
**Physical and mechanical properties of
wood — Test methods for small clear
wood specimens —**

Part 12:
Determination of static hardness

*Propriétés physiques et mécaniques du bois — Méthodes d'essais sur
petites éprouvettes de bois sans défauts —*

Partie 12: Détermination de la dureté statique



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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 218, *Timber*.

This first edition of ISO 13061-12 cancels and replaces ISO 3350:1975, which has been technically revised with regards to the sizes, moisture content of test pieces, and adjustment for moisture content.

A list of all parts in the ISO 13061 series can be found on the ISO website.

Introduction

The main purpose of this document is to establish the common international point of member countries of the International Organization for Standardization (ISO), concerning testing methods for small clear wood specimens and general requirements for determining physical and mechanical properties of wood.

Physical and mechanical properties of wood — Test methods for small clear wood specimens —

Part 12: Determination of static hardness

1 Scope

This document specifies a method for determining of the static hardness of wood by measuring resistance of a test piece to the penetration of a plunger under gradually increasing load.

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 3129, *Wood — Sampling methods and general requirements for physical and mechanical tests*

ISO 13061-1, *Physical and mechanical properties of wood — Test methods for small clear specimens — Part 1: Determination of moisture content for physical and mechanical tests*

ISO 13061-2, *Physical and mechanical properties of wood — Test methods for small clear specimens — Part 2: Determination of density for physical and mechanical tests*

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 24294 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 Principle

The static hardness of wood is determined by measuring the resistance of a test piece to the penetration of a plunger to a specified depth under gradually increasing load.

5 Apparatus

5.1 Testing machine, ensuring the rate of movement of the loading head according to 7.1 and allowing measurement of the load to a precision of 1 %.

5.2 Device consisting of a body, a plunger with a hemispherical tip of radius 5,64 mm ± 0,01 mm, and an instrument for measuring linear movements to a precision of 0,01 mm.