INTERNATIONAL STANDARD

ISO 12122-6

First edition
2017-07

Timber structures — Determination of characteristic values —

Part 6: Large components and assemblies

Structures en bois — Détermination des valeurs caractéristiques —

Partie 6: Composants assemblés

Reference number
ISO 12122-6:2017(E)

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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).

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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 Technical Committee ISO/TC 165, *Timber structures*.

A list of all parts in the ISO 12122 series can be found on the ISO website.

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Introduction

This document sets out a framework for establishing characteristic values from test results on a sample drawn from a clearly defined reference population of large components and assemblies. The characteristic value is an estimate of the property of the reference population with a consistent level of confidence prescribed in the standard.

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

Since this document is dedicated to large components and assemblies, it has to deal with a specific statistical issue, namely that the characteristic values are to be derived from a very small number of test results.

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

Annex A presents a commentary on the provisions in this document.

Annex B presents examples of the use of the statistical methods.

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Timber structures — Determination of characteristic values —

Part 6: Large components and assemblies

1 Scope

This document specifies methods of determination of characteristic values for a defined population of large components and assemblies, calculated from test values.

It establishes two methods for the determination of characteristic values:

a) direct calculation from test values;

b) calculation from a resistance model, which is firstly calibrated from test results, including calculation of error terms.

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*

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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

3.1
large components and assemblies
parts of a timber structure consisted of at least two members, assembled together by connections

4 Symbols

$E(.)$	mean value of (.)
$Var(.)$	variance of (.)
V	coefficient of variation [V = (standard deviation)/(mean value)]
V_X	coefficient of variation of X
V_δ	estimator for the coefficient of variation of the error term δ

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