

PUIDU JA PUITTOODETE VASTUPIDAVUS.  
KAITSEVAHENDIGA IMMUTATUD TÄISPUIT. OSA 1:  
KAITSEVAHENDI LÄBITAVUSE JA SISSEJÄÄVUSE  
LIIGITUS

Durability of wood and wood-based products -  
Preservative-treated solid wood - Part 1: Classification  
of preservative penetration and retention

## EESTI STANDARDI EESSÕNA

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ICS 71.100.50, 79.040

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English Version

## Durability of wood and wood-based products - Preservative-treated solid wood - Part 1: Classification of preservative penetration and retention

Durabilité du bois et des produits à base de bois - Bois massif traité avec produit de préservation - Partie 1 : Classification des pénétrations et rétentions des produits de préservation

Dauerhaftigkeit von Holz und Holzprodukten - Mit Holzschutzmitteln behandeltes Vollholz - Teil 1: Klassifizierung der Schutzmitteleindringung und -aufnahme

This European Standard was approved by CEN on 21 June 2007.

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## Foreword

This document (EN 351-1:2007) has been prepared by Technical Committee CEN/TC 38 "Durability of wood and wood-based products", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2008, and conflicting national standards shall be withdrawn at the latest by January 2008.

This document supersedes EN 351-1:1995.

Significant technical differences between this edition and EN 351-1:1995 are as follows:

- a) introduction of new penetration classes, see Table 1;
- b) modification of Figure A.1 to delete the suggested preservative treatments where no other guidance is available.

This document consists of two parts. Part 1 is concerned with defining the penetration requirements and gives guidance on the retention requirements for preservatives in preservative-treated solid wood and Part 2 gives guidance on the general procedures to be followed in the sampling for analysis of preservative-treated solid wood.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

This part of EN 351 allows a specifier or user to choose a preservative treatment for a solid wood product taking into account its intended service or the needs of different regional or traditional practices throughout Europe and the use class conditions to which the solid wood products will be exposed (see EN 335-1). In addition, it provides the basis on which treatments for timber in European product standards are to be defined. No attempt has been made to quantify the working life that could be expected from a particular preservative treatment as this will depend on the geographical location and the associated climate of the service environment. The performance of treated wood cannot be assessed directly, for example by field tests or bioassay, as no agreed documents specifically for this purpose exist. As a consequence, the penetration and retention of a preservative in treated wood are used to define quality of treatment. The penetration and retention values are measured by analysing the active ingredient(s) in the treated wood.

Preservative treatment for certain wood species used in the different use classes might be unnecessary owing to their natural durability (see EN 350-2 and EN 460). If appropriate treatment is necessary, the specification for appropriate preservatives is defined in EN 599-1.

## 1 Scope

This part of EN 351 establishes classification for preservative-treated wood in terms of preservative penetration and gives guidance on a classification of retention. These should be used as a basis for specifying preservative treatments for particular products.

This part of EN 351 provides terminology to be used by the specifier when preparing a preservative treatment specification or product standard. It is not a treatment specification in itself.

This part of EN 351 is applicable to the production of preservative-treated solid wood, including glued laminated timber, suitable for use in those service conditions defined by the use classes in EN 335-1. It does not apply to any subsequent examination of treated wood in service.

This part of EN 351 is applicable to the protection of wood against attack by wood-destroying and wood-disfiguring fungi, insects and marine organisms.

This part of EN 351 does not consider other properties of treated wood, for example odour, corrosiveness and compatibility with other materials, nor does it consider any properties from the health, safety and environmental point of view.

This part of EN 351 does not apply to wood treated with formulations that are applied to timber in service to eliminate or control an existing fungal or insect infestation, or to prevent attack by sapstain fungi, or insects in green timber.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 350-2, *Durability of wood and wood-based products — Natural durability of solid wood — Part 2: Guide to natural durability and treatability of selected wood species of importance in Europe*

EN 351-2, *Durability of wood and wood-based products — Preservative-treated solid wood — Part 2: Guidance on sampling for the analysis of preservative-treated wood*

EN 599-1, *Durability of wood and wood-based products — Performance of preventive wood preservatives as determined by biological tests — Part 1: Specification according to hazard class.*

EN 1001-2:2005, *Durability of wood and wood-based products — Terminology — Part 2: Vocabulary*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*