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NEN-ISO 9709

(en)

Hout voor constructieve toepassingen - Visuele sterktesortering - Uitgangspunten (ISO 9709:2018,IDT)

Structural timber - Visual strength grading - Basic principles (ISO 9709:2018,IDT)

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Preview

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Preview

Structural timber — Visual strength grading — Basic principles

*Bois de structure — Classement visuelle selon la résistance —
Principes de base*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by ISO/TC 165, *Timber structures*.

This second edition cancels and replaces the first edition (ISO 9709:2005), which has been technically revised. The main changes compared to the previous edition are as follows:

- general grading provisions have been moved to the main body from the annexes;
- Clause 7 has been technically revised;
- Annexes C and E have been added to provide additional guidance on the grading framework;
- a new Annex D on grading tropical hardwood timber has been added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The general principle of this document is that any type of visual strength-grading procedure is acceptable, provided it is defined, controlled, and documented to the extent required to reflect the degree of certainty of structural properties intended for the structural application of the product. The body of this document specifies the essential features common to all visual strength-grading operations. The requirements are minimal so as to ensure maximum scope and flexibility in the application of a standard to the visual strength-grading process for timber. The annexes provide a detailed example of a conformance standard resulting in strength properties having a high degree of engineering reliability and a simple standard resulting in strength properties where a high degree of engineering reliability is not required, as well as a tropical timber example.

This document was based initially on the European Standard EN 518 and modified to bring it into conformance with ISO procedures and requirements.

The bibliography lists a number of additional standards referenced during the development of this document.

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Structural timber — Visual strength grading — Basic principles

1 Scope

This document establishes the basic principles for rules and procedures governing the visual sorting of timber for use in structural applications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12122-1, *Timber structures — Determination of characteristic values — Part 1: Basic requirements*

ISO 12122-2, *Timber structures — Determination of characteristic values — Part 2: Sawn timber*

ISO 13910, *Timber structures — Strength graded timber — Test methods for structural properties*

ISO 24294, *Timber — Round and sawn timber — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13910 and ISO 24294 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

air dried timber

timber that has been dried by exposure to air without any artificial heating above 50 °C and has a moisture content in approximate equilibrium with the surrounding natural atmospheric conditions

3.2

compression wood

abnormal wood that forms on the underside of leaning and crooked coniferous trees

3.3

density

mass per unit volume expressed as kg/m³ at a moisture content of 12 %

3.4

fissure

separation of the wood occurring at various locations in a piece of timber, classified in terms of its type, size and location

EXAMPLE Shake, check or split.

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