

Timber

The timber used in the manufacture of trussed rafters in the UK and Eire is strength graded softwood.

The common sources of supply for the timber are Scandinavia, Baltic States, Canada and the USA. The last two countries provide only a minor proportion of the timber used in trussed rafters.

Timber is classified by either strength grade or strength class and this classification defines the working stresses which may be used to design with the particular timber involved.

Grading may be either manual, by trained graders, or mechanical, by use of a strength grading machine.

Machine strength graded timbers form the majority of timbers used in trussed rafters.

As each particular length of timber is classified, a grading mark or stamp is applied to show its classification.

When the timber is re-cut for use in trusses, the

Trussed Rafter Fabricator will mark the finished truss with the grades or strength classes of timber used, often by means of a label attached near the apex of the truss or by means of a stamp on the timber near the apex.

Maximum timber lengths of up to 6 metres are used, although lengths of 4.8 metres are commercially more common. This means that splice joints are frequently required in truss chord members, to achieve long spans. Please refer to section 2.4 concerning timber splicing.

The Designer will use the strength grade or strength class values when designing the members forming the truss. (See section 2.4, Design Method).

British Standard BS4978: - Specification for visual strength grading of softwood. BSEN 1313 - 1: Permitted deviations and preferred sizes of softwood sawn timber, together with BS 5268 - 3: Code of Practice for trussed Rafter Roofs govern the grading, sizing and use of the softwoods used in Trussed Rafter construction

