PRODUCT DATA SHEET

CYCLONE STRAPS

FEATURES AND BENEFITS

SIMPLE: Quick and easy to install.

VERSATILE: Multiple lengths, thicknesses and can be doubled up for even more capacity.

DURABLE: Made from G300 Z275 steel.

AS1684 COMPLIANT

- Designed and tested in accordance with Australian standards (AS1649)
- Minimum G300 Z275 Galvanised Steel

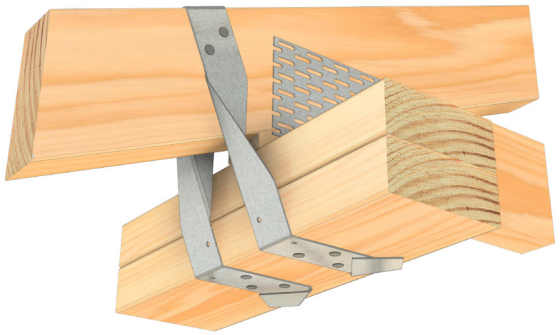
SPECIFICATIONS

STEEL	G300
THICKNESS	1.0 to 1.2mm
CORROSION RESISTANCE	Z275
LENGTHS	400, 588 and 880mm

FASTENER REQUIRED

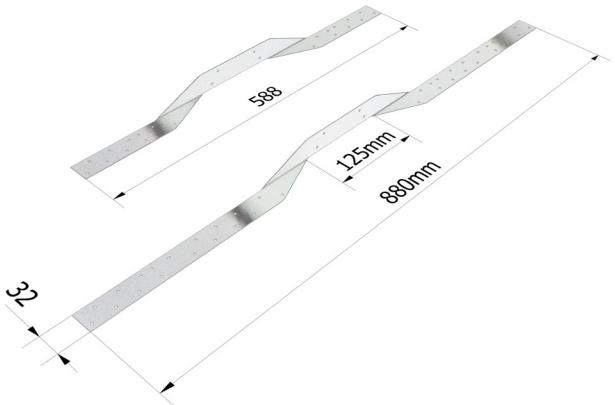
NAILS	Pryda Timber Connector Nails 35 x 3.15mm Product code – OSNG **For machine driven nails, refer to the note on the last page. Pryda's unpunched QHS6U and QHS9U straps are designed specifically for machine driven nails.**

Strong tie down suitable for tying purlins to roof trusses or roof trusses to the wall frame.



QHS6 shown

MPQHS6 QHS9



CYCLONE STRAPS

PRODUCT CODE	MATERIAL	THICKNESS (MM)	LENGTH (MM)	QUANTITY
MPQHS6 (Merchant Pack - Individually barcoded product)	G300 Z275 Galvanised Steel	1	588	80
QHS6U (Unpunched - For machine nailing)			588	80
QHS9			880	25
QHS9U (Unpunched - For machine nailing)			880	25
QHS9/2		1.2	880	25

PRYDA TIMBER CONNECTOR NAILS

PRODUCT CODE	MATERIAL	TYPE	SIZE	PACK CONFIGURATION	QUANTITY
OSNGB	Galvanised Steel	Flat Head	35 x 3.15mm	500g cardboard packs x 10	5kg
OSNG				1kg cardboard packs x 10	10kg
TPOSNG				5kg Trade pack x 1	5kg

DESIGN CAPACITIES

NAILS PER LEG	DESIGN CAPACITY (ΦNJ) (KN) FOR TIMBER JOINT GROUP USING ANY CYCLONE STRAP					
	J3	J2	JD5	JD4	JD3	JD2
2	3.8	5.3	3.2	3.8	5.3	6.8
3	5	6.9	4.4	5.3	7.4	9.4
4	6.3	8.9	5.8	6.9	9.7	12.3
6[4]	8.9	12.4[2]	8.4	10.1	12.4[2]	12.4[2]
INCREASED CAPACITIES FOR STRAPS THAT ARE WRAPPED AROUND; MINIMUM 4 NAILS PER LEG (SEE NOTE 4)						
MPQHS6 QHS9	12.4	12.4	12.4	12.4	12.4	12.4
QHS9/2	15	15	15	15	15	15

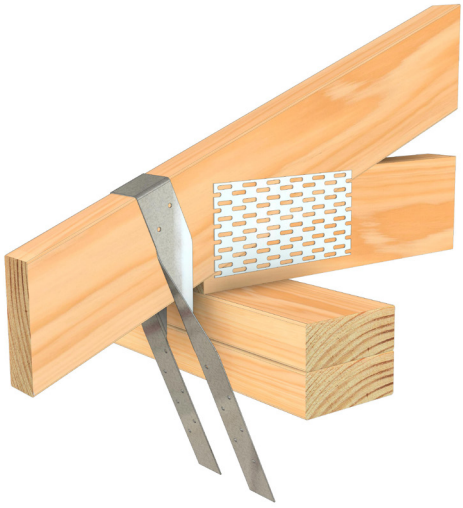
Notes:

1. These design capacities apply to Pryda Cyclone Straps fixed at both ends with 35x3.15 mm galvanised Pryda Timber Connector Nails or equivalent. For machine driven nails, refer to section “Fastening Cyclone Straps”
2. The 12.4kN value may be increased to 15.0kN for QHS9/2 cyclone strap.
3. When the strap is wrapped around the wall plate or other timber member and fixed with 4 nails per leg driven into the underside of the top plate, the capacity is limited by the steel. Tests have proven that bending the legs of Cyclone Straps around the timber increases the ultimate load the strap can carry.
4. Joint groups for timbers are specified in AS1720, and explained in our Connectors and Tie Downs Design Guide.

INSTALLATION

CYCLONE STRAPS FOR TRUSS TIE DOWN TO TOP PLATE

STEP 1

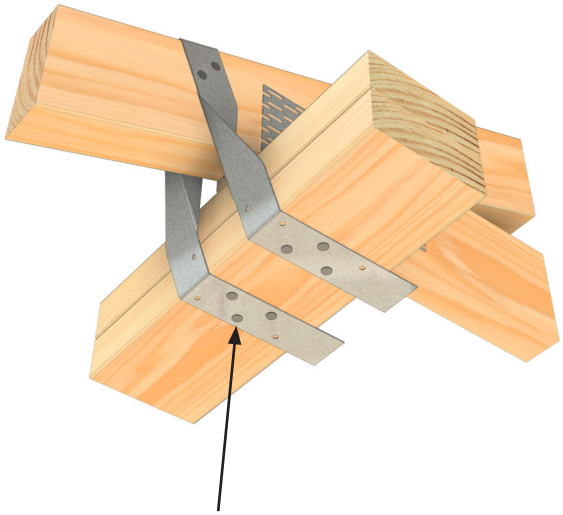


- Position the centre of the Cyclone Strap over the Truss and bend each side down at the same time, ensuring each leg is equal length.

STEP 2

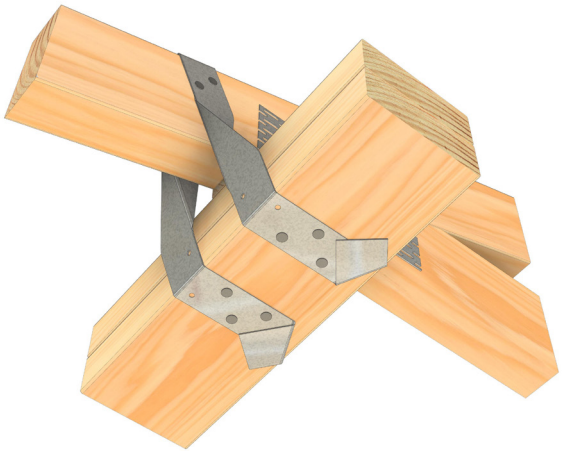
- Put 2 Pryda Timber Connector nails into each leg on both sides of the Truss

STEP 3



- Wrap the two legs under the top plate and fix off with Pryda Timber connector nails per leg to suit QHS selection length and tie down requirement. MPQHS6 shown above using three Pryda Connector nails to each leg. Higher capacities can be achieved if four nails are used (MPQHS6,QHS9,QHS9/2).

STEP 4



- Fold overhanging legs over itself and flatten. Do not leave overhanging legs pass frame.

IMPORTANT:

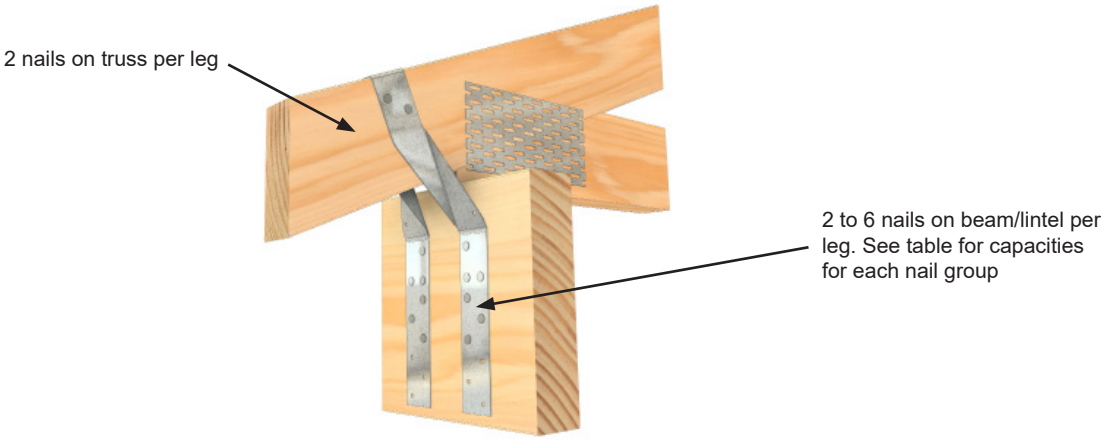
READ THIS DATASHEET IN CONJUNCTION WITH PRYDA CONNECTORS & TIE-DOWN CONNECTORS DESIGN GUIDE AND REFER TO ESSENTIAL NOTES AND GENERAL NOTES.

INSTALLATION

CYCLONE STRAPS FOR TRUSS TIE DOWN TO BEAM/LINTEL

Fixing to a beam or lintel is the same as above however instead of wrapping under the top plate, the cyclone strap legs are fastened to the face of the beam as shown below.

Note this is not as strong a connection as wrapping under the top plate and the number of nails into the face of the beam will dictate the capacity as shown in the design capacity table.



FASTENING CYCLONE STRAPS

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 to shallow or too deep)

USING PASLODE MACHINE DRIVEN NAILS WITH UN-PUNCHED QHS6U AND QHS9U

32x2.3 mm Duo-Fast C SHEG (ie: screw hardened electro galvanized) machine driven nails (code D40810) or equivalent may be used instead of the specified 35x3.15 mm Pryda Timber Connector Nails to fix selected Pryda connectors provided that the following requirements are strictly adhered to:

- Design capacities shall be reduced by 20% using the same number of nails as specified for the connectors and
- Nails shall be driven at nail spacings and edge distances closely following the dimple pattern on un-punched QHS6U and QHS9U.

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

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

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

Note: MPQHS6 shown. Typical hole spacing and edge distance.