Durability of wood and wood-based products - Test method against wood destroying basidiomycetes - Part 2: Assessment of inherent or enhanced durability



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

	This Estonian standard EVS-EN 113-2:2020 consists of the English text of the European standard EN 113-2:2020.	
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.	
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 16.12.2020.	Date of Availability of the European standard is 16.12.2020.	
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.	

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 71.100.50

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 113-2

December 2020

ICS 71.100.50

Supersedes CEN/TS 15083-1:2005, EN 113:1996

English Version

Durability of wood and wood-based products - Test method against wood destroying basidiomycetes - Part 2: Assessment of inherent or enhanced durability

Durabilité du bois et des matériaux dérivés du bois -Méthode d'essai vis-à-vis des champignons basidiomycètes - Partie 2 : Détermination de la durabilité inhérente ou améliorée Dauerhaftigkeit von Holz und Holzprodukten -Prüfverfahren gegen Holz zerstörende Basidiomyceten - Teil 2: Bewertung der natürlichen oder verbesserten Dauerhaftigkeit

This European Standard was approved by CEN on 2 November 2020.

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, 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, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Cont	tents	Page
Furon	ean foreword	4
-	luction	
1	Scope	
	Normative references	
_		
3	Terms and definitions	
4	Principle	6
5	Test material and apparatus	
5.1	Biological material	
5.1.1	Test fungi	
5.1.2	Wood as virulence control	8
5.2	Products and reagents	
5.3	Apparatus	
5.3.1	Culture vessels	
5.3.2	Drying oven	
5.3.3	Desiccators	
5.3.4	Conditioning chamber	
5.3.5	Culture chamber	
5.3.6	Test specimens supports	
5.3.7 5.3.8	Equipment for steam sterilization or access to a radiation source Ordinary laboratory equipment	
	Test specimens	
6	Test specimens	10
6.1 6.2	Species and source of wood	
	Wood quality	
6.3	Provision of the test specimens	
6.4	Dimensions of test specimens	
6.5	Number and distribution of test specimens	
7	Procedure	
7.1	Preparation of the wood test specimens	
7.1.1	Virulence control	
7.1.2	Wood under test	
7.2	Exposure to fungi	
7.3	Culture conditions and duration of test	
7.4	Assessment of test	
7.4.1	Examination of the test specimens	
7.4.2	Validity of results	
7.4.3	Assessment of results	
8	Statement of results	14
9	Test report	15
Annex	x A (informative) Guidance on sampling	16
Annex	B (normative) Methods of sterilization	18
Annex	x C (informative) Culture vessels	19

Annex D (informative) Example of a test report	
Annex F (informative) Assessment of results	23
Bibliography	29
Bibliography Control of the Control	29

European foreword

This document (EN 113-2:2020) 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 May 2021, and conflicting national standards shall be withdrawn at the latest by May 2021.

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 CEN/TS 15083-1:2005, EN 113:1996, EN 113:1996/A1:2004.

The different parts of EN 113 deal with similar testing but relate to a different scope.

In comparison with CEN/TS 15083-1:2005 EN 113:1996, EN 113:1996/A1:2004, the following significant changes have been made:

- change of the title;
- the obligatory fungi are indicated differently;
- the methods for sterilization are updated;
- all annexes are informative except Annex B.

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, Turkey and the United Kingdom.

Introduction

This document describes a laboratory method of test which gives a basis for the assessment of the biological durability of a sample of wood or wood product against attack by wood-destroying basidiomycetes. Specifically the natural durability of a wood species can vary depending on the conditions of growth such as climate and soil type. For this reason, the durability established using the method described in this document will relate only to the sample of timber tested. Guidance on sampling is given in Annex A.

This laboratory method provides one criterion by which the durability of the timber can be assessed. It is recommended that this information is supplemented by data from other relevant tests, and above all by practical experience.

in th. Control of the The procedures described in this standard method are intended to be carried out by suitably trained or supervised specialists.

1 Scope

This document specifies a method of test for determining the natural durability of a timber against wood-destroying basidiomycetes cultured on a malt extract agar medium. The method is applicable to all timber species.

Furthermore this method can be used to test modified wood. The test method described in this document can be applied to specific wood species, commercial supplies of sawn timber, wood-based materials, wood treated with preservatives and modified wood, both thermally and chemically modified wood.

However, this document is not intended to determine the effectiveness of wood preservatives used to prevent decay.

NOTE 1 Determining the efficacy of wood preservatives used to prevent decay is the scope of EN 113-1. However, in addition to this and with some amendments, it might also be possible in some cases to test treated wood using the method described here.

NOTE 2 This method can be used in conjunction with an ageing procedure, for example EN 73 or EN 84.

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.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1

supplier

sponsor of the test, person or company providing the sample of wood/timber to be tested

4 Principle

Test specimens of the timber under test and reference timber test specimens are exposed to attack by pure cultures of basidiomycetes. After a prescribed period of incubation under defined conditions, the percentage loss in dry mass of the test specimens is used to establish the timber durability classification of the timber under test.