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Durability of wood and wood-based products - Moisture dynamics of wood and wood-based products

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Durability of wood and wood-based products - Moisture dynamics of wood and wood-based products

Durabilité du bois et des matériaux à base de bois -
Cinétique d'humidification du bois et des produits à
base de bois

Dauerhaftigkeit von Holz und Holzprodukten -
Feuchte-Dynamik von Holz und Holzprodukten

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Contents

	Page
European foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Principle	6
5 Test specimens.....	6
5.1 Quality	6
5.2 Provision of the test specimens (Annex A)	6
5.3 Dimensions of each test specimen	6
5.3.1 Floating test.....	6
5.3.2 Submersion test.....	6
5.4 Number of test specimens.....	6
5.5 Products and reagents.....	6
5.5.1 Water	6
5.5.2 End sealer.....	7
5.6 Apparatus.....	7
6 Procedure.....	7
6.1 Treatment of the wood test specimens	7
6.1.1 Sealing of the end grain and edges.....	7
6.1.2 Conditioning of test specimens	7
6.2 Absorption cycle.....	7
6.2.1 Floating test.....	7
6.2.2 Submersion test.....	8
6.3 Desorption cycle.....	8
6.4 Additional short-term absorption cycle	8
6.5 Oven dry mass	9
7 Calculation and reporting results	9
7.1 Absorption coefficient.....	9
7.2 Residual moisture.....	10
8 Test report.....	12
Annex A (informative) Production of treatment blocks.....	13
Annex B (informative) Example of a test report	14
Bibliography.....	15

European foreword

This document (CEN/TS 16818:2018) has been prepared by Technical Committee CEN/TC 38 "Durability of wood and wood-based products", the secretariat of which is held by AFNOR.

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Introduction

Moisture has a significant influence on the mechanical and physical properties and on the biological durability of wood and wood-based materials. The test method described in this Technical Specification is a laboratory method in which small samples are exposed to water. It provides a basis for assessment of the moisture dynamics of wood and wood-based materials in service. The method permits the determination of the water uptake and moisture release which may provide important information on the susceptibility to the onset of fungal attack in certain end uses.

It is recommended that the results of this test should be supplemented by further suitable tests and especially by practical experience.

1 Scope

This document details a method for determining the water uptake and the effectiveness of the drying process on solid wood, wood-based materials or coated wood by means of water absorption and water vapour desorption. This document lays down a method to assess the moisture dynamics of wooden products which can be a contributing factor to the susceptibility to wood decay.

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 ISO 3696, *Water for analytical laboratory use — Specification and test methods (ISO 3696)*

EN 13183-1, *Moisture content of a piece of sawn timber — Part 1: Determination by oven dry method*

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