PRODUCT DATA SHEET

SPEEDBRACE

FEATURES AND BENEFITS

FAST: Doesn't require tensioning or notching.

EASY: Comes in a variety of lengths suited to common applications just position and fix.

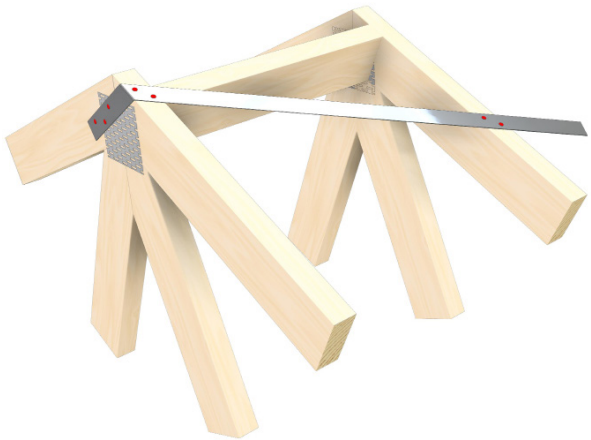
STRONG: 1.0mm G300 steel for consistent strength.

AS1684 & AS4440 COMPLIANT

- Type A & B Wall Bracing units as per AS1684
- Roof bracing as per AS4440

SPECIFICATIONS

STEEL	G300
THICKNESS	1.0mm
CORROSION RESISTANCE	Z275
FASTENERS	Pryda Timber Connector Nails 3.5 x 3.15mm
LENGTHS	4.0m and 6.0m



The quickest bracing option for roof trusses and walls.

SPEEDBRACE

PRODUCTCODE	MATERIAL	SIZE	LENGTH	QUANTITY	SUITABLE FOR WALLS	SUITABLE FOR ROOFS	DESIGN TENSION CAPACITY (ΦNJ) KN
SDB36*	G300 Z275 Galvanised Steel	37x1.0mm	3.6m	100	✓	✓	8.7
SDB40			4.0m				
SDB50*			5.0m				
SDB60			6.0m	200			
SDB60/10			6.0m	100			

Tied in bundles of 10 lengths.

Note: The product marked with * is no longer available.

PRYDA TIMBER CONNECTOR NAILS

PRODUCT CODE	MATERIAL	SIZE	LENGTH	QUANTITY
OSNGB	Galvanised Steel	35 x 3.15mm Flat Head	500g cardboard packs x 10	5kg
OSNG			1kg cardboard packs x 10	10kg
TPOSNG			5kg Trade pack x 1	5kg
OSNBCI/SS	S316 Stainless Steel		500g clamshell pack x 1	500g

ADVANTAGES

Pryda Speedbrace is applied on top of the top chord, eliminating the difficulty of applying a brace to the underside of the chord as is necessary with conventional timber braces. The profile of Speedbrace allows it to be applied without the need for tensioners as the rib merely needs to be hammered flat where it crosses the timber members.

In addition, Speedbrace can be spliced easily and can be wrapped around members to provide sound and secure anchorage.

ROOF BRACING

Pryda Speedbrace can be installed as for Strap Brace, where Speedbrace crosses each truss it is hammered flat and nailed with two galvanised Pryda Timber Connector Nails at each truss crossed.

Pryda Speedbrace is spliced by overlapping lengths of brace hammering flat and nailing with the same number of galvanised Pryda Timber Connector Nails as is required at the top plate (see diagram below).

WALL BRACING

Pryda Speedbrace may also be used to brace wall frames.

IMPORTANT:

READ THIS DATASHEET IN CONJUNCTION WITH BRACING DESIGN GUIDE AND REFER TO ESSENTIAL NOTES AND GENERAL NOTES.

INSTALLATION

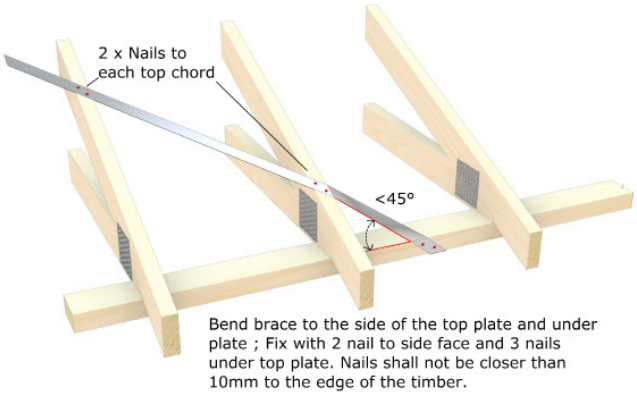
ROOF BRACING INSTALLATION

See your building plan for bracing layout, if you need assistance in the design of the roof bracing layout see AS4440:2004 Installation of Nailplated Timber Trusses as well as the Pryda Installation Guidelines for Timber Roof Trusses.

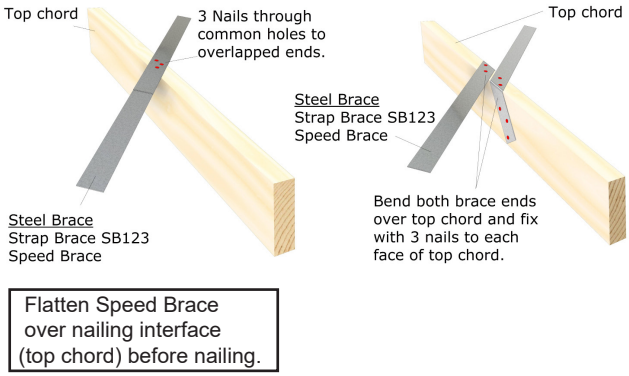
All trussed roofs require diagonal bracing to the top chords, which is typically at an angle of 30-45 degrees to the top plate, measured on plan.

Braces should be installed such that each main truss has a brace crossing it. Bracing is best located near the ends of buildings and will be installed on both sides of the ridge line. Some typical details are shown here:

END FIXING DETAIL

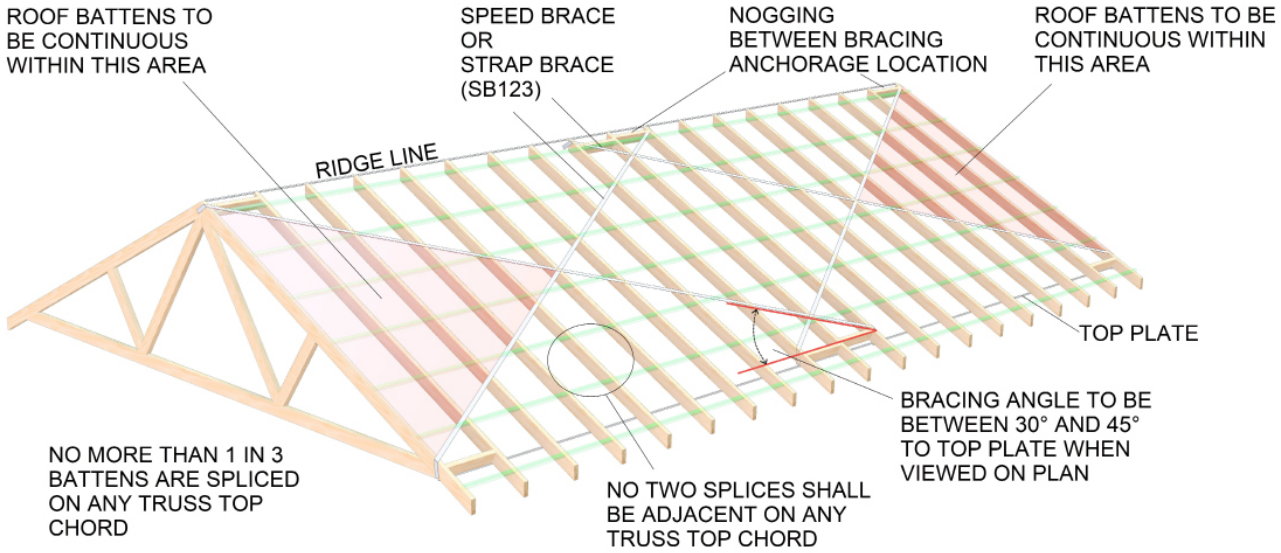


SPLICE DETAILS



(a) Lap Splice **(b) Wrap Around Splice**

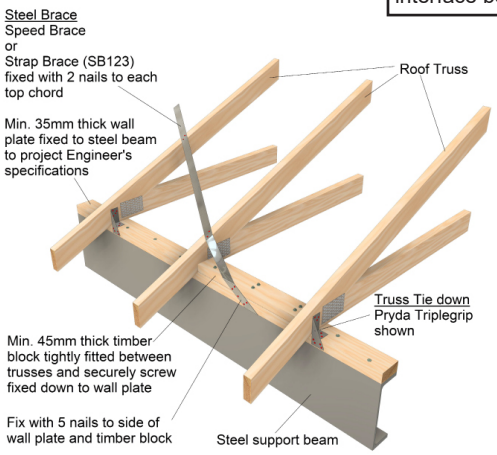
TYPICAL BRACING LAYOUT



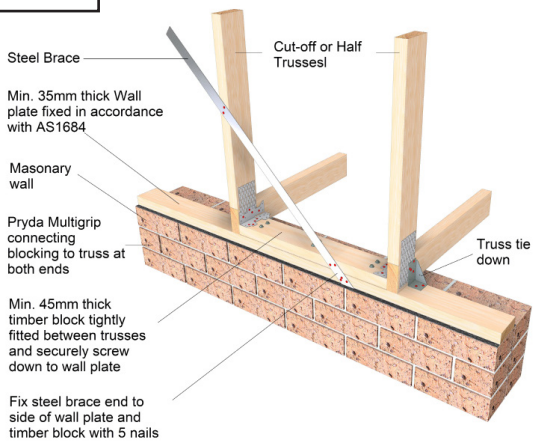
INSTALLATION

COMMON END FIXING DETAILS

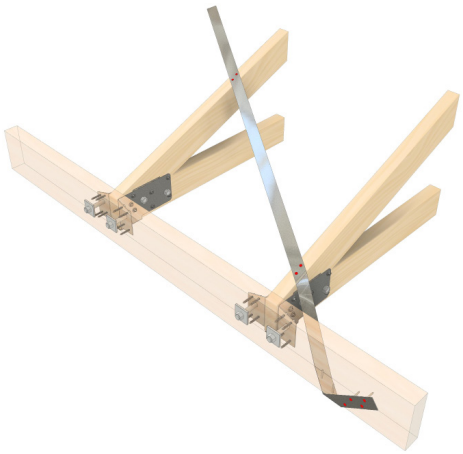
Flatten Speed Brace over nailing interface before nailing.



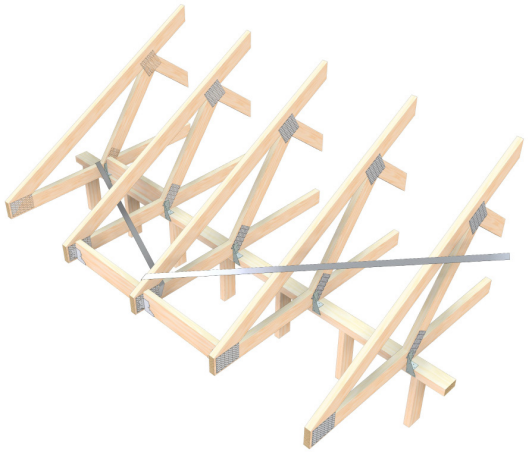
END FIXING DETAILS FOR STEEL BEAM



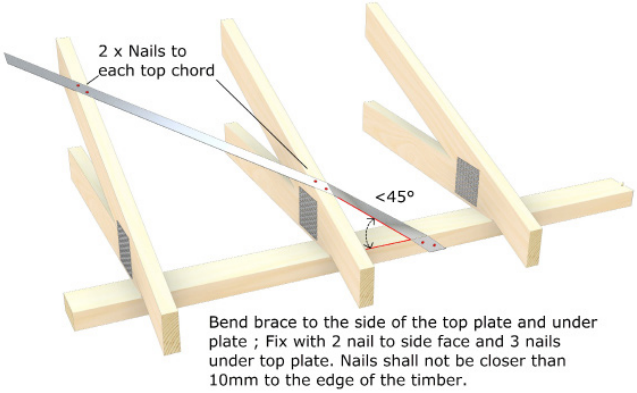
FIXING DETAILS FOR BRICKWALL PLATE



END FIXING DETAILS AT HEEL - TO GIRDER TRUSS



FIXING DETAILS FOR CANTILEVERS



END FIXING DETAILS AT HEEL - TO TOP PLATE

SPEEDBRACE TIPS

1. Make sure the rib is hammered flat where it crosses the timber members
2. SpeedBrace self tensions as it is fixed, so when bracing walls ensure everything is plumb and square prior to installing. The SpeedBrace should still be taut when installed prior to nailing.
3. Ensure nails are at least 10mm away from timber end or edges to prevent splitting.
4. Keep wall bracing angles within 30° to 60° and roof angles between 30° to 45° (to top plate) or the Brace will not be compliant.
5. When lap splicing SpeedBrace, three product nails should be fixed through adjacent holes near the end of each brace and into the underlying timber. The end of each brace only needs to extend past the underlying timber by enough to fix the nails. As shown in AS4440 Figure 4.20.

FASTENING SPEEDBRACE

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

WALL BRACING UNIT CONSTRUCTION GUIDE

Section 8 of AS1684:2010 – Residential Timber-Framed Construction specifies methods of determining the required minimum amount of permanent wall bracing, ie:

- Simplified method (Part 4 of AS 1684): The number of Type A bracing units included in each plan direction must comply with Table 8.2 – which depends on the overall size of the walls. Details of Type A bracing units are specified in Table 8.3 – and in this document.
- Other constructions (Part 2 or 3): The designer must either:
  - Calculate the design horizontal wind force (“total racking force” -kN) and the total capacity of the bracing included in each plan direction to resist this force, or
  - Look up the wind force in Appendix G of the code and ensure by calculation that the total capacity of the bracing exceeds this force.
  - Details of wall bracing units and their capacities (in kN/m) are specified in Table 8.18 – and in this document.

The “Simplified method” applies only to non-cyclonic wind zone N1 or N2 and to buildings of limited size – see Clause 1.6 of Part 4 of the code.

This guide provides full details of how bracing units (or “panels”) can be constructed in accordance with AS 1684 using Pryda Bracings, Stud Ties, Strap Nails and Pryda Timber Connector Nails. The details specified in AS1684 are based on the results of test on such units. Bracing capacities are for units with a lining such as plasterboard installed. During construction, additional temporary bracing may be required until the lining is fully installed. For information on the derivation of unit capacities, contact Standards Australia.

LOOKING FOR MORE DETAILED DESIGN VALUES?

SEE OUR BRACING DESIGN GUIDE AVAILABLE AT PRYDA.COM.AU