

GANG-NAIL XPO Truss – for the Exposed Architectural Look

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Introduction

GANG-NAIL XPO Truss, a recent development from MiTek New Zealand Ltd, has been generating a lot of interest with designers of timber buildings lately.

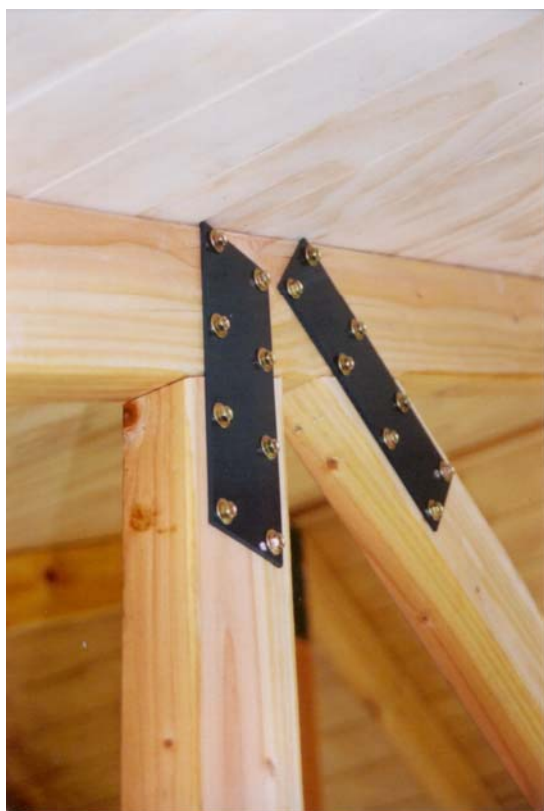
The system features a jointing system of 3mm thick steel plate, screwed onto the face of timber members, to form an attractive and structurally sound truss.

XPO Plate

Two sizes of plates are available, 65x200x3 and 130x150x3. Each plate has 8 holes for screws and is available in the finishes listed below.

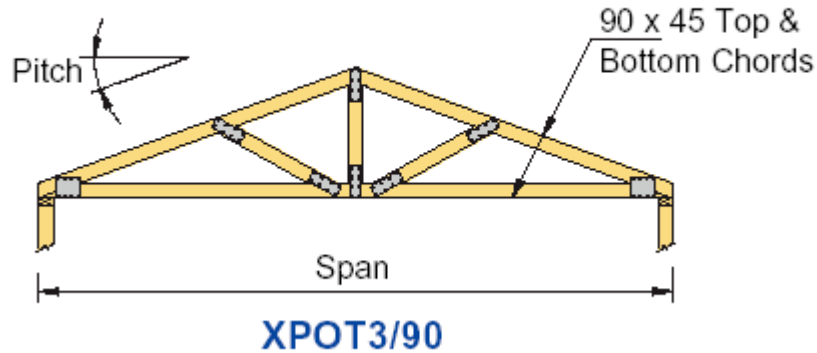
| XPO Plate Finish | | | |
|-------------------------------------|-----------------|-----------------------------|-----------------------------------|
| Plate | Screws | Use | Comment |
| Gold passivate (electro galvanised) | Gold passivate | Internal | Can be power-coated to any colour |
| Hot Dip galvanised | Galvanised | Sheltered | |
| Stainless steel | Stainless steel | Sheltered in sea spray zone | |

The standard finish, gold passivate, is attractive within itself and is durable enough for standard internal conditions. Many people specify stainless steel to achieve a long lasting stainless look.



Timber

Radiata pine, minimum No.1 framing grade is used. Other timber may be used, subject to specific design. The minimum web and chord size is 90x45. The timber should be selected for its clear, minimal knot size appearance. Selection



MiTek provide selection charts for the product, with a specific design service available for applications outside the selection chart.

| <i>Truss Type</i> | <i>Max span (mm)</i> | <i>Max Truss Centres</i> | |
|-----------------------------|----------------------|---------------------------|----------------------------|
| | | <i>Light roof</i> | <i>Heavy roof</i> |
| XPOT3/90 | 4000 | 1200 (15 to 30° pitch) | 900 (22.5 to 30° pitch) |
| XPOT4/140 & XPOT5/140 | 8000 | 1200 (15 to 30° pitch) | 900 (22.5 to 30° pitch) |
| | 9600 | 900 (15 to 30° pitch) | - |

| Load Criteria | |
|----------------------|--------------------------------|
| Roof weight | Light 0.25kPa Heavy 0.65kPa |
| Ceiling weight | Light 0.25kPa |
| Wind load | High (44m/s) |
| Snow load | 0.50 kPa |
| Earthquake | A, B or C |

Supply

XPO trusses are manufactured by accredited GANG-NAIL Fabricators under factory conditions.