PRODUCT DATA SHEET

NZ STRAP BRACE AND MAXI STRAP

CodeMark CMNZ-10029

Versatile and cost-effective bracing product for roofs, ceilings, walls, and floors.

FEATURES AND BENEFITS

SIMPLE: Can be cut to match any size or application, meaning you can do more, with less. Slim profile means studs do not need to be notched,saving time and cost.

FAST: Tensioner can be used with a drill to speed up tensioning. Unlike Speed or Angle Brace, can be partially fastened but not tensioned allowing for plumb adjustment of wall frames prior to tensioning.

DURABLE: Made from G550 Z275 Steel or Stainless Steel 304.

WING NUT, WASHER, T-BOLT, AND TENSIONER FOR G550 Z275 STRAP BRACE.

SPECIFICATIONS

STEEL	G550 or Stainless Steel 304
THICKNESS	0.8mm
CORROSION RESISTANCE	Z275 or Stainless Steel 304
FASTENERS	Pryda 35 x 3.15mm Timber Connector Nails
LENGTHS	10m to 30m rolls.

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

For full range details see table on next page. Use Stainless Steel fasteners with Stainless Steel Straps.

2 X WING NUTS, 2 X WASHERS, 2 X T-BOLTS, AND TENSIONER FOR G550 Z275 MAXI BRACE.

*STAINLESS STEEL M6 BOLT, WASHER AND HEX NUT WILL BE USED FOR ALL STAINLESS STEEL TENSIONERS.

STRAP BRACE SB10, SB30

MAXI STRAP SBI, SBI/15

*All dimensions shown are in “mm.”

STRAP BRACE

PRODUCT CODE	MATERIAL	TYPE	LENGTH	SIZE
SB10	G550 Z275	Strap Brace	10m	25 X 0.8mm
SB30			30m	
SB10T		Strap Brace + 5 x Tensioner	10m	
SB30T			30m	
SBI/15		Maxi Strap	15m	50 X 0.8mm
SBI			30m	
SB15/S	Stainless Steel 304	Strap Brace	15m	25 X 0.8mm
SBI/S		Maxi Strap	30m	50 X 0.8mm

Note:

1. Use same material type for Strap and Tensioner. Example, use stainless steel tensioners with stainless steel straps only.
2. T-bolts and Wing nuts are only available for non stainless steel tensioners. Stainless steel tensioner will be supplied with equivalent stainless steel M6 hex head bolt, washer, and nut.

TENSIONERS

PRODUCT CODE	MATERIAL	FASTENING STYLE	TO SUIT BRACE WIDTH	QUANTITY
SBTNZ	G550 Z275	Wing Nut	25mm	1 ctn
				(8 bags of 5)
SBI/T	G300 HDG Galvanised Steel		50mm	1 each
SBI/TS	Stainless Steel 304	Hex Nut	50mm	1
SBT/SS	Stainless Steel 316	Hex Nut	25mm	1

DESIGN CAPACITY (WIND LOADS ONLY)

PRODUCT CODE	MATERIAL	SIZE	Limit State Design Tension Capacity (kN) for Wind load case
SB10	G550 Z275	25 X 0.8mm	7.6(1)
SB30			
SB30T			
SBI/15		50 X 0.8mm	12.1(1)
SBI			
SB15/S	Stainless Steel 304	25 X 0.8mm	6.9(1)
SBI/S		50 X 0.8mm	18.9(1)

Note:

1) Tension capacity shown are with tensioners installed with the fastening style:

- G550 Z275 strap: T-bolt, washer, and Wing nut.
- Stainless steel strap: Stainless steel M6 bolt, washer, and hex nut.

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)

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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 Strap brace is suitable for bracing walls and truss/rafter roof construction (spans up to 12m) in residential buildings. Use Pryda Maxi Strap for larger spans and commercial and industrial buildings. Pryda Tensioners provide a fast, dependable, and simple method of tensioning long lengths of bracing strap.

Pryda Strap brace complies with NZS3604:2011 Light Timber Frame Buildings, clause 10.4.2.2 (b) requirements for diagonally opposing pair of continuous metal bracing strips each having a tension capacity of 4kN **but is not suitable for use as holding down straps on braced wall panels**. Use Pryda Sheet Brace Straps for this application.

Pryda Strap brace and Maxi Strap act in tension only. Braces must be **applied in pairs** as illustrated. Holes are pre-punched for Pryda 35x 3.15mm Timber Connector Nails and 6mm tensioner bolts.

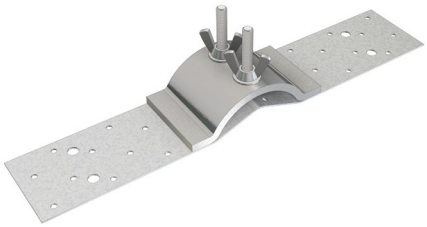
Pryda Strap Brace and Maxi strap are certified when used and installed in accordance with the product datasheet shown connection details. Pryda fasteners approved for the installation form an integral part of the connection and therefore should be used with all Pryda products installation unless otherwise 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.

WALL BRACING

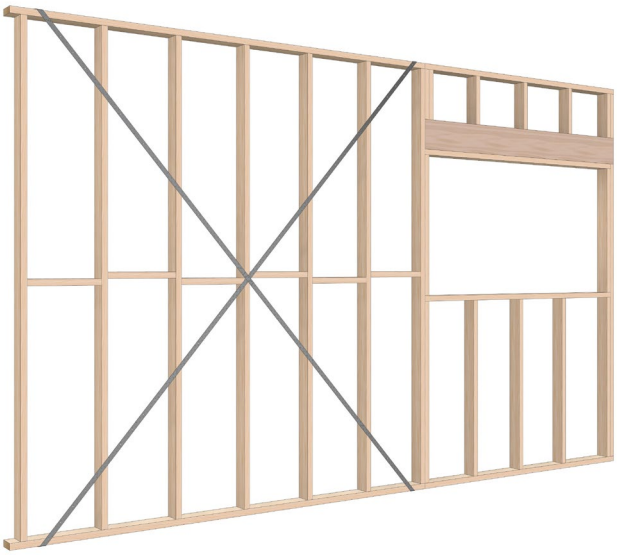
- Make sure wall frame is square. Nail end of brace to the top wall plate within 150mm of a stud, using 3 x Pryda 35 x 3.15mmTimber Connector Nails. Unroll brace coil at angle of approximately 45˚ and cut to length. Tighten by pulling down onto bottom wall plate. Nail within 150mm of stud with 3 nails.

- Fix another brace in the same way diagonally opposite the first length. The two braces must cross to form a strong rigid brace. Fit tensioners (usually one per 3.6m length of brace) and plumb frame. Nail braces to intermediate studs with 2 nails after tensioning braces.

STRAP BRACE
SB10, SB30



MAXI STRAP
SBI, SBI/15

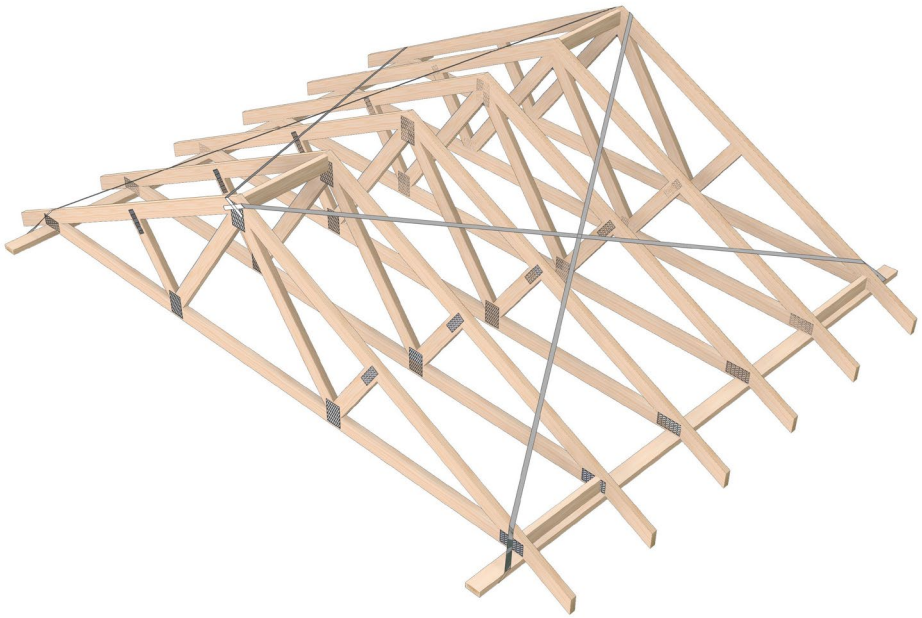


ROOF AND CEILING BRACING

Use in crossed pairs as for wall braces. For residential construction in accordance with NZS3604:2011, secure braces with 6 x Pryda 35 X 3.15mm Timber Connector Nails (12 nails for Maxi Strap) at each end, and 2 nails (after tensioning braces) at truss/ rafter or Purlin crossing.

ROOF BRACE DEFINITION

A “roof brace” comprises a diagonal pair of Pryda Strap Braces intersecting at 45°, connecting the ridge of the roof to the top plate of the wall with both ends fixed as shown in the diagrams below. A “roof brace” can also be a valley or hip connected continuously.



Light Weight Roofs

Require ONE “roof brace” in each plane of the roof area per 50m² of plan roof area which also includes any overhangs.

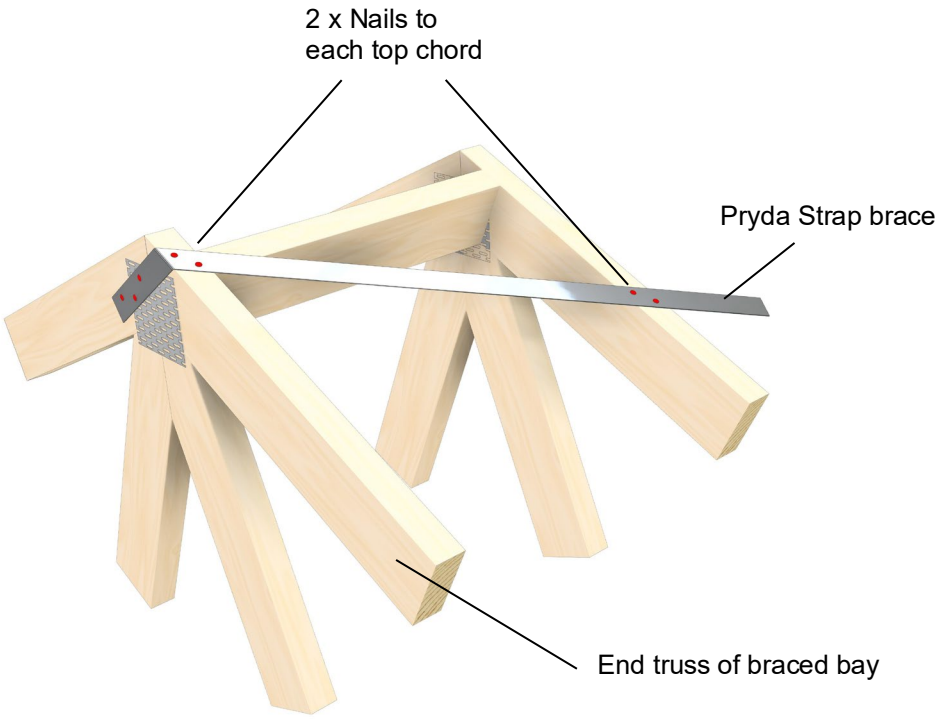
Heavy Weight Roofs

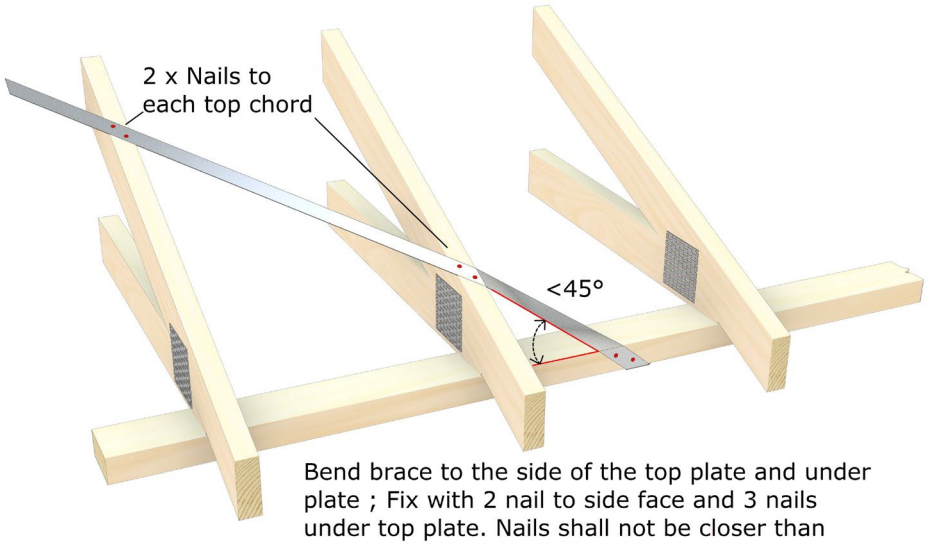
Require ONE “roof brace” in each plane of the roof area per 25m² of plan roof area which also includes the overhangs. Note: Porches, dormers, and small roof planes of less than 6m² do not require bracing.

Installation Notes

1. The distribution of roof braces should be performed in an even and balanced fashion.
2. For purlins / battens 50mm or deeper, the roof brace shall occupy the plane directly on top of the top chords or rafters.
3. Pryda Strap Brace shall be used for spans up to 12m. For spans over 12m Pryda Maxi brace shall be used.
4. Nail off Pryda Strap Brace at apex end with 5 nails. Layout Pryda Strap Brace at 45° and nail off at heel end with 5 nails.
5. Tension Pryda Strap Brace using Pryda Tensioner before final nailing of one nail per top chord crossing.

Anchorage Point:
Bend strap brace over side of top chord and fix Pryda Strap brace end with 5 Pryda Timber Connector nails. Three nails to face and 2 nails to top. Nails shall be no closer than 10mm to the edge of the timber. Solid block between trusses/rafter behind each anchorage point.





Bend brace to the side of the top plate and under plate ; Fix with 2 nail to side face and 3 nails under top plate. Nails shall not be closer than 10mm to the edge of the timber.

BUILD WITH CONFIDENCE

Where possible, hand nailing with Pryda Timber Connector nails is always preferred, why?

- Pryda Timber Connector Nails are forged in one piece, unlike clouts that are two pieces soldered together, meaning the head can pop off
- Pryda Nails are the correct diameter, ensuring a tight fit in prepunched holes = a stronger connection
- Design values and testing have all been conducted using Pryda Timber Connector Nails
- Hand hammered nails ensure correct nail positioning and drive depth (not driven too shallow or too deep)

PRYDA CODEMARK CERTIFICATE CMNZ10029 CERTIFIES PRYDA STRAP BRACE WITH USE OF NZ PRYDA TIMBER CONNECTOR NAILS. OTHER FIXING METHODS ARE OUTSIDE THE SCOPE OF THE CODEMARK.

USING PASLODE MACHINE DRIVEN NAILS

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

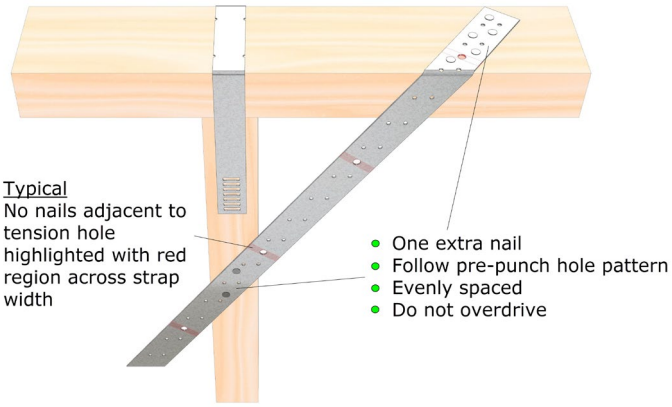
- There is one additional nail per connection than specified in the bracing details (e.g., 2 instead of 1, 3 instead of 2, 5instead of 4 etc.)
- Machine driven nails are driven at nail spacings and edge distances similar to the hole pattern, ensuring that these nails are not:
  - Driven into the holes
  - Located not closer than 5mm from the edge of a hole
  - Grouped together
  - Within 10mm from the edge

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

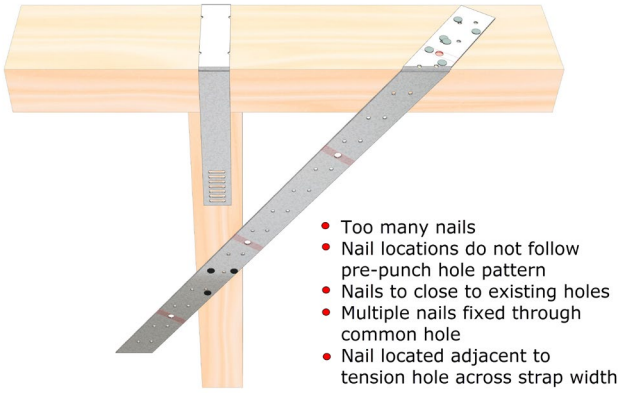
- Duo-Fast C SHEG 32 x 2.3mm (D40810)
- Paslode 32 x 2.5mm (B25110)
- Duo-Fast 32 x 2.5mm (D41060)
- Pas Coil 32 x 2.5mm SHEG 2 Pack (B25250)
- Impulse 32 x 2.5mm SHEG (B40020)

Extreme care must be taken when using machine driven nails as the prevailing installation practices tend to inhibit compliance with the above requirements.

MACHINED DRIVEN NAILS
CORRECT FIXING METHOD



MACHINED DRIVEN NAILS
INCORRECT FIXING METHOD



STRAP BRACE TIPS

1. Larger holes are only for tensioners, do not use them for nails
2. Do not over tension Strap Bracing as this can both reduce the capacity of the unit and bring walls out of plumb
3. Ensure nails are at least 10mm away from timber end or edges to prevent splitting
4. Ensure Strap Brace is tensioned prior to nailing to studs/trusses
5. Keep wall bracing angles within 30° to 60° and roof angles between 30° to 45° or the brace will not be compliant
6. Fix Strap Brace to the Bottom Plate before standing wall
7. Avoid having the center of the opposing brace located over a stud or a nog as this can cause a bump in the plasterboar

Contact Details	
Manufacture location	New Zealand
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Legal and trading name of importer	Pryda New Zealand -a Division of ITW New Zealand
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Importer NZBN	9429039833129