

Prefabricated trusses provide support to the roof cladding and ceiling material and generally span from external walls.

The truss can be manufactured to match almost any profile and designed to withstand a range of loadings; from snow loads to cyclonic winds.

Typically a truss is formed from a frame made up from triangles. The key to the strength of a truss is due to the triangles. A triangle is the strongest geometric shape and connected together, form a frame which is both strong and lightweight.



The truss chords provide the stiffness similar to a deep beam and the webs act in compression and tension together providing a strong, stable, structural frame.



A timber truss spanning 10 metres manufactured from 90 x 35 pine has the same stiffness as a 410 UB 54 steel beam. The steel beam is 10 times the weight and considerably more expensive.

Multinail trusses are connected together using Quality Assured nailplates manufactured from G300 Z275 steel.



Multinail is a wholly owned Australian Company that specialises in the manufacture and supply of quality metal connectors, machinery, software and engineering services to the prefabricated residential and commercial timber truss industry in Australia, Malaysia, Asia, United Kingdom, USA, New Zealand and Europe.

Multinail's fabricators are manufacturers of pre-fabricated structural timber components. Fabricators rely closely on Multinail's metal connectors, machinery, software and engineering support to accurately and efficiently manufacture timber roof trusses, wall frames and floor trusses for building contractors.

Multinail holds proprietary rights for its entire range of nailplate, ancillary components and designs. All metal stamped products are manufactured in-house, in an ISO9001:2000 accredited environment, to ensure consistent product guality.

Multinail nailplates are used to join the timber in trusses, ensuring structural adequacy of each truss joint and the total truss.

Multinail's Head Office and Manufacturing Facility at Wauchope is certified as complying with Australian Standard ISO9001 for the production of Nailplate, Bracing and Ancillary Components.



Your Multinail Truss Fabricator:

Multinail Australia Pty Ltd is proudly 100% Australian owned and operated www.multinail.com

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Due to continual product improvement Multinail Australia Pty Ltd. reserves the right to change the product's depicted - both in description and specification. Multinail's Head Office and Manufacturing Facility at Wauchope are certified as complying with Australian Standard ISO9001 for the production of Nailplate, Bracing and Ancillary components. MNAP039



Understanding the benefits of using **timber roof trusses** when building your home

COST

Timber trusses are cheaper than conventionally pitched or steel roofs! The proof can be found in areas where roof trusses are established in the market - other types of roof construction are virtually non-existent.

SPEED OF CONSTRUCTION



Closely related to cost - a trussed roof for a house can be erected in the space of one or two days whilst a roof pitched/built on site may take a week or more. This means a reduced construction time and earlier weather protection for the walling and flooring.

LONGER SPANS

Trusses rarely need internal support as they generally span from outside wall to outside wall. This allows for larger open areas in a building and makes a trussed roof particularly suitable for medium scale commercial work. The omission of internal supports saves cost of load-bearing walls and footings.



LIGHT WEIGHT

Timber trusses are light weight, helping to speed up their construction. Most typical roof trusses can be lifted by two people, making them ideal for owner builders.

RELIABILITY OF DESIGN

Multinail roof trusses are fully engineered to all relevant Australian Standards using sophisticated computer software. Timber roof trusses meet or exceed the strength of any competing structural systems or materials, with all relevant dead, live and wind loads being accounted for.

RELIABILITY OF MANUFACTURE & SUPPLY



Trussed roofs are rapidly computer quoted using virtually the final design, thereby providing the right price with no variations. Fabrication takes place under factory controlled conditions, ensuring consistent fabrication of trusses to exact tolerances. The roof is then supplied to site in its prefabricated form so there are no storage or pilfering problems.

CONSERVATION VALUE

Roof trusses are ecologically sound! They use smaller length and cross section timbers than conventionally pitched roofs - indeed this is one of the reasons they are cheap. Not only is the total timber volume in a roof reduced, but trussed roofs can make better use of the smaller timbers that are available from timber plantations - a renewable resource. When compared to steel trussed roofs, timber trusses have a lower environmental impact because of the enormous quantities of energy required to produce the steel for steel roof trusses.

COMPATIBILITY

Timber roof trusses can be erected using existing labour forces and techniques. They can also be designed to accommodate all standard roofing and ceiling materials.



Whether the supporting structure is brick, block, timber or steel, fixing to the supporting structure is consistent with conventional practice.

FLEXIBILITY OF DESIGN

Roof trusses can easily be designed and fabricated to make more complex roof and ceiling shapes. These include belled roofs, fan hip ends, cathedral and scissored ceilings. If it can be done as a conventional roof - it can be done more easily as a trussed roof.

Various truss shapes are pictured below;





