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Timber structures — Determination of characteristic values —

Part 3: Glued laminated timber

Structures en bois — Détermination des valeurs caractéristiques —

Partie 3: Exigences pour les bois lamellé-collé

Reference number
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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 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.

The committee responsible for this document is ISO/TC 165, *Timber structures*.

ISO 12122 consists of the following parts, under the general title *Timber structures — Determination of characteristic values*:

— *Part 1: Basic requirements*

— *Part 2: Sawn timber*

— *Part 3: Glued laminated timber*

— *Part 4: Engineered wood products*[1)]

— *Part 6: Large components and assemblies*[1)]

The following parts are under preparation:

— *Part 5: Mechanical connections*

1) To be published.

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Introduction

This part of ISO 12122 sets out a framework for establishing characteristic values from test results on a sample drawn from a clearly defined reference population of glued laminated timber. The characteristic value is an estimate of the property of the reference population with a consistent level of confidence prescribed in this part of ISO 12122.

This part of ISO 12122 is to be used in conjunction with ISO 12122-1.

This part of ISO 12122 permits the evaluation of characteristic values on testing on commercial sized specimens of glued laminated timber. Where the characteristic values are derived using calculations based on laminate structural properties, this part of ISO 12122 does not apply, but Annex B references other methods for estimating characteristic values.

In some cases, characteristic values determined in accordance with this part of ISO 12122 may be modified to become a design value.

This part of ISO 12122 has the following annexes:

— Annex A presents a commentary on this part of ISO 12122;

— Annex B presents information on analytical models for determining characteristic values of glued laminated timber.

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Timber structures — Determination of characteristic values —

Part 3: Glued laminated timber

1 Scope

This part of ISO 12122 gives methods for the determination of characteristic values for a defined population of glued laminated timber products, calculated from test values.

It presents methods for the determination of

a) characteristic value of mean-based properties, and

b) characteristic value of 5th percentile-based properties.

NOTE Annex B gives information on the methods that have been successfully used to estimate the characteristic values of glued laminated timber products from properties of the laminates.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8375, *Timber structures — Glued laminated timber — Test methods for determination of physical and mechanical properties*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12122-1 and ISO 12578 apply.

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

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

4 Symbols and abbreviated terms

Symbols defined in the relevant ISO product or test standard shall be used. Other symbols are defined in ISO 12122-1.

5 Reference population

In addition to the requirements for definition of the reference population in ISO 12122-1, the following attributes of glued laminated timber may be included:

a) sources of raw material;

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