

## NZ PRYDA FRAMING BRACKET

**CodeMark**   
CMNZ-10030

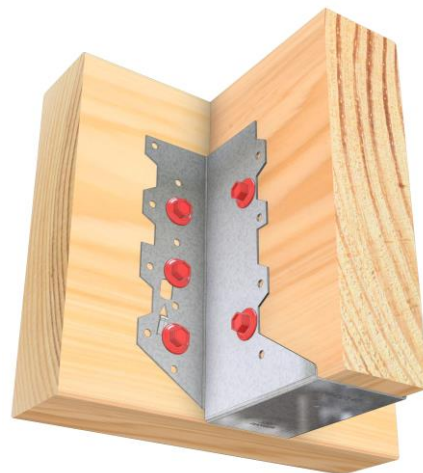
Simple means of connecting two members at 90° that provides resistance to gravity and uplift loads.

### FEATURES AND BENEFITS

**SIMPLE:** Can be installed without needing to create special housings or high skill timber joints.

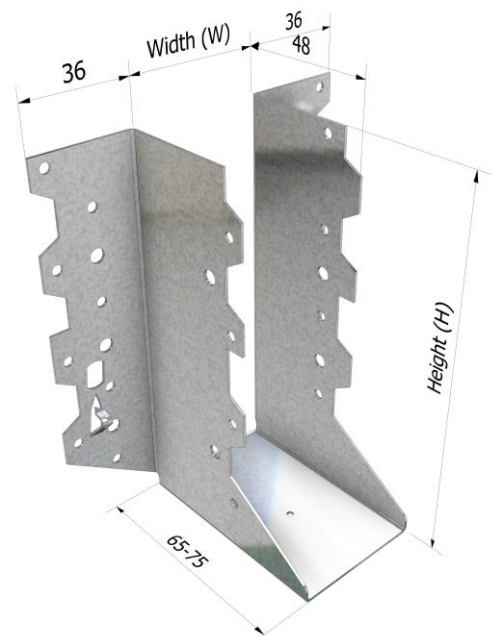
**FAST:** Can be fastened with Pryda 12G x 35mm Timber Connector screws -painted red head.

**DURABLE:** 1.0mm thick galvanised steel engineered to resist gravity loads **and** wind uplift loads.



### SPECIFICATIONS

<b>PRODUCT CODE</b>	MPFB(W)(D) * (See table for available sizes)
<b>STEEL</b>	G300 or Stainless Steel 304
<b>THICKNESS</b>	1mm
<b>CORROSION RESISTANCE</b>	Z275 or Stainless Steel 304
<b>FASTENERS</b>	Pryda 35 x 3.15mm Timber Connector Nails  <b>OR</b> Pryda 12G x 35mm Timber Connector Screws – painted red head.  Ensure the corrosion resistance of the fastener matches the product i.e., galvanised nails for a galvanised brackets or stainless steel nails for a stainless steel brackets.
<b>HEIGHTS</b>	90-180mm
<b>WIDTHS</b>	45-94mm



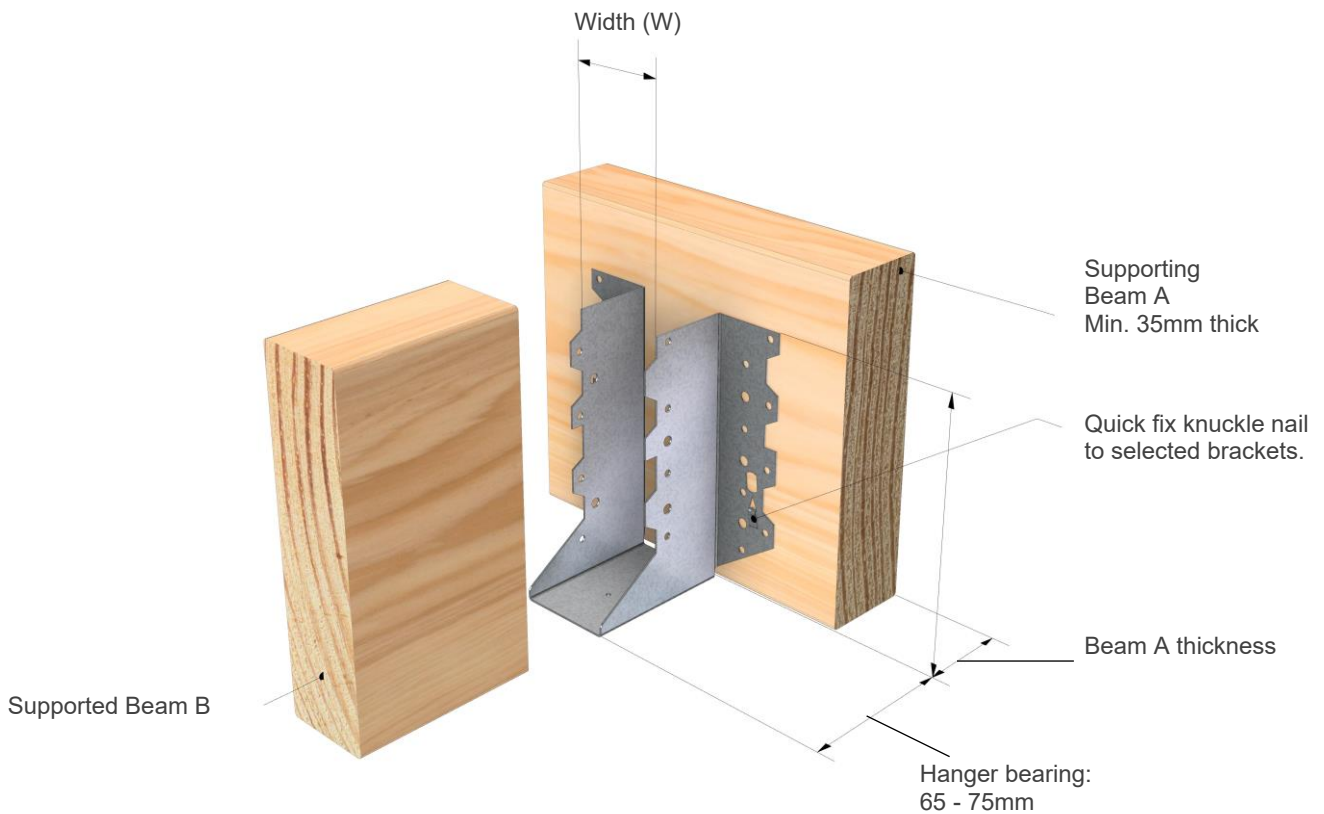
At the time of print, this product is NOT subject to any known warnings and bans found in Building Act 2004.

\*All dimensions shown in "mm."

## FRAMING BRACKET

PRODUCT CODE	MATERIAL	WIDTH	HEIGHT	SUITABLE APPLICATION		
MPFBK4590	G300, Z275 Galvanised Steel		46	77	Solid Joist/Beam/Rafter	
MPFBK45120			46	110		
MPFBK45180			46	176		
MPFB5274			52	74		
MPFB52124			52	124		
MPFB52174			52	177		
FB65170			65	167		
FB72163			72	163		Pryda Floor Trusses
FB94152			94	152		
MPFB4590/S	Stainless Steel 304		45	77	Solid Joist/Beam/Rafter	
MPFB45120/S			45	110		
MPFB45180/S			45	176		
MPFB52124/S			52	124		
FB94152/S			94	152	Pryda Floor Trusses	

## CONNECTION DEFINITION



\*Only selected Framing Brackets have the Quick fix knuckle nail

## DESIGN CAPACITY- LIMIT STATE DESIGN

PRODUCT CODE	Fixing to Supporting Beam (A)	Dead + Floor Live Load (kN) 1.2G+1.5Qf	Fixing to Supported Beam (B)	Wind Uplift (kN) k1 = 1.14
		Joint Group		Joint Group
		JD5		JD5
MPFB5274	6 nails	2.7	3 nails	2.2
	2 screws	2	2 screws	3.3
MPFBK4590	8 nails	3.6	4 nails	3
MPFB4590/S <sup>(9)</sup>	4 screws	4	2 screws	3.3
MPFBK45120	12 nails	5.4	6 nails	4.5
MPFB45120/S <sup>(9)</sup>	6 screws	6	4 screws	6.6
MPFB52124				
MPFB52124/S <sup>(9)</sup>				
MPFBK45180	20 nails	9	10 nails	7.4
MPFB45180/S <sup>(9)</sup>	8 screws	8	6 screws	9.9
MPFB52174 MPFB65170	18 nails	8.1	6 nails	4.5
			11 nails	8.2
	6 screws	6	6 screws	9.9
<b>Floor Truss Framing Brackets</b>				
FB72163	18 nails	8.1	3 nails	2.2
			10 nails	7.4
	6 screws	6	6 screws	9.9
FB94152 FB94152/S <sup>(9)</sup>	18 nails	8.1	3 nails	2.2
			10 nails	7.4
	6 screws	6	6 screws	9.9

### NOTES:

- The above tabulated capacities are for a minimum supporting beam thickness of 35 mm.
- Design capacities 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.
- For FB65170, FB72163 and FB94152 brackets, wind uplift values have been reduced due to a shorter end distance on the supported beam compared to the other brackets.
- For FB72163 to FB94152, the wind uplift 3 nails fixing option allows for fixing to the chords only of I-beams or trusses.
- Unless the top of the supported beam is provided with additional lateral restraints, the bracket must cover at least 60% of the depth of the supported beam.
- Multiple Laminated Supporting Beams: Fasteners with longer lengths are required when Joist Hangers are fixed into a multiple laminated supporting beam. For double laminates, use 65mm long nails or screws. Alternatively, for double or triple laminated supporting beams, additional fixings may be provided at hanger locations to laminate plies. Seek advice from the Consulting Project Engineer.
- Gap between Supported and Supporting Beams: A maximum gap of 3mm is permitted without a reduction in design capacity. A larger gap would result in a rotation of the supported beam under downward loads and could compromise on end distance requirements of nails resulting in reduced uplift capacities. Seek advice from a Pryda Engineer regarding treatment of large gaps.
- The framing bracket shall not hang more than 10mm below the underside of Beam A if the above table values are to be maintained. Seek advice from a Pryda engineer.
- Stainless Steel Framing Bracket definition ending with:
  - “/S” -Stainless Steel 304

Use Stainless Steel fasteners with Stainless Steel Framing brackets.

## 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 <sup>2</sup> /m <sup>2</sup> or LESS	Sheltered	Pryda Stainless Steel 304 Products <sup>(3)</sup>
		Vented MORE than 7000mm <sup>2</sup> /m <sup>2</sup>	Exposed	Pryda Stainless Steel 304 Products <sup>(3)</sup>
	All subfloor fastenings within 600mm of the ground	Sheltered and Exposed		Pryda Stainless Steel 304 Products <sup>(3)</sup>
	All other structural fixings	Sheltered		Pryda Stainless Steel 304 Products <sup>(3)</sup>
Exposed		Pryda Stainless Steel 304 Products <sup>(3)</sup>		
Zone D	All structural fixings	Sheltered and Exposed		Pryda Stainless Steel 304 Products <sup>(3)</sup>

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.

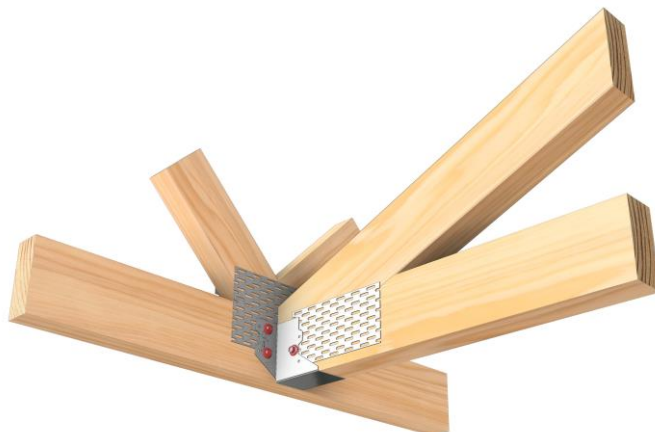
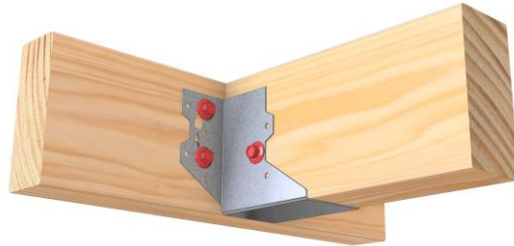
**Clause F2 HAZARDOUS BUILDING MATERIALS:** Performance F2.3.1.

## APPLICATION AND SCOPE OF USE

Pryda Framing Brackets 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.

Pryda Framing Brackets are suitable for many joints including:

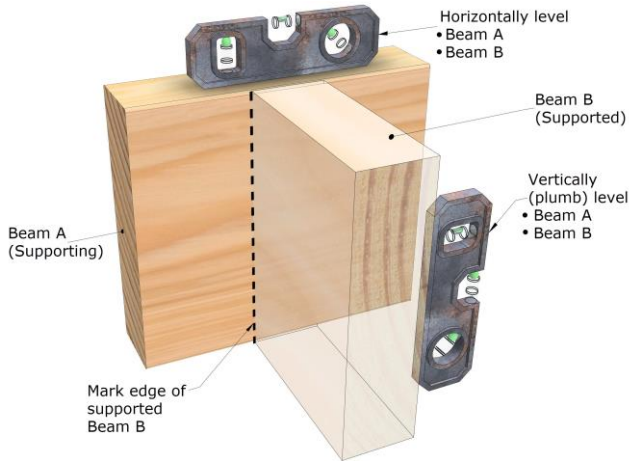
- Joist to beam
- Jack to TG truss
- Ceiling joist to hanger
- Floor truss to beam
- Pergola rafters to fascia
- Beams to masonry





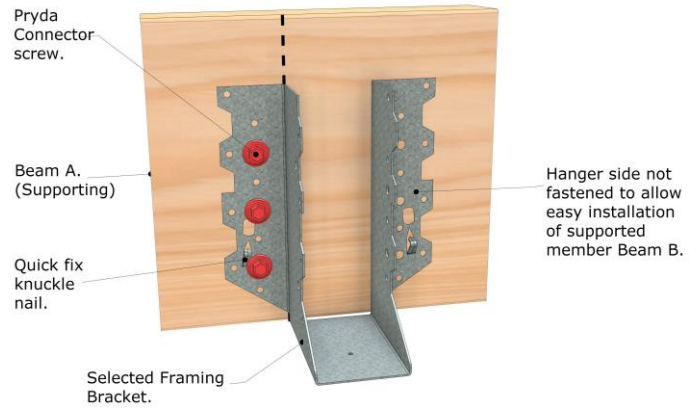
# INSTALLATION

## STEP 1



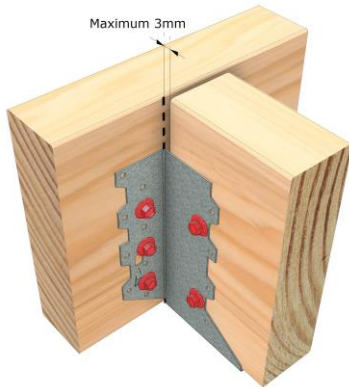
- Ensure both Beam A and B are level and plumb.
- Measure and mark location of connection on supporting beam.

## STEP 2



- Line up Framing Bracket on the supporting beam and fasten only one side initially. Quick fix hanger in to position to supporting Beam A with knuckle nail.
- For Hand nails, fill each small hole.
- For Screws, fill each larger screw hole (shown in diagram above)
- For machine nails use 20% more nails and do not fire through holes, see tips below.

## STEP 3



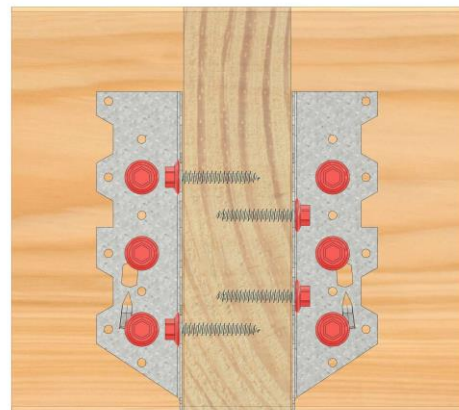
- Place the supported beam into the Framing Bracket ensuring it is right up against supporting beam.
- Any gap greater than 3mm will reduce capacity.

### CAUTION

If both sides are fastened before the supported beam is slotted in, the final connection to the supported beam could be:

- Too loose, leading to squeaking and reduced design values
- Too tight, meaning the beam will not fit

## STEP 4



- Place the supported beam into the Framing Bracket ensuring it is right up against supporting beam.
- Any gap greater than 3mm will reduce capacity.

## MACHINE NAILING

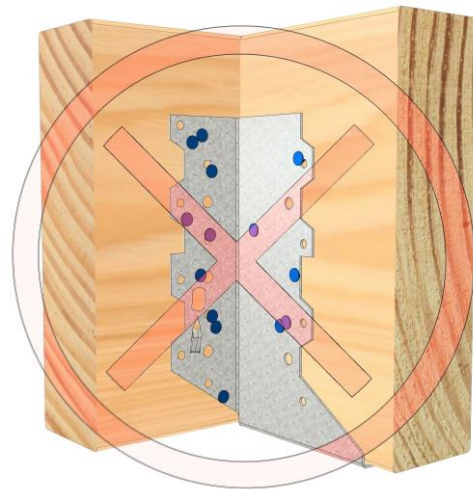
Where appropriate, Paslode Machine Driven Nails listed below may be used instead of the specified Pryda 35 x 3.15 mm Timber Connector Nails.

PRYDA CODEMARK CERTIFICATE CMNZ10030 CERTIFIES PRYDA FRAMING BRACKETS WITH USE OF NZ PRYDA TIMBER CONNECTOR NAILS AND TIMBER CONNECTOR SCREWS. OTHER FIXING METHODS ARE OUTSIDE THE SCOPE OF THE CODEMARK.

Paslode's PPN-Master positive placement nailer replicates the accuracy of hand nailing by using a probing tip to fire nails through holes in the connector. Pryda supports the use of the PPN-Master for these products. Unlike traditional nailing tools, no design capacity reduction is required when using the PPN-Master.



Acceptable



Not Acceptable

Where appropriate, Paslode Machine Driven Nails listed below may be used instead of the specified Pryda 35 x 3.15mm Timber Connector Nails, provided that:

- 20% More machine nails are used.

Machine driven nails are driven at nail spacings and edge distances similar to the hole pattern, ensuring that these nails are:

- Driven into the blank metal between the pre-punched holes.
- Not located closer than 5mm from the edge of a hole
- Not tightly clustered together
- Not within 15 mm from the edge of the supported beam (B) or 10mm from the edge of the supporting beam (A)
- Nails shall be located vertically aligned with supported beam (B) pre-punched nail holes as shown above.

Screw hardened, electro galvanised Paslode nails that are appropriate include:

- Duo-Fast C SHEG 32 x 2.3 ( D40810)
- Paslode 32 x 2.5mm (B25110)
- Duo-Fast 32 x 2.5mm (D41060)
- Pas Coil 32 x 2.5 SHEG 2 Pack (B25250)
- Impulse 32 x 2.5 SHEG (B40020)

## NZ FRAMING BRACKET DATA SHEET

Contact details		Contact details	
Manufacture location	Overseas	Manufacture location	New Zealand
Legal and trading name of manufacturer	Pryda Australia -a Division of ITW Australia PTY LTD	Legal and trading name of manufacturer	Kimberly Tool & Design (NZ) Limited
Legal and trading name of importer	Pryda New Zealand -a Division of ITW New Zealand	Legal and trading name of supplier	Pryda New Zealand -a Division of ITW New Zealand
Importer address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand	Supplier address for service	23-29 Poland Road, Wairau Valley, Auckland, 0627, New Zealand
Importer website	Pryda.co.nz	Supplier website	Pryda.co.nz
Importer email	info@prydaanz.com	Supplier email	info@prydaanz.com
Importer phone number	0800 88 22 44	Supplier phone number	0800 88 22 44
Importer NZBN	9429039833129	Supplier NZBN	9429039833129
Product Skus	MPFBK4590, MPFBK45120, MPFBK45180	Product Skus	MPFB5274, MPFB52124, MPFB52142/S, MPFB52174, FB65170, FB72163, FB94152, FB94152/S, MPFB4590/S, MPFB45120/S, MPFB45180