



**NSAI**  
Standards

Irish Standard  
I.S. EN 350:2016

Durability of wood and wood-based products  
- Testing and classification of the durability  
to biological agents of wood and wood-based  
materials

**I.S. EN 350:2016**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

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## National Foreword

I.S. EN 350:2016 is the adopted Irish version of the European Document EN 350:2016, Durability of wood and wood-based products - Testing and classification of the durability to biological agents of wood and wood-based materials

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EUROPEAN STANDARD

EN 350

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2016

ICS 79.040

Supersedes EN 350-1:1994, EN 350-2:1994

English Version

## Durability of wood and wood-based products - Testing and classification of the durability to biological agents of wood and wood-based materials

Durabilité du bois et des matériaux dérivés du bois -  
Méthodes d'essai et de classification de la durabilité  
vis-à-vis des agents biologiques du bois et des  
matériaux dérivés du bois

Dauerhaftigkeit von Holz und Holzprodukten - Prüfung  
und Klassifikation der Dauerhaftigkeit von Holz und  
Holzprodukten gegen biologischen Angriff

This European Standard was approved by CEN on 18 June 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## EN 350:2016 (E)

### European foreword

This document (EN 350:2016) 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 February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 350-1:1994 and EN 350-2:1994.

Wood durability is an important factor that influences the service life of a wood product. This standard provides input to service life prediction of wood and wood-based products. It's intended to give guidance on using wood products appropriate for different end-uses avoiding excessive requirements. It also ranks durability against wood-decay organisms of various wood species thereby allowing species of appropriate durability to be selected for a particular use. It will however be emphasized that the biological durability rating of wood species given in Annex B cannot be regarded as any guarantee of performance in service.

There are many other factors influencing service life of a wood product, such as the principles of good design, use conditions, climate, maintenance which should be taken into consideration.

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



## 1 Scope

This European Standard gives guidance on methods for determining and classifying the durability of wood and wood-based materials against biological wood-destroying agents.

The methods can be applied either to individual wood species, batches of wood and processed wood-based materials, including heat-treated, preservative-treated wood and modified wood. However, this standard is not intended to replace testing of the efficacy of biocides.

The wood-destroying agents considered in this standard are:

- wood-decay fungi (basidiomycete and soft-rot fungi);
- beetles capable of attacking dry wood;
- termites;
- marine organisms capable of attacking wood in service.

Data on the biological durability of selected wood species considered of economic importance in European countries are presented in Annex B (informative), which also provides information relating to their geographical origin, density, sapwood width and treatability.

**NOTE** Treatability, durability to disfiguring fungi, permeability to water and performance in use of wood and wood-based materials are also important issues. However, because standardized methods aiming to assess and classify these factors do not exist and/or have not been extensively experienced yet, preliminary guidance is given in Annex C (informative) for the classification of wood treatability with aqueous wood preservatives, Annex D (informative) for the classification of the permeability to water, Annex E (informative) for the durability to disfiguring fungi, and Annex F (informative) for the classification of performance.

## 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.

EN 20-1, *Wood preservatives - Determination of the protective effectiveness against Lyctus Brunneus (Stephens) - Part 1: Application by surface treatment (laboratory method)*

EN 46-1, *Wood preservatives - Determination of the preventive action against recently hatched larvae of Hylotrupes bajulus (Linnaeus) - Part 1: Application by surface treatment (laboratory method)*

EN 49-1, *Wood preservatives - Determination of the protective effectiveness against Anobium punctatum (De Geer) by egg-laying and larval survival - Part 1: Application by surface treatment (Laboratory method)*

EN 117, *Wood preservatives - Determination of toxic values against Reticulitermes species (European termites) (Laboratory method)*

EN 252, *Field test method for determining the relative protective effectiveness of a wood preservative in ground contact*

EN 275, *Wood preservatives - Determination of the protective effectiveness against marine borers*

ENV 12038, *Durability of wood and wood-based products - Wood-based panels - Method of test for determining the resistance against wood-destroying basidiomycetes*

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