TECHNICAL SPECIFICATION

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CEN/TS 15083-1

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English version

Durability of wood and wood-based products - Determination of the natural durability of solid wood against wood-destroying fungi, test methods - Part 1: Basidiomycetes

Durabilité du bois et des matériaux dérivés du bois - Détermination de la durabilité naturelle du bois massif vis-à-vis des champignons lignivores, méthodes d'essai - Partie 1: Basidiomycètes

Dauerhaftigkeit von Holz und Holzprodukten - Bestimmung der natürlichen Dauerhaftigkeit von Vollholz gegen holzzerstörende Pilze, Prüfverfahren - Teil 1: Basidiomyceten

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Foreword

This document (CEN/TS 15083-1:2005) 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 document consists of two parts. Part 1 is required to determine the natural durability of solid wood against wood destroying basidiomycetes fungi and Part 2 against soft rotting micro-fungi.

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

Introduction

This CEN Technical Specification specifies a laboratory method of test which gives a basis for the assessment of the natural durability of a sample of timber against attack by wood-destroying basidiomycetes. The natural durability of a species of timber 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 be supplemented by data from other relevant tests, for example CEN/TS 15083-2, and above all by practical experience.

The procedures described in this standard method are intended to be carried out by suitably trained and/or supervised specialists.

1 Scope

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

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

2 Normative reference

The following referenced document is 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.

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

3 Terms and definitions

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

3.1
supplier
sponsor of the test (person or company providing the sample of timber to be tested)

4 Principle

Test specimens prepared from the timber under test and reference timber test specimens are exposed to attack by pure cultures of wood-destroying basidiomycete fungi. After a prescribed period of incubation under defined conditions, the percentage loss in dry mass of the test specimens is used to estimate the resistance of the test timber to attack by the test fungi and as the basis of a provisional durability rating.

5 Test materials and apparatus

5.1 Biological material

5.1.1 Test fungi

The test fungi to be used are as follows.

5.1.1.1 Obligatory fungus in all cases: *Coniophora puteana* (Schumacher ex Fries) Karsten (BAM Ebw. 15).

Loss in mass of Scots pine sapwood in 16 weeks: minimum 30 %.

Loss in mass of beech in 16 weeks: minimum 30 %.