

ROOF TRUSS FAQ

Engineered timber roof trusses are now used in over 95% of all new housing projects in the UK and are increasingly being used in commercial and industrial projects. Offering the most cost effective roofing option, timber roof trusses have many distinct advantages:

- Flexibility through design to cater for the wide range of services required in the modern building
- A practical and tailor-made solution to a diverse range of different roof structures
- Material savings of up to 40% less timber than a traditional cut-roof
- Due to trusses being pre-fabricated components, there are substantial on-site time and cost savings
- Reduced site waste, loss and pilferage of materials
- Space saving on site, truss deliveries can be specified to arrive only when required
- Suitable for a number of different roof and ceiling coverings
- Ability to design to cater for extra loadings i.e. Office and even industrial use

1. How are roof trusses designed?

Roof Trusses are designed by an experienced roof truss designer using Computer Aided Design (CAD) software. This software is programmed with a specialist engineering/design package. Quinn Building Supplies Limited is licensed to design and manufacture roof trusses using its industry specific software and connector plates in accordance with BS5268 and BS6299.

2. How are roof trusses made?

Pre-cut timber components are inserted into a set-up (type of jig/clamp system). Galvanised metal connector plates are positioned at each joint intersection. They are then clamped at each joint, where a hydraulic head 'presses' each joint, fixing plates in place and connecting the timber members to form a truss.

3. What key factors determine the quality of a roof truss?

- All timber used in the manufacture of roof trusses should be Kiln Dried (to ensure minimal shrinkage when in position in the roof)
- All timber used should be stress graded to C24 or TR26 (C24 and TR26 are high strength timber grades) Using these grades guarantees the strength of the roof truss
- Rafter size. On standard Fink Trusses the smallest rafter dimension of timber that we use is 4ins×1.5ins (100mm x 38mm)Some manufacturers will use lighter timber e.g. 3.5ins x 1.5ins (87mm x 38mm) in order to appear cheaper WE DO NOT DO THIS and we will not compromise on quality.

4. What is the manufacturing lead time?

Quinn Building Supplies Ltd operates a 2 to 3 week lead time from confirmation of order and measurements until the roof trusses arrive on your site.

5. Is it important that my measurements are accurate?

This is very important as every set of roof trusses is designed and custom made specifically for one particular building. A final check of the block-work is essential as very often the block-work dimensions differ from the drawings/plans.

Measurements should be taken from the outside of the wall-plate to the outside of the wall-plate to get the actual span measurement.

****If the Measurements are wrong the Roof Trusses will be wrong, if in doubt contact one of our designers****

6. How far should roof trusses spaced apart?

Most roof trusses in N. Ireland are designed to be spaced at 16 inch (400mm) centres. At QBS Ltd, we design both attic and standard trusses to be spaced at 16 inch (400mm) centres.

In the South of Ireland the common practice is to space Roof Trusses at 2ft (600mm) centres. 400mm centres are our preferred option and we believe it makes a stronger/better roof.

7. When do you need extra trusses?

Generally it is necessary to double up (nailing two roof trusses tight together) on either side of an opening. For example: when inserting roof lights, dormer windows, stairwells, chimneys etc.

ATTIC TRUSS FAQs

Q1 How much extra floor space can be gained in the roof space using attic trusses?

Ans. Normally about 50 – 58% of the ground floor area

For Example:

A bungalow with 1280sq ft ground floor area (simple rectangular shape/plan)
Span (Width of the house) outside Wallplate to outside Wallplate 8.50m
Pitch (The steepness of the roof) 37.5 Degrees
Length of the House 14.00m

Room Width created (inside the attic truss) is 5.00m (16ft 4")

Extra room created using attic trusses is 70m² (750sq ft) = an additional 58% of the ground floor area.

Q2 How do you maximise the amount of living area in the attic space?

- This should ideally, be decided at the design stage with your architect. The wider the house, the more room can be achieved in the attic space
- The greater the roofs pitch, the more room can be created. A roof pitch of 40 degrees will ensure a wider attic room size than a roof pitch of 35 degrees
- Give careful consideration to the positioning of chimney/s, water tanks & stairwells. – This will have implications for your attic rooms

Q3 My plans are approved for a “traditional cut roof”, can we use attic trusses instead?

Ans. Yes. Virtually all roofs can be trussed and in most cases there are substantial cost savings to be made using attic trusses.

We work closely with architects, surveyors and building control to provide the most cost effective way to roof your new-build project.

Q4 We don't need the extra room now, why should we use attic trusses?

Ans.

3. It could cost you up to £25,000 to do a substantial roof conversion in the future when you do need the extra space.
4. Using attic trusses will add a substantial amount to the value of your new home, whether you intend to sell it in the future, borrow money against it or use the space for extra bedrooms, a home office, a games room, a leisure suite or a self-contained apartment.