# Durability of wood and wood- based products - Definition of use classes - Part 1: General

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# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 335-
1:2006 sisaldab Euroopa standardi EN
335-1:2006 ingliskeelset teksti.

Käesolev dokument on jõustatud 27.10.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 335-1:2006 consists of the English text of the European standard EN 335-1:2006.

This document is endorsed on 27.10.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

# Käsitlusala:

This part of EN 335 defines five use classes which represent different service situations to which wood and wood-based products can be exposed. This part of EN 335 also indicates the biological agents relevant to each situation. Annex A gives information on these biological agents.

# Scope:

This part of EN 335 defines five use classes which represent different service situations to which wood and wood-based products can be exposed. This part of EN 335 also indicates the biological agents relevant to each situation. Annex A gives information on these biological agents.

ICS 71.100.50

**Võtmesõnad:** bioloogiline lagunemine, kahjurikaitse, liigitused, määratlused, ohud, puit, vastupidavus, üldreeglid

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 335-1

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ICS 71.100.50

Supersedes EN 335-1:1992

# **English Version**

# Durability of wood and wood- based products - Definition of use classes - Part 1: General

Durabilité du bois et des matériaux dérivés du bois -Définition des classes d'emploi - Partie 1 : Généralités Dauerhaftigkeit von Holz und Holzprodukten - Definition der Gebrauchsklassen - Teil 1: Allgemeines

This European Standard was approved by CEN on 7 July 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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# **Foreword**

This document (EN 335-1:2006) has been prepared by Technical Committee CEN/TC 038 "Durability of wood and derived materials", 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 2007, and conflicting national standards shall be withdrawn at the latest by February 2007.

This document supersedes EN 335-1:1992.

EN 335 is divided in three parts. Part 1 gives general definitions of use classes in different service situations. Part 2 concerns their application to solid wood and Part 3 concerns their application to wood-based panels

The revision of EN 335-1 is in general accordance with ISO 21887 (in preparation).

Attention of users is therefore drawn to the need to avoid misinterpretation of any numbering system using classes for timber which cannot correspond exactly to the European use classes defined in this part of EN 335

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

# Introduction

The classes described in this part of EN 335 are based on an existing classification agreed on by the European Homologation Committee (EHC) in 1981 and published in the EHC reference document in 1984.

Proposals for altering the five classes of EHC classification have been considered, particularly the possibility of harmonisation with other classes used outside Europe. It has, however, been judged that five classes are the most appropriate solution to European conditions.

The possibility of harmonisation between the three moisture categories of Eurocode 5 (EN 1995-1-1) and the five classes of all parts of EN 335 has been carefully studied. The latter have been adjusted as far as possible. Nevertheless it is important to note that the two systems use different criteria to achieve different results.

Any user can use the appropriate part of EN 335 to identify the "use class" of a given service environment and geographical location. Table 1 will assist in determining the biological agents that can attack timber in certain situations. The user can then consider the type and duration of performance required, select an appropriate level of durability and ensure that the timber or wood-based product specified has either, as a natural (see EN 350-2) or an acquired characteristic durability as the result of appropriate preservative treatment (see EN 351-1).

NOTE At the moment EN 350-2 only gives information regarding solid wood. EN 351-1 considers only the performance of preservative-treated solid wood.

# 1 Scope

This part of EN 335 defines five use classes which represent different service situations to which wood and wood-based products can be exposed. This part of EN 335 also indicates the biological agents relevant to each situation.

Annex A gives information on these biological agents.

# 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.

None applicable.

# 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

#### 3.1

# protected

subject to design and construction measures intended to prevent excessive exposure to direct effects of the weather

#### 3.2

## use class 1

situation in which the wood or wood-based product is under cover, not exposed to the weather and wetting

NOTE Adapted from EN 1001-2:2005, 1.46.

#### 3.3

## use class 2

situation in which the wood or wood-based product is under cover and not exposed to the weather but where high environmental humidity can lead to occasional, but not persistent wetting

NOTE Adapted from EN 1001-2:2005, 1.47.

# 3.4

#### use class 3

situation in which the wood or wood-based product is not under cover and not in contact with the ground. It is either continually exposed to the weather or is protected from the weather but subject to wetting

NOTE Adapted from EN 1001-2:2005, **1.48**.

#### 3.5

## use class 4

situation in which the wood or wood-based product is in contact with the ground or fresh water and thus is permanently exposed to wetting

[EN 1001-2:2005, **1.49**]

#### 3 6

#### use class 5

situation in which the wood or wood-based product is permanently exposed to salt water

[EN 1001-2:2005, **1.50**]