

# PRYDA SHEAR CONNECTORS (PSC)

## FEATURES AND BENEFITS

**SMART:** Allows vertical movement of trusses while still transferring racking loads

**FAST:** Can be machine nailed

**VERSATILE:** Suitable for walls both perpendicular and parallel to the truss

## SPECIFICATIONS

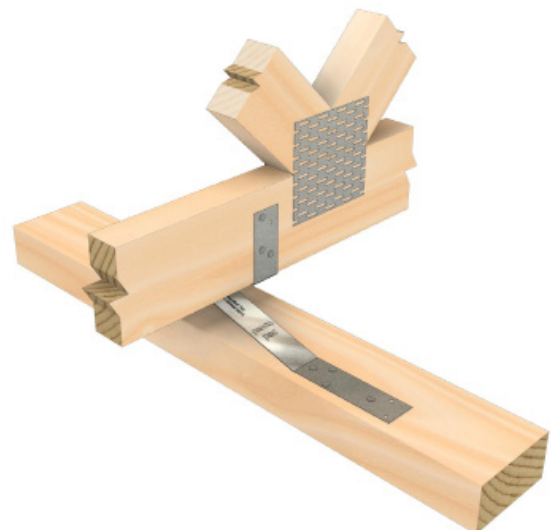
PRODUCT CODE	PSC
STEEL	G300
THICKNESS	1.0mm
CORROSION RESISTANCE	Z275
FASTENERS	Pryda Timber Connector Nails 35 x 3.15mm OR Paslode machine driven nails (Refer to using Paslode Machine Driven Nails)
SIZE	30mm wide X 300mm (flat length)
QUANTITY	200 per carton

Smart method of transferring racking loads into non-load bearing walls.



### AS1684 COMPLIANT

- Transfer of racking loads as per Clause 8.3.6.9, part 2
- Designed and tested in accordance with Australian standards
- Minimum G300 Z275 Galvanised Steel



## APPLICATION & FEATURES

Pryda Shear Connectors (PSC) are used to transfer racking loads from the ceiling diaphragm to non-load bearing bracing walls. These connectors allow vertical movement of trusses (to release creep deflection) and ensures that truss camber dissipation is uninhibited by over-driven nails.

PSC are fixed to top of bracing walls and can be used as a direct substitute for a pair of nail fixed timber blocks as specified in Table 8.22 AS 1684.2:2010 and AS1684.3:2010.

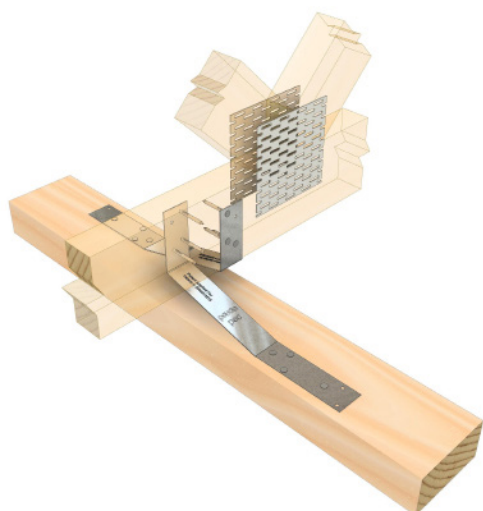
Table A provide design information on how PSC may be specified.

PSC should always be used in pairs as illustrated.

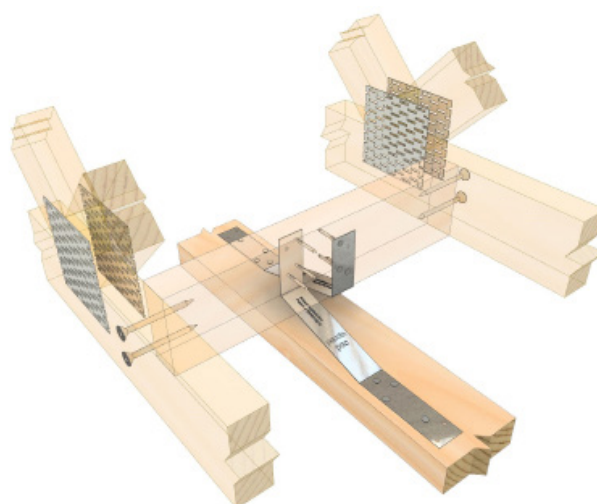
## INSTALLATION

1. All trusses are to be installed in accordance with the requirements of AS4440.
2. Discard any damaged product.
3. It is preferable (but not essential) to fix the Pryda Shear Connectors (PSC) after the roof cladding has been fixed and prior to the application of the ceiling material.
4. The PSC are to be installed in opposing pairs on the same bottom chord of a truss.
5. Ensure the connectors are located adjacent to each other and directly over the internal, non-load bearing bracing wall to which they are to be fixed.
6. Fix each connector to the truss bottom chord with the specified number of nails below so that the connector is flush up against the vertical face and under side of the truss bottom chord.
7. Ensure the long leg of each connector passes under the bottom chord and is located directly over the underlying top plate.
8. Press vertically downwards on the free end of the long leg of the connector until it contacts the top face of the underlying top plate.
9. Fix the long leg down to the underlying top plate with the specified number of nails.
10. Repeat where marked on truss & wall frame layout.

**(A) TRUSSES PERPENDICULAR TO WALL**



**(B) TRUSSES PARALLEL TO WALL**



**IMPORTANT:**

READ THIS DATASHEET IN CONJUNCTION WITH PRYDA BRACKETS & FIXES GUIDE AND REFER TO ESSENTIAL NOTES AND GENERAL NOTES.

## INSTALLATION

BRACING TYPE	WALL LENGTHS (MM)	NO. OF PAIRS OF PRYDA SHEAR CONNECTORS	NO. OF NAIL FIXING ONTO TOP PLATE PER CONNECTOR*	FIXING TO TRUSS PER CONNECTOR
TYPE A 1.5kN/m	1800	1	4	3
	2400	1	4	3
	2700	1	5	3
TYPE B 3.0kN/m	1800	2	4	3
	2400	2	4	3
	2700	2	5	3
NARROW WALL BRACING 6.0kN/m	600	1	4	3
	900	2	4	3
	1200	2	4	3
	1500	2	5	3

\*If nails are machine driven using 32 x 2.3 Duo-Fast SHEG or equivalent, provide one additional nail to the table values and ensure nails are driven away from holes.

Note: When specifying requirement for non-standard braced wall lengths, assume a pair of PSC (with 5 nails) is capable of resisting a maximum 2700 mm (for 1.5 kN/m capacity) and 1500 mm (for 3.0 kN/m capacity) wall lengths.

## FASTENING PRYDA SHEAR CONNECTORS

### 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)
- The corrosion resistance and material specification of Pryda Nails is known and can be certified

## 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 (eg. 2 instead of 1, 3 instead of 2, 5 instead 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 2.3 ( 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)