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NSAI Standards

Standard Recommendation
S.R. 70:2015

Timber in construction - Eurocode 5 - Trussed rafters

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Foreword

This Standard Recommendation was developed by NSAI Timber Standards Consultative Committee, Working Group 2, Task Group 2 "Trussed rafters and timber in buildings". The secretariat for the Task Group was held by NSAI.

This Standard Recommendation gives requirements in relation to design and site work relating to timber trussed rafters.

This Standard Recommendation, which replaces I.S. 193:2006 (withdrawn in 2010), is intended to provide non-conflicting complementary information (NCCI) for timber trussed rafters designed in accordance with I.S. EN 1995-1-1 and fabricated in accordance with I.S. EN 14250 "*Timber structures – Product requirements for prefabricated structural members assembled with punched metal plate fasteners*".

It is important for designers, specifiers and purchasers to understand the Construction Products Regulation (CPR), the meaning of the Declaration of Performance (DoP) and CE Marking of construction products. The appropriate specification and use of ‘proper’ construction products plays a fundamental role in ensuring compliance with the Building Regulations.

I.S. EN 14250:2010 is a harmonised standard under the Construction Products Regulation (EU) No. 305/2011 (CPR). In brief, it requires manufacturers, when placing construction products on the market which are covered by harmonised European product standards (hENs), to make a Declaration of Performance for the product and affix the CE Mark.

Within the terms of this Standard Recommendation general definitions are given for "building designer", "roof designer" and "truss designer", however, work contracts may define these differently. Other definitions and responsibilities may exist under Safety, Health and Welfare (Construction) Regulations and may take precedence.

During all construction related activities account should be taken of the Safety, Health and Welfare at Work (Construction) Regulations.

This Standard Recommendation does not purport to include all necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this Standard Recommendation does not of itself confer immunity from legal obligations.

In line with international standards the decimal point is shown as a comma (,) throughout this Standard Recommendation.

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TIMBER IN CONSTRUCTION - EUROCODE 5 - TRUSSED RAFTERS

1 Scope

This Standard Recommendation specifies requirements for materials, fabrication and the use of timber trussed rafters with punched metal plate fasteners for roofs in:

— service classes 1 and 2; and

— consequence class 1 and class 2a lower risk group buildings.

Additionally, this Standard Recommendation gives voluntary guidance on design, structural analysis, bracing and site work for both trusses and roofs. Limitations are also given for truss spans and bay lengths based on timber thickness and member sizes.

This Standard Recommendation contains non-contradictory complementary information (NCCI) as guidance material for use, in Ireland, of I.S. EN 1995-1-1.

2 References

The following referenced documents are indispensable for the application of this Standard Recommendation. For dated references, only the edition cited applies. For undated references, the latest edition of the publication referred to applies (including any amendments). For referenced Eurocodes, the requirements of the corresponding National Annexes apply.

I.C.P. 2, *Slating and tiling*

S.R. 325, *Recommendations for the design of masonry structures in Ireland to Eurocode 6*

I.S. 127, *Structural timber – Visual strength grading – Sawn softwoods with rectangular cross-section*

I.S. EN 301, *Adhesives, phenolic and aminoplastic, for load-bearing timber structures - Classification and performance requirements*

I.S. EN 336, *Structural timber – Sizes, permitted deviations*

I.S. EN 338, *Structural timber – Strength classes*

I.S. EN 595, *Timber structures - Test methods - Test of trusses for the determination of strength and deformation behaviour*

I.S. EN 845-1, *Specification for ancillary components for masonry - Part 1: Wall ties, tension straps, hangers and brackets*

I.S. EN 1912, *Structural timber – Strength classes – Assignment of visual grades and species*

I.S. EN 1990:2002, *Eurocode - Basis of structural design*

I.S. EN 1991, *Eurocode 1: Actions on structures (All parts)*

I.S. EN 1995-1-1:2004, *Eurocode 5: Design of timber structures*

I.S. EN 1999, *Eurocode 9: Design of aluminium structures (All parts)*

I.S. EN 14080, *Timber structures - Glued laminated timber and glued solid timber - Requirements*

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