

INSTALLATION

This section is for the builder to use on-site. It may be photocopied and supplied with the Posi-STRUT™ trusses.

Do's and Don'ts

- Posi-STRUT™ trusses are not to be modified in any way on site without the approval of the fabricator and MiTek® New Zealand Limited.
- Posi-STRUT™ trusses are not to be subject to excessive construction loads e.g. no stacks of concrete tiles or particle board.
- Remember to install the strongbacks before closing in the ends.

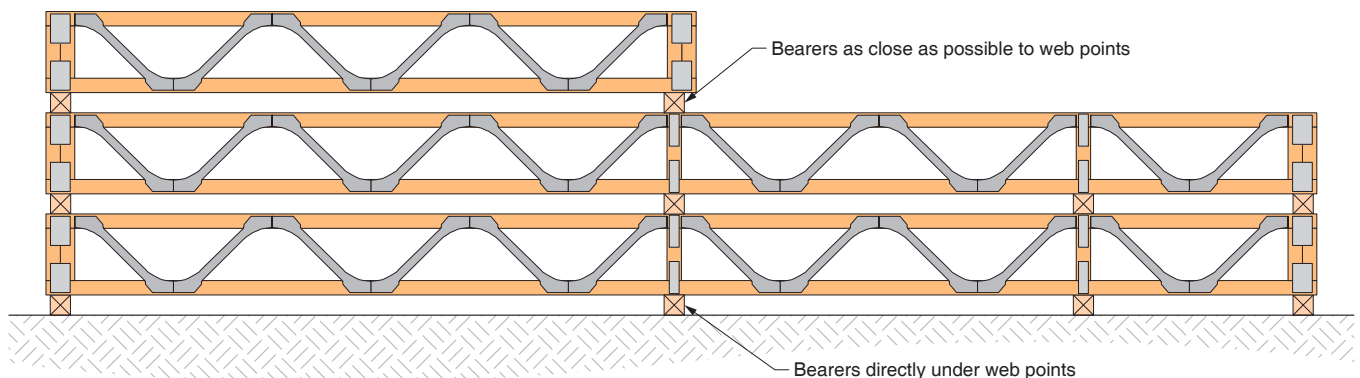
Stacking and Storage

Posi-STRUT™ trusses should be strapped and stacked upright with the bottom chord clear off the ground and on level fillets or dunnage directly underneath web points. Posi-STRUT™ trusses may be stacked on top of each other with fillets aligned as closely as possible to web panel points.

Posi-STRUT™ trusses should not be left exposed to weather for extended periods of time without adequate protection. If covered, adequate air circulation should be ensured around the Posi-STRUT™ trusses.

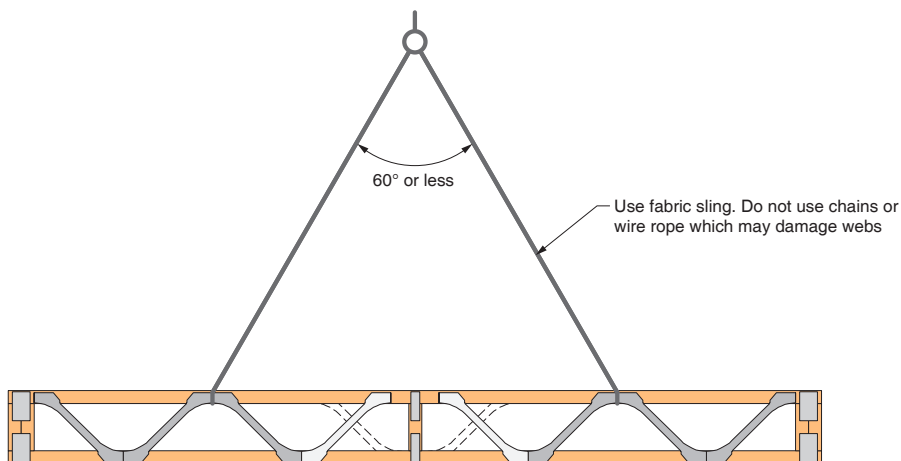
Care should be taken when handling the Posi-STRUT™ not to bend, collide, twist or drop. Handling should be confined to the timber chords, and no weight should be applied to the metal webs which could cause buckling.

Any Posi-STRUT™ trusses damaged in transport or handling cannot be repaired on site without the advice or approval of the fabricator and MiTek New Zealand Limited.



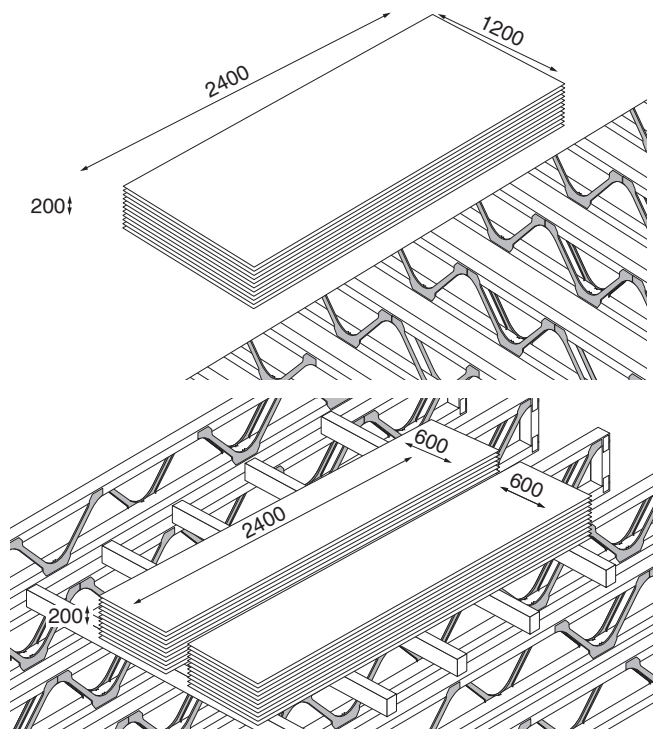
Typical Handling of Posi-STRUT™ Trusses

Care should be taken when handling the Posi-STRUT™ to avoid bending, twisting or dropping. Slings should always be attached to the timber chords, and not to the metal webs to avoid buckling. When lifting Posi-STRUT™ trusses with a crane, slings should be attached at panel points closest to the truss quarter points.



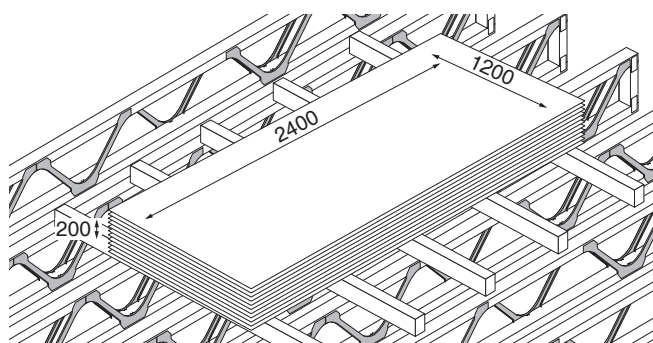
The maximum allowable load of sheet materials temporarily stored on the Posi-STRUT™ purlins and rafter trusses is 70kg/m² and should not be greater than 150mm deep. For typical plywood sheets that are sized at 2.4m x 1.2m, this equates to:

Number of Plywood Sheets	Sheet Thickness
11	12mm
9	15mm
8	17mm
7	19mm
6	21mm
5	25mm



The maximum allowable load of sheet materials temporarily stored on the Posi-STRUT™ floor trusses is 175kg/m² and should not be greater than 200mm deep. For particle board sheets this equates to:

Number of Particle Board Sheets	Sheet Thickness
15	13mm
10	19mm
9	22mm



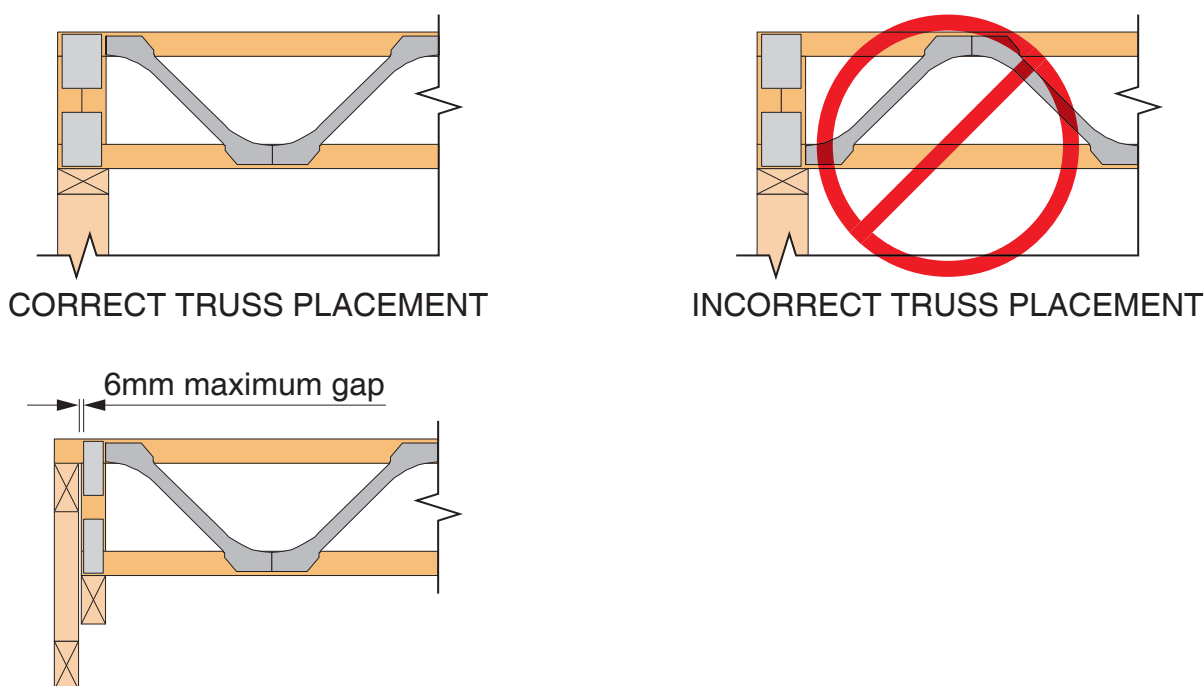
Where the sheets are stacked by hand they should span lengthways across the joists. When lifted mechanically they should be seated on 5 bearers the width of which are 600mm longer than the width of the board.

Installation Instructions

Posi-STRUT™ trusses are generally placed perpendicular to load bearing supporting walls and should be located so that distance between them does not exceed the designed spacing.

Care should be taken to place the Posi-STRUT™ trusses the right way up. Unless marked otherwise Posi-STRUT™ trusses are always manufactured so that Posi-STRUT™ webs starts at the top chord at each support point. There are occasions where it is necessary to design and manufacture Posi-STRUT™ trusses with the first web starting at bottom chord level. In this case trusses will be marked “THIS WAY UP”.

Posi-STRUT™ trusses must be installed plumb and straight. Support location tolerance is 50mm with no reduced bearing. Check bearing strength where bearing area is reduced. For top chord support, the gap between bearing and timber web must not exceed 6mm.

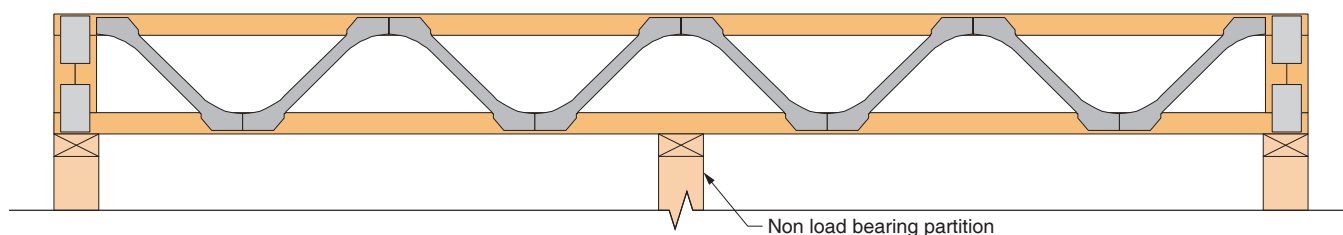


Clearance over Non-Load Bearing Internal Walls

Posi-STRUT™ floor trusses on the upper storey of multi-storey dwellings should be kept clear of internal non-load bearing walls of the lower storey.

It is recommended that the Posi-STRUT™ floor be connected to these internal partition walls in order to provide lateral stability to the wall below with fixings that will also allow the Posi-STRUT™ trusses to deflect under load.

Internal walls should be level to enable truss camber to provide clearance between the wall and truss.



Rafter and Purlin Stability Bracing

The following details cover ancillary bracing for Posi-STRUT™ stability only, and not roof bracing for the total roof or building structure which will have to be separately detailed.

The top chord stability is provided by purlins. The bottom chord needs to be restrained during wind uplift. Ceiling battens fixed to bottom chord will provide this restraint. Otherwise specific design will be required. Generally 90x45mm runners at 2.4m spacing may be sufficient.

