

English version

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

Durabilité du bois et des matériaux dérivés du bois -  
Panneaux à base de bois - Méthode d'essai pour  
déterminer la résistance aux champignons basidiomycètes  
lignivores

Dauerhaftigkeit von Holz und Holzwerkstoffen -  
Holzwerkstoffplatten - Bestimmung der Beständigkeit  
gegen holzerstörende Basidiomyceten

This European Prestandard (ENV) was approved by CEN on 23 December 2001 as a prospective standard for provisional application.

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## Contents

	page
Foreword.....	4
Introduction .....	5
1 Scope .....	6
2 Normative references .....	6
3 Term and definition.....	6
4 Principle .....	6
5 Test materials.....	7
5.1 Biological material .....	7
5.2 Other materials and reagents .....	8
5.3 Apparatus .....	9
6 Test product .....	9
6.1 General.....	9
6.2 Test specimen preparation .....	10
7 Numbers of test specimens .....	10
7.1 Test product specimens.....	10
7.2 Virulence control specimens .....	10
7.3 Size control specimens .....	10
8 Procedure .....	11
8.1 Pre-conditioning.....	11
8.2 Initial dry mass.....	11
8.3 Sterilization of test specimens .....	12
8.4 Preparation of the culture vessels .....	12
8.5 Inoculation .....	12
8.6 Exposure of test specimens .....	12
8.7 Culture conditions and duration of the test .....	13
8.8 Assessment of the test.....	13
9 Validity of the test .....	14
10 Assessment of results.....	14
11 Test report .....	14
Annex A (informative) Test fungi .....	16
A.1 General information on maintenance and acquisition of test strains .....	16
A.2 Maintenance and treatment of test fungi.....	16
A.3 Information regarding obligatory fungi .....	16
Annex B (informative) Recommended but non-comprehensive list of optional fungi.....	18
Annex C (informative) Culture vessels.....	19
Annex D (normative) Methods of sterilization .....	20
D.1 Ionizing radiation .....	20
D.2 Steam .....	20
Annex E (normative) Calculation of the decay susceptibility index (DSI).....	21
E.1 Principle .....	21
E.2 Calculation.....	21
Annex F (informative) Example of a test report.....	22

Bibliography .....25

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## Foreword

This document ENV 12038:2002 has been prepared by CEN/TC 38 "Durability of wood and wood-based products", the secretariat of which is held by AFNOR.

This document supersedes ENV 12038:1996.

Annexes A, B, C and F are informative.

Annexes D and E are normative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## Introduction

This European Prestandard describes a laboratory test method in which small samples of the wood-based panel product under test are exposed to attack by a range of wood-destroying basidiomycete fungi in pure culture. The thickness of the test specimens varies, since it is dictated by the thickness of the wood-based panel product under test. In order to make comparisons of the decay resistance of wood-based panel products of different thicknesses, solid wood specimens of the same dimensions as the wood-based panel product test specimens are included. The effect of constituents giving temporary protection is avoided by testing after pre-conditioning of the cut specimens in a freely ventilated environment. The test method also includes a minimum moisture uptake requirement.

The procedures described in this prestandard method are intended to be carried out by suitably trained and/or supervised specialists. Appropriate safety precautions should be observed throughout the use of this prestandard.

## 1 Scope

This European Prestandard specifies a method for assessing the resistance of wood-based panel products to attack by wood-destroying basidiomycete fungi growing in pure culture.

The method is applicable to uncoated, rigid wood-based panel products. It is applicable to the determination of the decay resistance of wood-based panel products:

- made from naturally durable materials;
- made from materials treated with preservatives prior to manufacture;
- treated with a preservative which is introduced during manufacture, for example as an additive to the adhesive;
- treated with preservative after manufacture.

NOTE 1 This method can be used in conjunction with an appropriate ageing procedure, for example EN 73 or EN 84.

NOTE 2 Wood-based panel products that have received a preservative treatment after manufacture can be susceptible to attack through the cut edges of the test specimens and the decay resistance indicated can be less than that of complete panels used in service.

## 2 Normative references

This European Prestandard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 73, *Wood preservatives - Accelerated ageing tests of treated wood prior to biological testing - Evaporative ageing procedure.*

EN 84, *Wood preservatives - Accelerated ageing tests of treated wood prior to biological testing - Leaching procedure.*

EN ISO 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696:1987).*

## 3 Term and definition

For the purposes of this European Prestandard, the following term and definition apply.

### 3.1

#### **supplier**

the sponsor of the test

## 4 Principle

Specimens prepared from the wood-based panel product(s) under test, after pre-conditioning, and control specimens of defined function are exposed to attack by pure cultures of wood-destroying basidiomycete fungi.

After a prescribed period of incubation under defined conditions, the loss in dry mass of the specimens is used as the criterion for determining the extent of attack. This, in comparison with the loss in mass of the size control specimens, is used to estimate the resistance of the wood-based panel product(s) to attack by the test fungi.