3.15mm Timber Connector nails to small holes when using nails.
- Alternatively fix bracket to pole with 3 x 12G x 65mm Type 17 Hex Head screws.
- Fix bracket to girt with 8 x Pryda 35x3.15mm Timber Connector nails to small holes when using nails.
- Select nail holes away from girt cut-end.
- Alternatively fix bracket to girt with 3 x 12G x 35mm Type 17 Hex Head screws.

Contact details	
Manufacture location	New Zealand
Legal and trading name of manufacturer	Kimberly Tool & Design (NZ) Limited
Legal and trading name of supplier	Pryda New Zealand -a Division of ITW New Zealand
Supplier address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Supplier website	Pryda.co.nz
Supplier email	info@prydaanz.com
Supplier phone number	0800 88 22 44
Supplier NZBN	9429039833129

PRODUCT DATA SHEET

NZ PRYDA FIX

A non-tear economical fixing for foil insulation and shade cloth.



FEATURES AND BENEFITS

FAST: A simple and economical method of fixing building foil insulation to timber framing, roof insulation to trusses or rafters, enables quick and efficient installation of netting on privacy screens, and shade clothes to timber framing. It holds the insulation foil securely and prevents tearing.

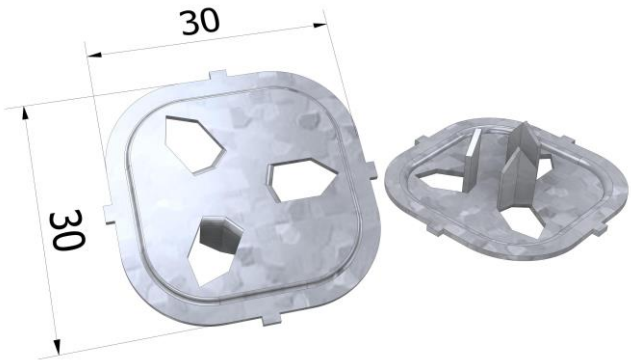
FAST: Fixed with pre-punched nails. No additional fasteners required.

DURABLE: Made from G300 Z275 Steel.

SPECIFICATIONS

PRODUCT CODE	SFI
STEEL	G300
FASTENER SIZE	Nil Pre-punched nails
CORROSION RESISTANCE	Z275

At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.



*All dimensions shown in “mm”.

DESIGN CAPACITIES

LOADING	TIMBER	LIMIT STATE DESIGN CAPACITY ϕNJ (KN)
Pryda Fix Pull-Out	Radiata Pine	0.085
	Hardwood	0.17
Shade cloth tearing (Shear)	Radiata Pine or Hardwood	0.26

Note:
1.Design capacities applies for dry (maximum moisture content of 18%) Radiata Pine and Douglas Fir timber grade SG8 and for timber which meets J5 timber in accordance with NZS3604.

APPLICATION AND SCOPE OF USE

Pryda Fix is certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise approved by a certified structural Engineer. Only use the product for its intended applications and the selected product material type within the specified environmental condition as outlined in NZS 3604:2011 Table 4.1. (Refer to Durability section for more details). Fastener material type shall match the selected Pryda product. i.e., Galvanised fasteners with galvanised products. Stainless Steel fasteners with stainless steel products.

WALL INSULATION
Pryda Fix is a simple and economical method of fixing building foil insulation to timber framing. It holds the insulation foil securely and prevents tearing. Recommended fixing spacing is 600 mm.

ROOF INSULATION
Pryda Fix may be used for fixing insulation foil in roof construction. Again. it holds the insulation foil securely and prevents tearing due to the rounded corners of the product. Recommended fixing spacing is 600 mm.

PRIVACY SCREENS
Pryda Fix enables quick and efficient installation of netting on privacy screens. Recommended fixing spacing is 400 mm.

SHADE CLOTH
Pryda Fix also facilitates fixing of shade cloth onto timber pergolas or other framework, eliminating the need for battens to hold the shade cloth in position. Recommended fixing spacing is 400 mm.

HOT HOUSE COVERING
Pryda Fix is also suited to fixing sheet p.v.c. onto hot houses for both domestic and commercial use. Pryda Fix prevents tearing of the sheeting.

DURABILITY

The following table provides an easy guide when selecting a Pryda product corrosion protection finish that will meet and exceeds NZS 3604:2011 Table 4.1.

Pryda Fix is only available in Z275, therefore suitable for “Closed” environment.

ZONE	LOCATION		ENVIRONMENT	PRODUCT
All Zones	Fully enclosed walls, floors, and roof spaces		Closed	Pryda Zinc Coated Products Z275
Zones B and C	All subfloor fastenings more than 600mm above the ground	Vented 7000mm^2/m^2 or LESS	Sheltered	Pryda Stainless Steel 304 Products (3)
		Vented MORE than 7000mm^2/m^2	Exposed	Pryda Stainless Steel 304 Products (3)
	All subfloor fastenings within 600mm of the ground	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)
	All other structural fixings	Sheltered		Pryda Stainless Steel 304 Products (3)
		Exposed		Pryda Stainless Steel 304 Products (3)
Zone D	All structural fixings	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)

Notes:
1.All Pryda galvanised products comply with NZS3604:2011 Table 4.2.
2.Refer to NZS3604:2011 for all environment definitions and Table 4.3 for nails or screw galvanizing.
3.Routine inspection and cleaning using soap and fresh warm water is an integral part of the ongoing care and maintenance of stainless steel to preserve its appearance.

STORAGE AND HANDLING

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

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e., B1.3.3 (a), (b), (f), (g), and (h)). Only some may apply for a specific use of the component.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

INSTALLATION

STEP 1

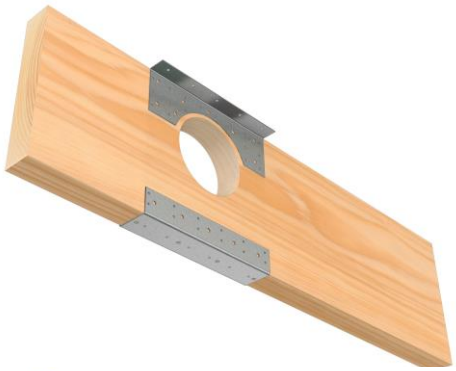
- Position foil and align foil corners with timber frame.
- Place Pryda fix at corner leaving a 10mm edge distance to both edges.
- Firmly press Pryda fix against frame or lightly hammer in, temporarily securing the foil and partially embedding the Pryda fix into timber.
- Carefully hammer in the Pryda fix evenly with moderate force until all pre-punched claw-nails are fully embedded and Pryda fix is sitting flat against foil and frame.

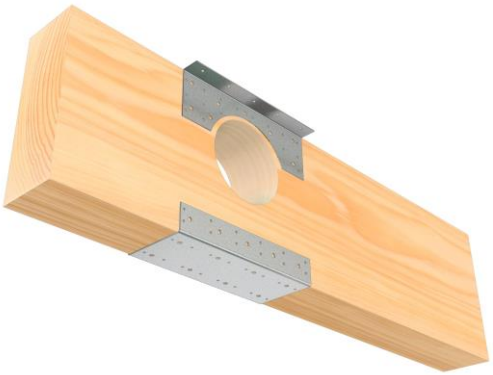
Contact details	
Manufacture location	Overseas
Legal and trading name of manufacturer	Exim Engineering Pty Ltd
Legal and trading name of importer	Pryda New Zealand -a Division of ITW New Zealand
Importer address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Importer website	Pryda.co.nz
Importer email	info@prydaanz.com
Importer phone number	0800 88 22 44
Importer NZBN	9429039833129

PRODUCT DATA SHEET

NZ PRYDA STREN-JOIST

The Pryda Stren-Joist has been designed to allow holes to be cut in floor joists. The fitting of a Pryda Stren-Joist re-instates the integrity of the penetrated joist.





NPSJ -Suits 45mm Width

NPSJD -Suits 90mm Width

*All dimensions shown are in “mm”.

FEATURES AND BENEFITS

SIMPLE: Comes in easily fitted parts for retrofitting on site if required with all necessary fasteners provided with one of the available fixing methods.

FAST: Fixed with nails and screw using standard onsite hand tools.

DURABLE: 1.6mm thick, Z275 galvanised steel.

SPECIFICATIONS

PRODUCT CODE	NPSJ, NPSJD
STEEL	G300
THICKNESS	1.6mm
CORROSION RESISTANCE	Z275
FASTENERS REQUIRED	Pryda 30 x 3.15mm Timber Connector Nails 8G x 20mm screws (Optional) Pryda 12G x 35mm Timber Connector Screws - painted red head
HEIGHT	Suitable for joist 140mm - 290mm
WIDTH	45mm, 90mm
QUANTITY	Refer to product table for specific kit details

At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.

DURABILITY

The following table provides an easy guide when selecting a Pryda product corrosion protection finish that will meet and exceeds NZS 3604:2011 table 4.1.

Pryda Stren-Joist is only available in Z275, therefore suitable for “Closed” environment.

ZONE	LOCATION		ENVIRONMENT	PRODUCT
All Zones	Fully enclosed walls, floors, and roof spaces		Closed	Pryda Zinc Coated Products Z275
Zones B and C	All subfloor fastenings more than 600mm above the ground	Vented 7000mm^2/m^2 or less	Sheltered	Pryda Stainless Steel 304 Products (3)
		Vented MORE than 7000mm^2/m^2	Exposed	Pryda Stainless Steel 304 Products (3)
	All subfloor fastenings within 600mm of the ground	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)
	All other structural fixings	Sheltered		Pryda Stainless Steel 304 Products (3)
		Exposed		Pryda Stainless Steel 304 Products (3)
Zone D	All structural fixings	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)

Notes:
1.All Pryda galvanised products comply with NZS3604:2011 Table 4.2.
2.Refer to NZS3604:2011 for all environment definitions.
3.Routine inspection and cleaning using soap and fresh warm water is an integral part of the ongoing care and maintenance of stainless steel to preserve its appearance.

STORAGE AND HANDLING

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

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e., B1.3.3 (a), (b), (f), (g), and (h)). Only some may apply for a specific use of the component.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

ALTERNATIVE SOLUTION TO NZS3604:2011

Alternative solution for strengthening of joists are required after a hole or notch has been made in a joist, refer to NZS3604:2011 cl 8.5.1.6 and cl 8.7.5.

Designed to reinstate the structural integrity of a joist after a service hole has been drilled through the member using the verification methods in accordance with the New Zealand Building Code B1 & B2.

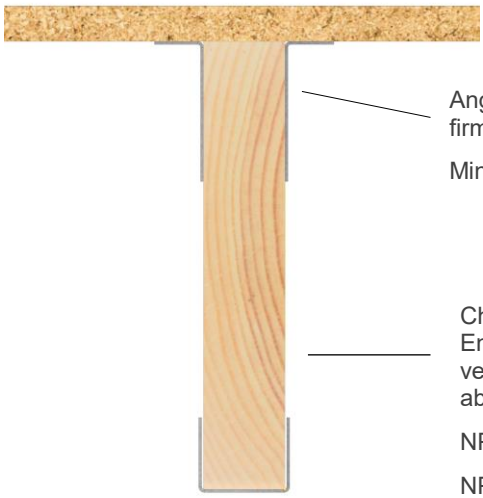
NPSJ JOIST SIZE (MM)	MAXIMUM HOLE SIZE (MM)	NPSJD JOIST SIZE (MM)	MAXIMUM HOLE SIZE (MM)
140 x 45	60	140 x 90	60
190 x 45	110	190 x 90	100
240 x 45	125	240 x 90	110
290 x 45	125	290 x 90	110

Table 1: Maximum Hole Size

APPLICATION AND SCOPE OF USE

Pryda Stren-Joist is certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise approved by a certified structural Engineer. Only use the product for its intended applications and the selected product material type within the specified environmental condition as outlined in NZS 3604:2011 Table 4.1. (Refer to Durability section for more details).

INSTALLATION CRITERIA



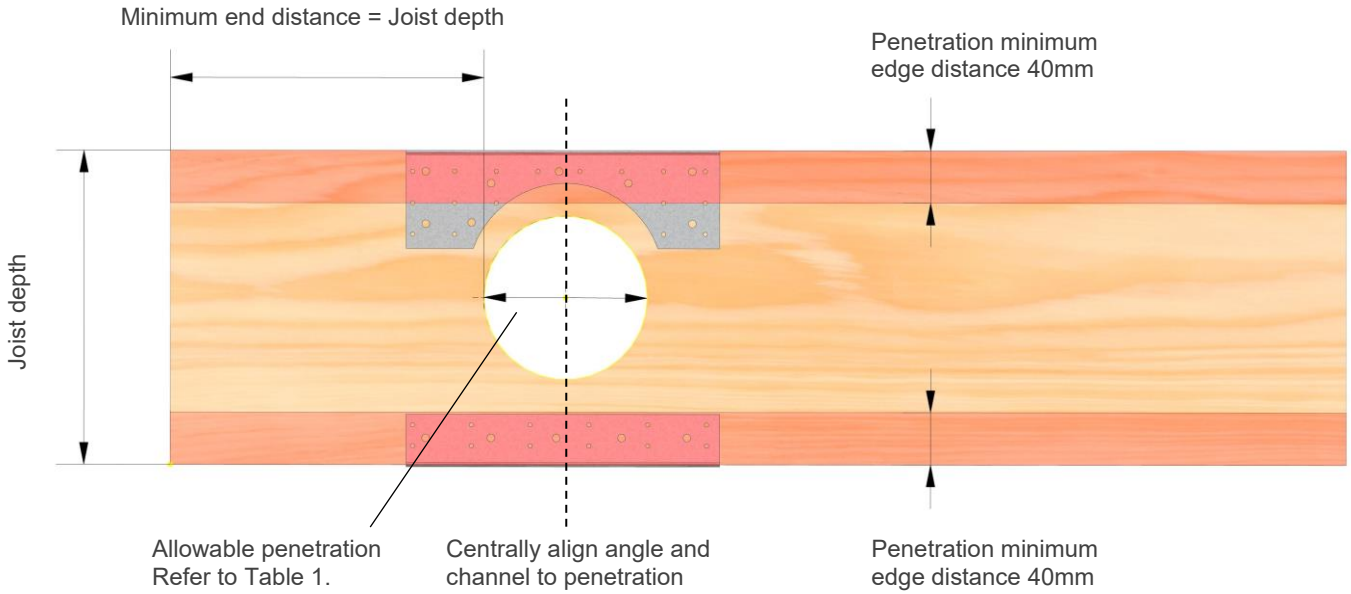
Angle to be installed on both face of joist and firmly against the underside of flooring.

Minimum flooring thickness: 19mm.

Channel to underside of joist. Ensure the channel is vertically aligned to angle above.

NPSJ: 45mm width

NPSJD: 90mm width



INSTALLATION

- Use NPSJ/NPSJD to locate and correct vertical location of hole along the joist. Care shall be exercised when installing NPSJ in 140 x 45mm or NPSJD in 140 x 90mm joist where hole location is critical.
- The hole can be made in any position along the span of the joist provided that the hole edge is no closer than one joist depth from the end supports of the joist. Refer to Table 1 for maximum hole size in joist.
- Penetration region within joist depth shall be free from natural defects such as knots (all types), checks, shakes, wane, twist, cupped, bowed, crooked, splits, and any defects that may compromise the structural integrity of the joist. Example, joist depth 240mm. Within 240mm of penetration, joist shall be free from all defects.
- Present the two angles to either side of hole as shown and nail or screw into place ensuring a tight snug fit onto joist and underside of flooring (use 10 / 8G x 20mm screws for top flange).
- Present channel to underside of joist and nail or screw into place ensuring a tight and snug fit.
- If hex screw fixing option is used, then 30 / 12G x 35mm T17 hex head screws are required (not supplied with the NPSJ or NPSJD kit).
- All nail or screws holes shall be filled.
- Intended for use in internal ‘closed space’ as per Table 4.1 of NZS3604:2011.
- Maximum of 3 holes per one joist, spacings at two times the joist depth.

INSTALLATION: NPSJ

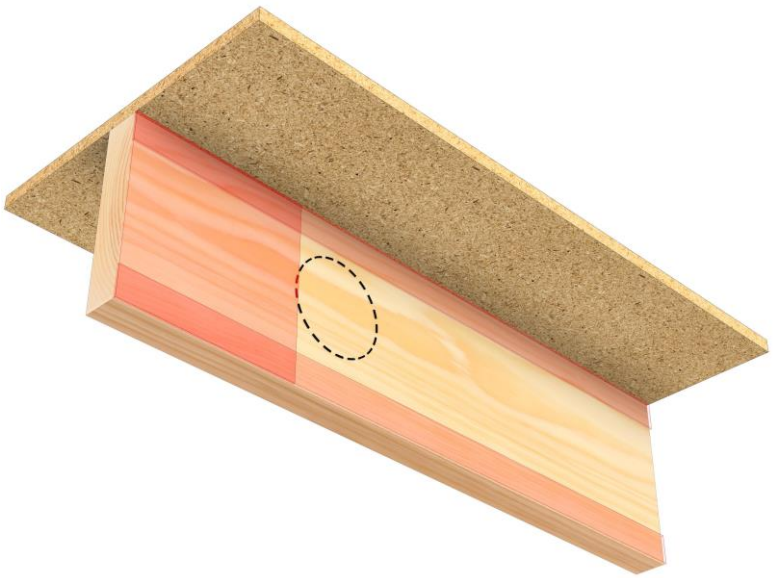
STEP 1

- Mark hole location within the allowable region. See Installation Criteria for more details on penetration exclusion zone. Refer to Table 1 for maximum hole size for selected joist depth and width.

Shaded Regions

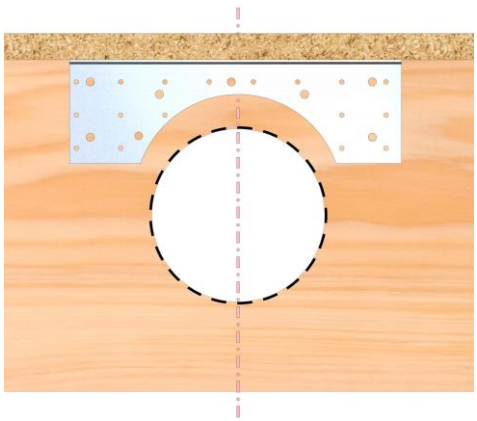
Penetration minimum edge distance 40mm

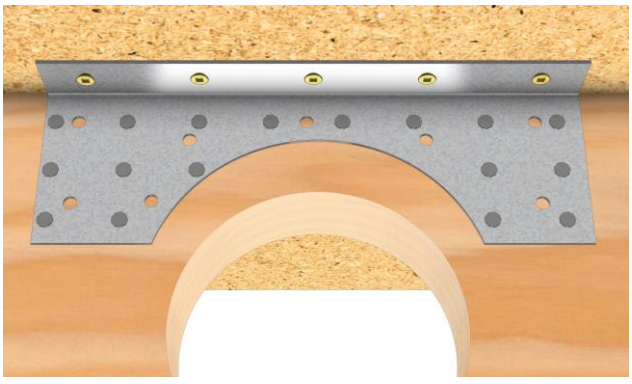
Penetration minimum end distance = Joist depth



STEP 2

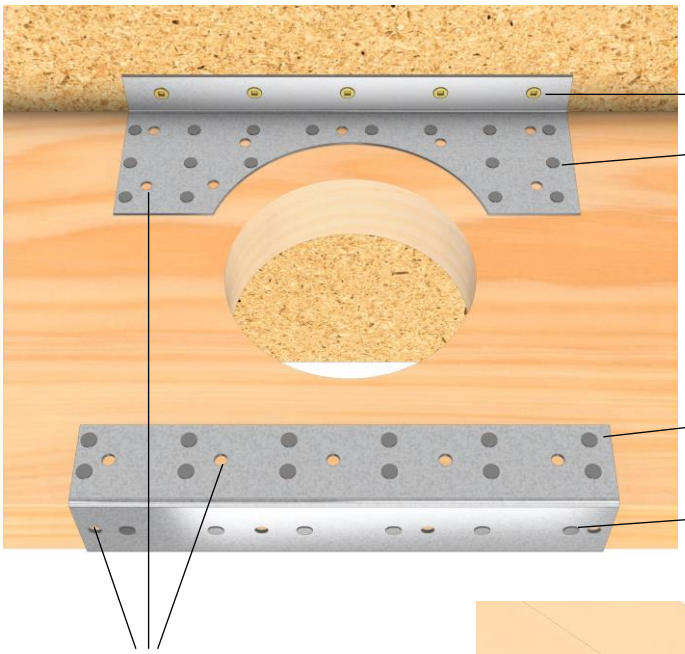
- Drill hole and mark center line to locate NPSJ angle.
- Vertically center angle to hole and ensure angle is firmly against joist and underside of flooring.
- Fully nail fix angle to joist using supplied 17 nails into small holes. Alternatively, 9 x Pryda 12G x 35mm Timber. Connector Screws. (Not Supplied it kit).
- Fasten short flange to underside of flooring with 5 x 10G x 20mm counter sunk screws.
- Repeat the same on opposite face. A pair of NPSJ angles are required for each installation.





STEP 3

- Install channel to underside of joist. Ensure channel is vertically aligned with top angles.
- Begin by fixing channel to underside of joist to ensure firm seating of joist into channel.
- Fully nail fix channel to joist using supplied 30 nails into small holes. 24 nails to face and 6 nails to underside.
- Alternatively, 14 x Pryda 12G x 35mm Timber Connector Screws.10 screw to face and 4 screws to underside. (Not Supplied it kit)



EACH ANGLE

5 x 10G x 20mm counter sunk screws.

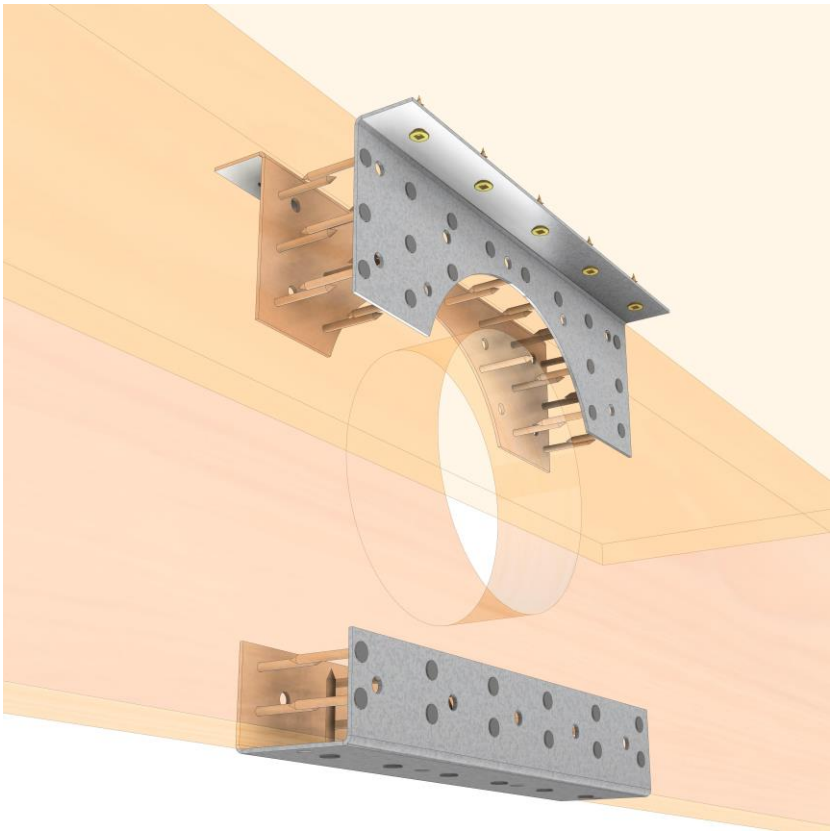
17 x Pryda 30 x 3.15mm Timber Connector Nails

CHANNEL

12 x Pryda 30 x 3.15mm Timber Connector Nails each face. 24 nails in total to faces.

6 x Pryda 30 x 3.15mm Timber Connector Nails to underside.

Alternatively, larger holes can be filled instead using Pryda 12G x 35mm Timber Connector screws. Only select either nail fix (supplied) or screw fix.



Contact details	
Manufacture location	Overseas
Legal and trading name of manufacturer	Ray Staiger Limited
Legal and trading name of importer	Pryda New Zealand -a Division of ITW New Zealand
Importer address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Importer website	Pryda.co.nz
Importer email	info@prydaanz.com
Importer phone number	0800 88 22 44
Importer NZBN	9429039833129

PRODUCT DATA SHEET

STRUCTURAL BRACKETS RANGE

Extensive structural brackets range specifically designed and fabricated from high grade materials for use in all types of reliable connection methods.

FEATURES AND BENEFITS

SIMPLE: Extensive range to suit most types of common site connections.

FAST: Bolt fix using standard on site tools

DURABLE: 5mm thick HDG galvanised steel. *Excludes SBKFS

SPECIFICATIONS

PRODUCT CODE	SBK*
STEEL	G300
THICKNESS	5mm*
CORROSION RESISTANCE	Electroplated or Hot Dipped Galvanised
FASTENERS REQUIRED	Bolt Fix*
HEIGHT	Refer to specific bracket
WIDTH	Refer to specific bracket

* Refer to specific product for code and fixing methods
* SBKFS is only 3mm thick.

At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.

DURABILITY

The following table provides an easy guide when selecting a Pryda product corrosion protection finish that will meet and exceeds NZS 3604:2011 table 4.1.

ZONE	LOCATION		ENVIRONMENT	PRODUCT
All Zones	Fully enclosed walls, floors, and roof spaces		Closed	Pryda Zinc Coated Products Z275
Zones B and C	All subfloor fastenings more than 600mm above the ground	Vented 7000mm^2/m^2 or less	Sheltered	Pryda Stainless Steel 304 Products (3)
		Vented MORE than 7000mm^2/m^2	Exposed	Pryda Stainless Steel 304 Products (3)
	All subfloor fastenings within 600mm of the ground	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)
	All other structural fixings	Sheltered		Pryda Stainless Steel 304 Products (3)
		Exposed		Pryda Stainless Steel 304 Products (3)
Zone D	All structural fixings	Sheltered and Exposed		Pryda Stainless Steel 304 Products (3)

Notes:
1.All Pryda galvanised products comply with NZS3604:2011 Table 4.2.
2.Refer to NZS3604:2011 for all environment definitions.
3.Routine inspection and cleaning using soap and fresh warm water is an integral part of the ongoing care and maintenance of stainless steel to preserve its appearance.

STORAGE AND HANDLING

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

COMPLIES WITH THE FOLLOWING PROVISIONS OF THE NEW ZEALAND BUILDING CODE (NZBC)

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow, and wind. (i.e., B1.3.3 (a), (b), (f), (g), and (h)). Only some may apply for a specific use of the component.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

DESIGN CAPACITIES

Pryda SBK structural bracket are supplied as individually described with product dimensions, hole geometry, and fabrication material specifics.

Design capacities can be derived from:

- Engineering first principles by the user/purchaser consulting project Engineer for each component and its intended design.
- The characteristic strength of bolts in timber or steel, using the relevant design code for the intended load directions based on the connection geometry and selected components.

Before use, the end user/purchaser is responsible for checking the suitability and seeking Engineering advice from his/her consulting project structural Engineer for any selected components and deem the components “fit for purpose” for its intended use.

AVAILABLE STRUCTURAL BRACKET RANGE

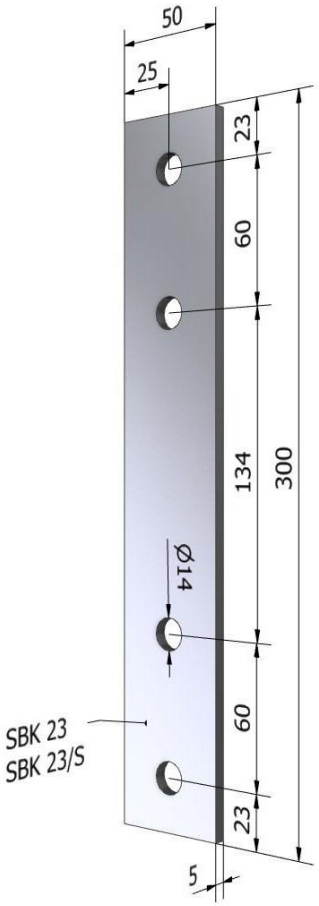
FLAT STRAPS

SBK 23

SBK 23/S

SBK 25

SBK 25/S



SBK23

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR

SBK23/S

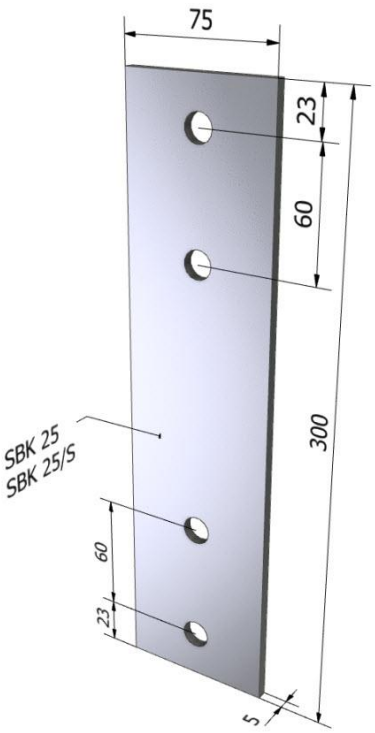
STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR

SBK25

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR

SBK25/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

FLAT T-STRAPS

SBK 27

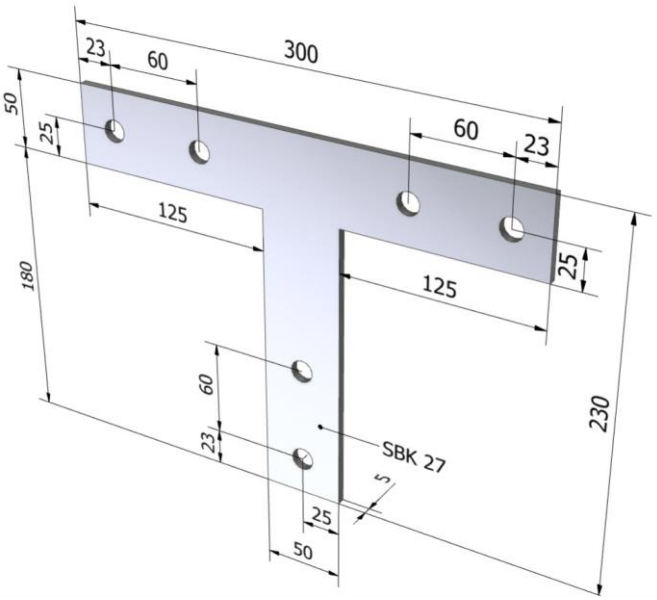
SBK 27/S

SBK27

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR

SBK27/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

FLAT L-STRAPS

SBK 29
SBK 29/S

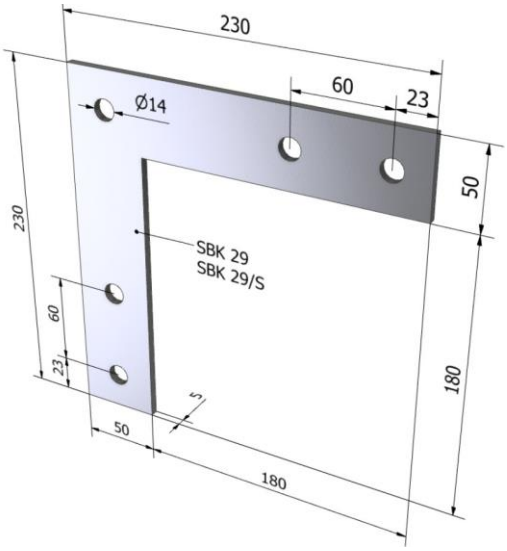
SBK 30

SBK29

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR

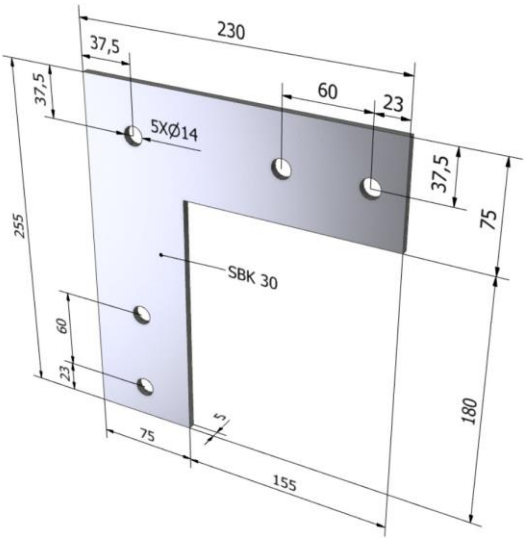
SBK29/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR



SBK30

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

ANGLE BRACKETS

SBK 10A
SBK 10A/S

SBK 14A
SBK 14A/S

SBK 31
SBK 31/S

SBK 31A
SBK 31A/S

SBK 33
SBK 33/S

SBK 34

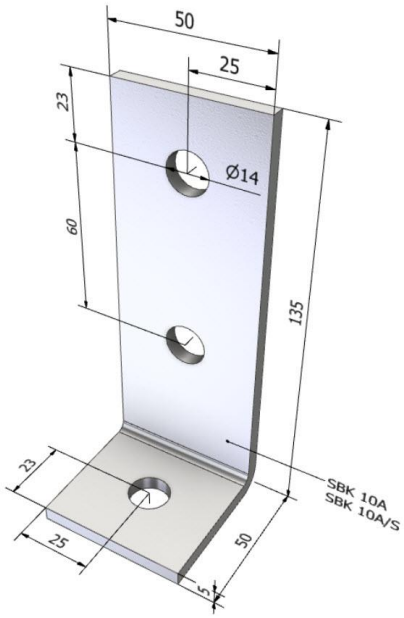
SBK 53
SBK 53/S

SBK10A

STEEL GRADE: Grade 250
STEEL THICKNESS: 5mm
CORROSION PROTECTION: HDG to AS/NZS 4680
FASTENER SIZE: M12 BOLT OR SIMILAR

SBK10A/S

STEEL GRADE: Stainless Steel 304
STEEL THICKNESS: 5mm
CORROSION PROTECTION: Stainless Steel
FASTENER SIZE: M12 BOLT OR SIMILAR

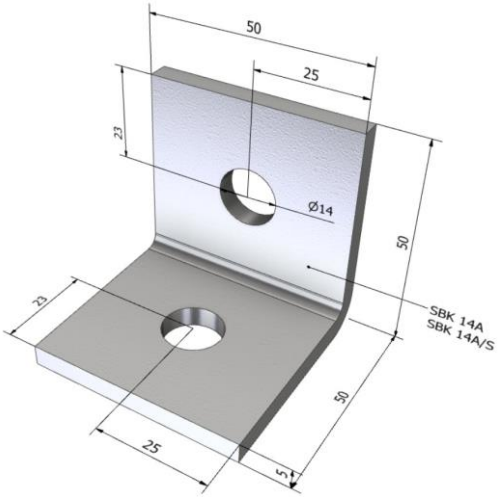


SBK14A

STEEL GRADE: Grade 250
STEEL THICKNESS: 5mm
CORROSION PROTECTION: HDG to AS/NZS 4680
FASTENER SIZE: M12 BOLT OR SIMILAR

SBK14A/S

STEEL GRADE: Stainless Steel 304
STEEL THICKNESS: 5mm
CORROSION PROTECTION: Stainless Steel
FASTENER SIZE: M12 BOLT OR SIMILAR

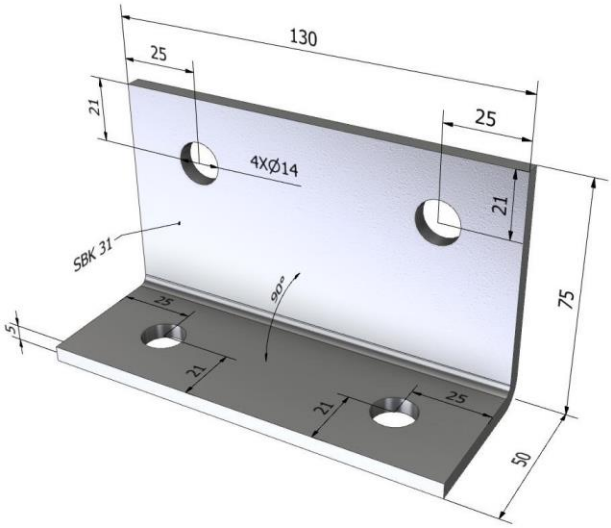


SBK31

STEEL GRADE: Grade 250
STEEL THICKNESS: 5mm
CORROSION PROTECTION: HDG to AS/NZS 4680
FASTENER SIZE: M12 BOLT OR SIMILAR

SBK31/S

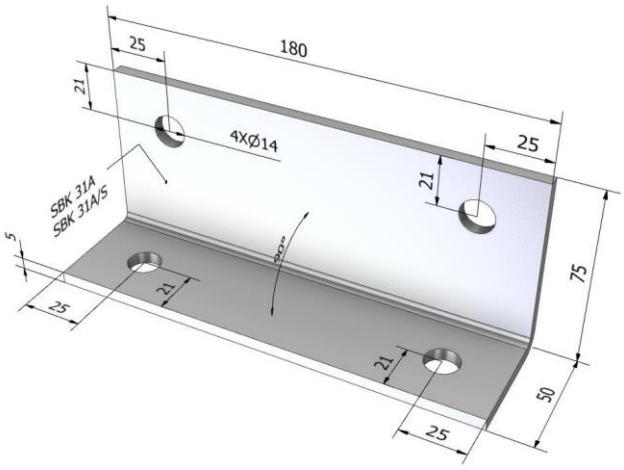
STEEL GRADE: Stainless Steel 304
STEEL THICKNESS: 5mm
CORROSION PROTECTION: Stainless Steel
FASTENER SIZE: M12 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

SBK31A

STEEL GRADE: Grade 250
STEEL THICKNESS: 5mm
CORROSION PROTECTION: HDG to AS/NZS 4680
FASTENER SIZE: M12 BOLT OR SIMILAR

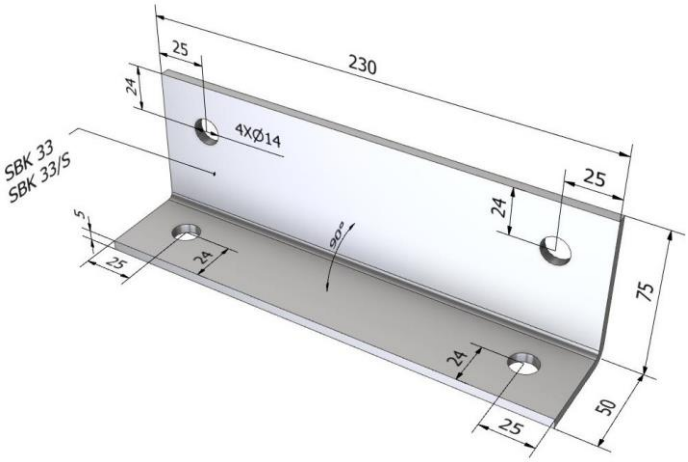


SBK31A/S

STEEL GRADE: Stainless Steel 304
STEEL THICKNESS: 5mm
CORROSION PROTECTION: Stainless Steel
FASTENER SIZE: M12 BOLT OR SIMILAR

SBK33

STEEL GRADE: Grade 250
STEEL THICKNESS: 5mm
CORROSION PROTECTION: HDG to AS/NZS 4680
FASTENER SIZE: M12 BOLT OR SIMILAR



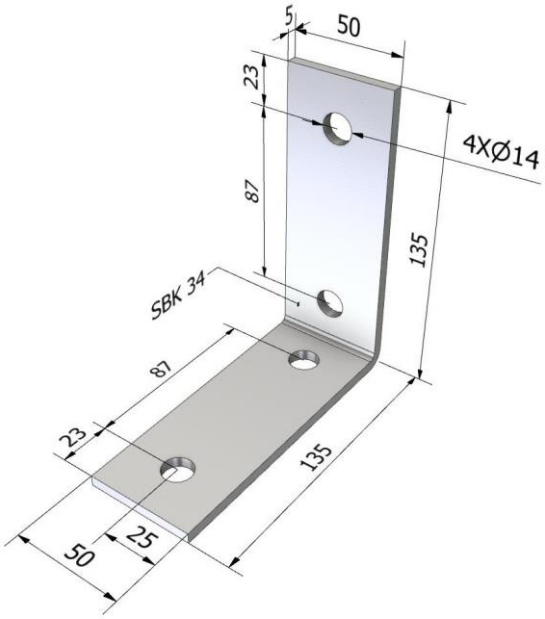
*All dimensions shown are in “mm”.

SBK33/S

STEEL GRADE: Stainless Steel 304
STEEL THICKNESS: 5mm
CORROSION PROTECTION: Stainless Steel
FASTENER SIZE: M12 BOLT OR SIMILAR

SBK34

STEEL GRADE: Grade 250
STEEL THICKNESS: 5mm
CORROSION PROTECTION: HDG to AS/NZS 4680
FASTENER SIZE: M12 BOLT OR SIMILAR



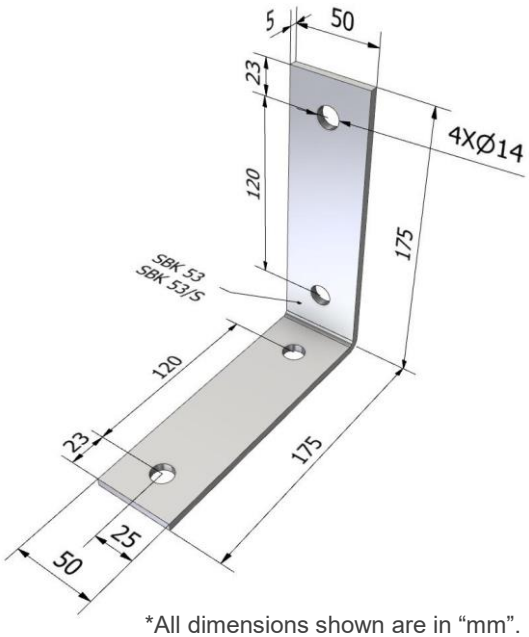
*All dimensions shown are in “mm”.

SBK53

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR

SBK53/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

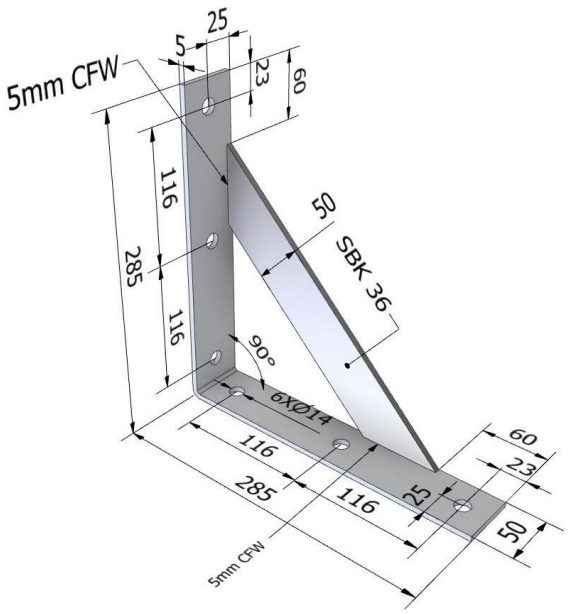
ANGLE BRACKETS WITH GUSSET

SBK 36

SBK 55

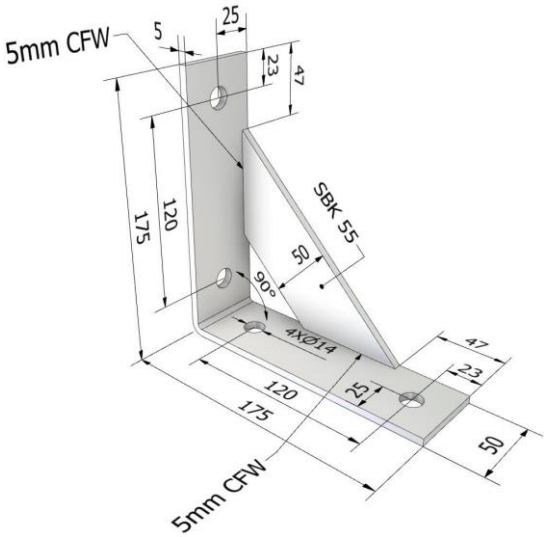
SBK36

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
WELD TO UNDERSIDE OF EACH BEARING PLATE	5mm CFW SP Category to AS/NZS 1554.1
FASTENER SIZE:	M12 BOLT OR SIMILAR



SBK55

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR



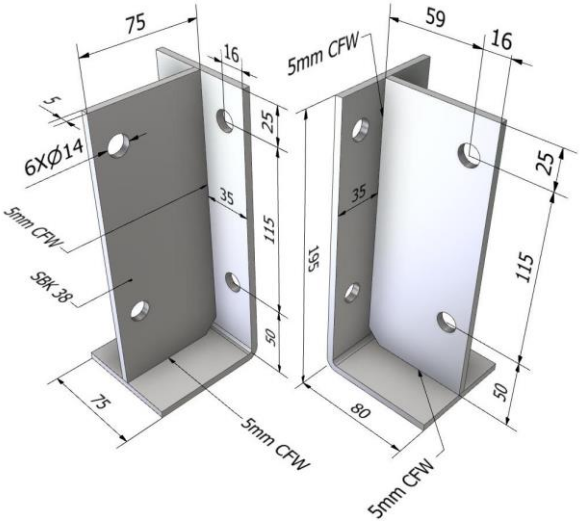
BEAM SUPPORTS

SBK 38

SBK 38A

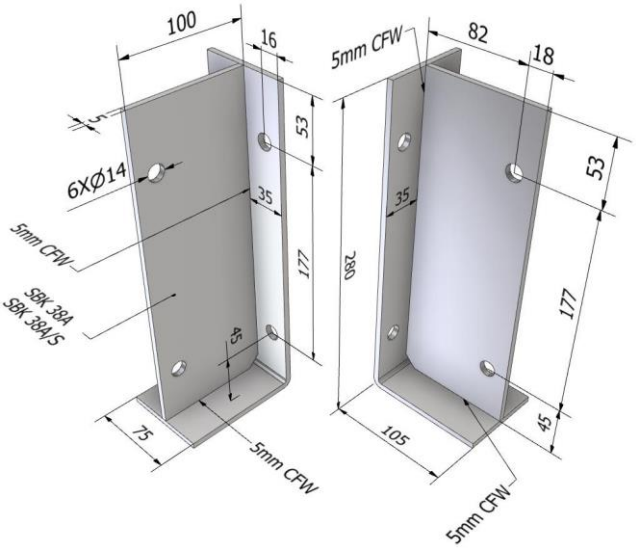
SBK38

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
WELD TO UNDERSIDE OF EACH BEARING PLATE	5mm CFW SP Category to AS/NZS 1554.1
FASTENER SIZE:	M12 BOLT OR SIMILAR



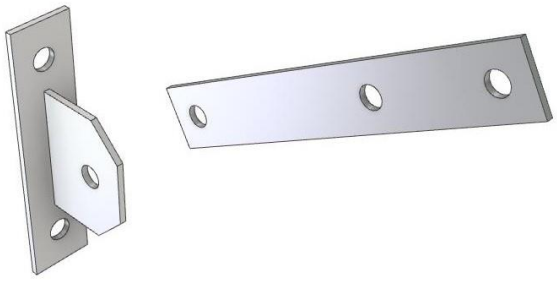
SBK38A/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

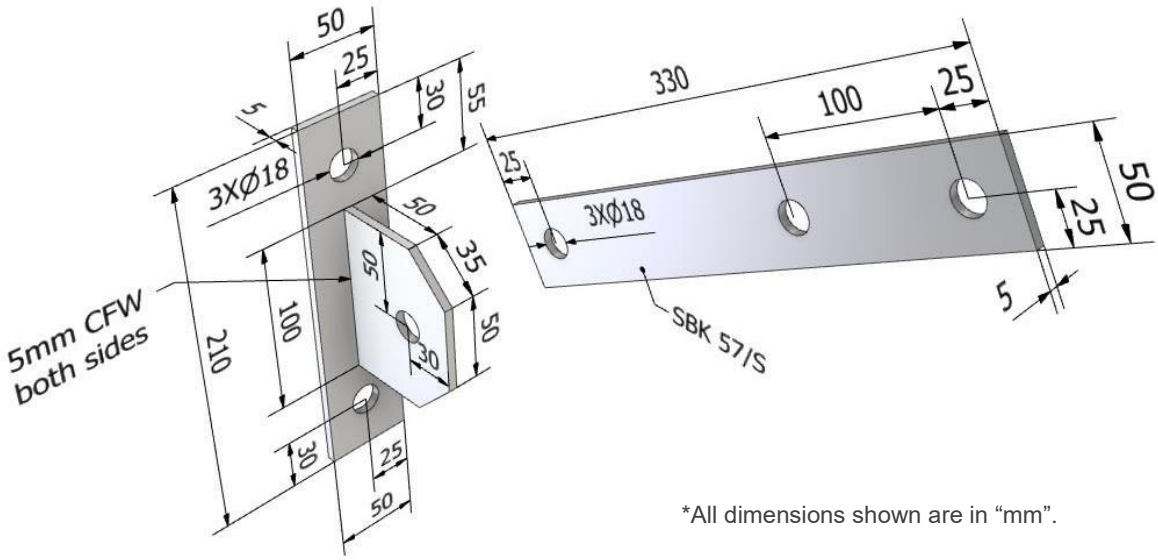
POLE BRACE BRACKET



SBK 57/S

SBK57/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M16 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

POST AND BEARER SUPPORTS

SBK 4
SBK 4/S

SBK 6
SBK 6/S

SBK 8
SBK 8/S

SBK 9

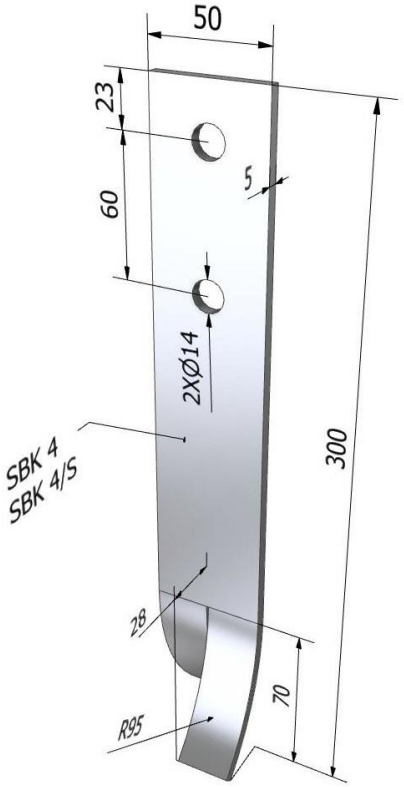
SBK 18

SBK4

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR

SBK4/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR

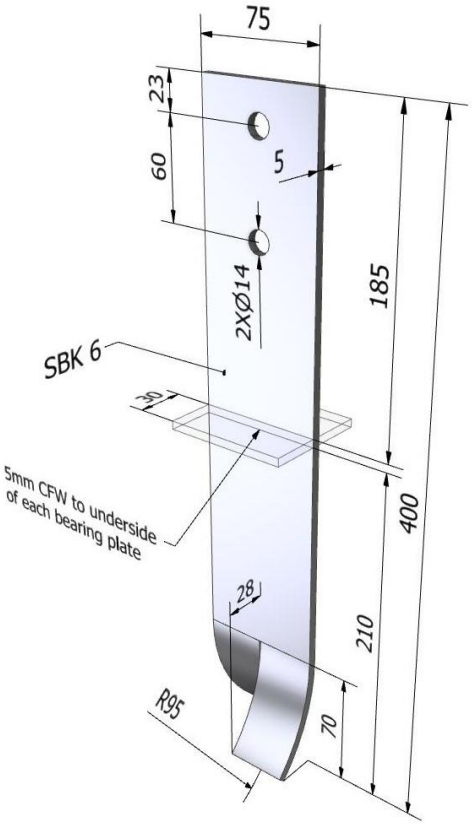


SBK6

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
WELD TO UNDERSIDE OF EACH BEARING PLATE	5mm CFW SP Category to AS/NZS 1554.1
FASTENER SIZE:	M12 BOLT OR SIMILAR

SBK6/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR



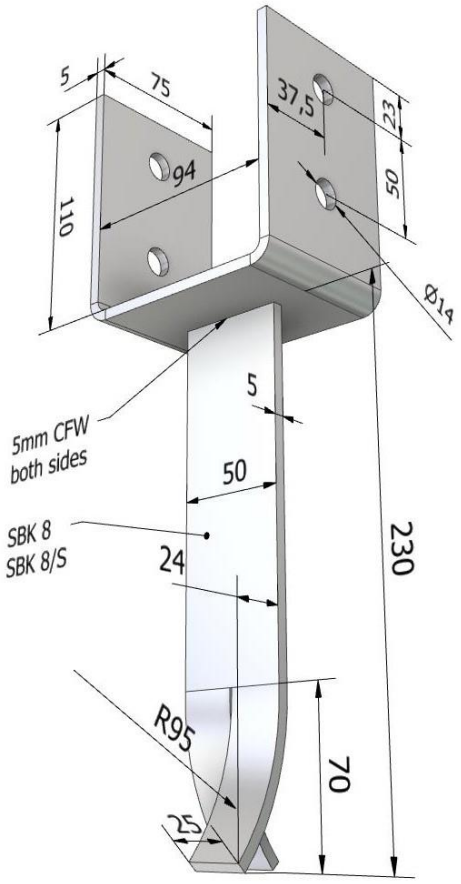
*All dimensions shown are in “mm”.

SBK8

STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR

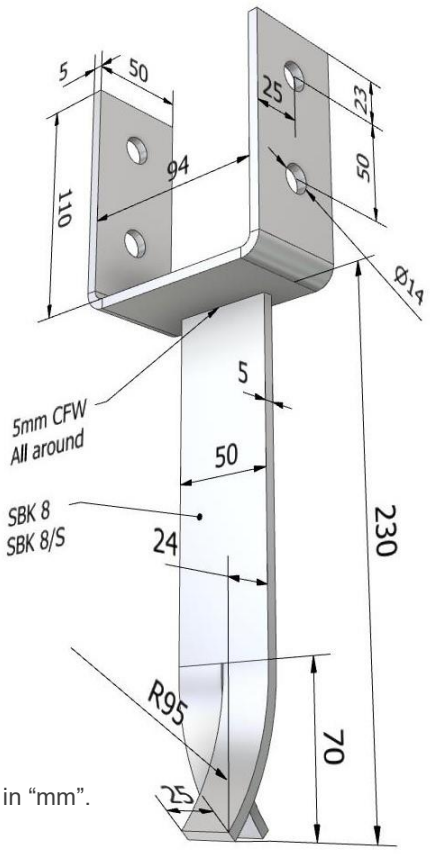
SBK8/S

STEEL GRADE:	Stainless Steel 304
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	Stainless Steel
FASTENER SIZE:	M12 BOLT OR SIMILAR



SBK9

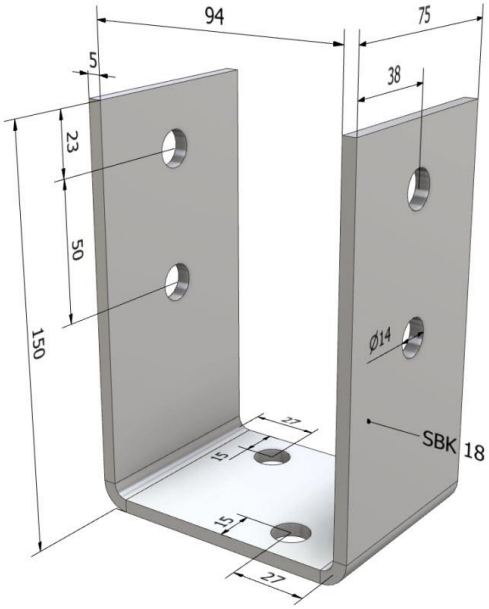
STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

SBK18

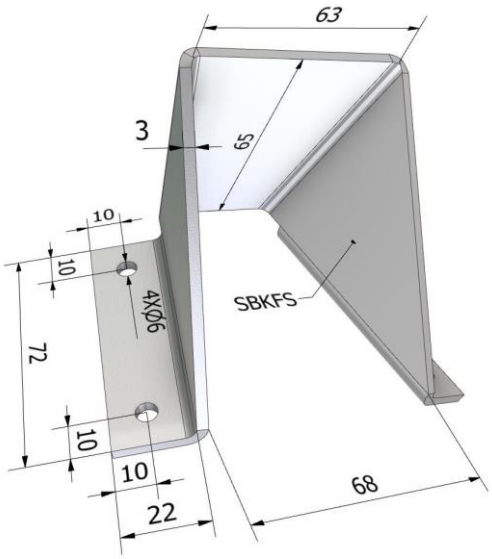
STEEL GRADE:	Grade 250
STEEL THICKNESS:	5mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	M12 BOLT OR SIMILAR



*All dimensions shown are in “mm”.

FENCE STAY BRACKET

SBKFS



*All dimensions shown are in “mm”.

SBKFS

STEEL GRADE:	Grade 250
STEEL THICKNESS:	3mm
CORROSION PROTECTION:	HDG to AS/NZS 4680
FASTENER SIZE:	NO.12 GAUGE SCREW OR SIMILAR

Contact details	
Manufacture location	New Zealand
Legal and trading name of manufacturer	Kimberly Tool & Design (NZ) Limited
Legal and trading name of supplier	Pryda New Zealand -a Division of ITW New Zealand
Supplier address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Supplier website	Pryda.co.nz
Supplier email	info@prydaanz.com
Supplier phone number	0800 88 22 44
Supplier NZBN	9429039833129

www.pryda.co.nz
FOR MORE INFORMATION CALL 0800 88 22 44 OR EMAIL INFO@PRYDA.CO.NZ