

Durability of wood and wood-based products - Test method against wood destroying basidiomycetes - Part 3: Assessment of durability of wood-based panels



ESTI STANDARDI EESSÕNA

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Durability of wood and wood-based products - Test
method against wood destroying basidiomycetes - Part 3:
Assessment of durability of wood-based panels

Durabilité du bois et des matériaux dérivés du bois -
Méthode d'essai contre les champignons
basidiomycètes lignivores - Partie 3 : Évaluation de la
durabilité des panneaux à base de bois

Dauerhaftigkeit von Holz und Holzprodukten -
Prüfverfahren in Bezug auf Holz zerstörende
Basidiomyceten - Teil 3: Bewertung der
Dauerhaftigkeit von Holzwerkstoffen

This European Standard was approved by CEN on 25 December 2022.

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European foreword

This document (EN 113-3:2023) 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of an identical text or by endorsement, at the latest by August 2023, and conflicting national standards shall be withdrawn at the latest by August 2023.

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 ENV 12038:2002.

Test results obtained with earlier versions of ENV 12038 are still valid.

Compared to current EN 113, modifications are the following:

- A third part has been included.
- The three parts of the new EN 113 deal with similar testing but relate to a different scope.

EN 113-3:2023 includes the following significant technical changes with respect to ENV 12038:2002:

- Change of the title;
- The methods for sterilization are updated;
- All annexes are informative, except Annex B on sterilization methods;
- Some additional validity requirements are introduced for control specimens;
- Number of test specimens per fungus doubled;
- Number of virulence control specimens increased from 6 to 10;
- Size control specimens deleted;
- Assessment of results changed.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document 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. 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 document 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 document.

1 Scope

This document describes a method for assessing the durability of wood-based panels or analogue wood products to attack by wood-destroying basidiomycete fungi growing in pure culture.

The test method described in this document is intended to complement EN 113-2 with focus on specific aspects of wood-based panels or analogue wood products. This document is not intended to determine the effectiveness of wood preservatives used to prevent decay, which is covered by EN 113-1.

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

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;
- specific treatments to increase durability of wood-based panels, e.g. wood modification.

Annex A (informative) contains a guidance on sampling.

Annex B (normative) contains some methods of sterilization.

Annex C (informative) contains information on the culture vessels.

Annex D (informative) contains an example of a test report.

Annex E (informative) contains information on the test fungi.

Annex F (informative) contains the assessment of the results.

Annex G (informative) contains extra info on moisture dynamics, coatings, composites and impact of dimensions.

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.

EN 84, *Durability of wood and wood-based products - Accelerated ageing of treated wood prior to biological testing - Leaching procedure*