

SVENSK STANDARD

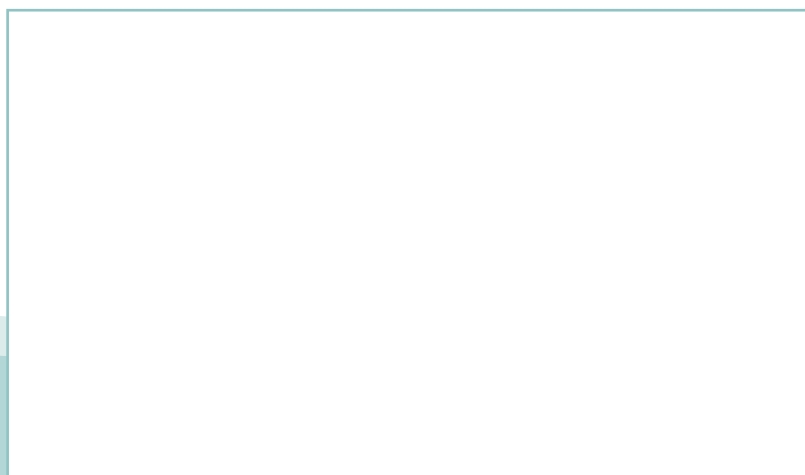
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Träskydd – Bestämning av den förebyggande skyddseffekten hos trä behandlat mot blånad – Provning (Laboratoriemetod)

Wood preservatives – Determination of the protective effectiveness of a preservative treatment against blue stain in wood in service – Laboratory method



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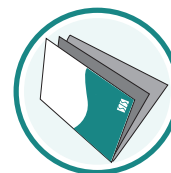
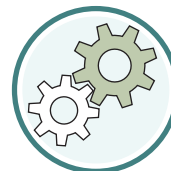
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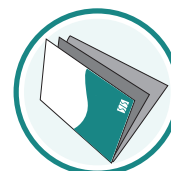
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Denna standard ersätter SS 27221-1, utgåva 1 och SS 27221-2, utgåva 1.

The European Standard EN 152:2011 has the status of a Swedish Standard. This document contains the official version of EN 152:2011.

This standard supersedes the Swedish Standard SS 27221-1, edition 1 and SS 27221-2, edition 1.

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EUROPEAN STANDARD

EN 152

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2011

ICS 71.100.50

Supersedes EN 152-1:1988, EN 152-2:1988

English Version

Wood preservatives - Determination of the protective effectiveness of a preservative treatment against blue stain in wood in service - Laboratory method

Produits de préservation du bois - Détermination de l'efficacité préventive d'un traitement de protection du bois mis en œuvre contre le bleuissement fongique - Méthode de laboratoire

Holzschutzmittel - Bestimmung der vorbeugenden Wirksamkeit einer Schutzbehandlung von verarbeitetem Holz gegen Blaüepilze - Laboratoriumsverfahren

This European Standard was approved by CEN on 24 September 2011.

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.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 152:2011) 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 2012, and conflicting national standards shall be withdrawn at the latest by May 2012

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 152-1:1988, EN 152-2:1988.

Significant technical differences between this standard and EN 152-1 and EN 152-2:1988 are as follows:

- a) introduction of a new harmonised specification for the test specimens used in the diverse biological tests;
- b) merging of Part 1 relating to the brushing procedure and Part 2 concerning the application by methods other than brushing;
- c) taking into account of the terms given in EN 1001-1 and the definitions of EN 1001-2;
- d) introduction of an informative Annex to take account of consideration for minimisation of environmental and health hazards caused by the use of this biological test.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The test method described in this European Standard is a laboratory method combined with pre-conditioning (natural or artificial weathering), which provides a basis for assessment of the effectiveness of a wood preservative or wood preservative systems in preventing the development of blue stain fungi in wood in service where disfigurement can be considered important, such as external decorative timber and joinery. The method permits the determination of the effectiveness of undiluted preservatives and may also be used to test preparations in which the proportions of the individual components (active ingredients) have been varied and so establish for the active ingredients the limit of their effectiveness.

It should be used to assess the value of the protection, taking into account the method of application and in particular the suppliers specifications. It is recommended that the results of these tests should be supplemented by further suitable tests and especially by practical experience.

Suitable precautions should include the use of separate rooms, areas within rooms, extraction facilities, conditioning chambers and special training for personnel (also see Annex H for environmental, health and safety precautions).

1 Scope

This European Standard specifies a method which is only suitable for testing preparations and systems which are intended to prevent the occurrence of blue stain fungi in wood in service. It is not suitable for assessing the temporary preventive effectiveness of anti-stain preservatives on round wood or on freshly cut wood. The method is not intended for the determination of the fungicidal properties of the surface coating applied to the wood after the priming coat.

This European Standard lays down a method for determining the effectiveness of a preparation applied by e.g. brushing, spraying, spraying tunnel, dipping or vacuum and pressure treatments resulting in an equivalent retention of product in preventing the development of blue stain fungi in wood in service. It is also applicable where a primer paint is used in conjunction with the preservative system¹⁾.

This method is applicable to the following types of preparations or systems:

— type A: fungicidal preparations with or without pigment, used in conjunction with unspecified varnishes or paint coatings;

or

— type B: fungicidal preparations with or without pigment, used in conjunction with specified varnishes or paint coatings;

or

— type C: fungicidal preparations with or without pigment, used without any subsequent paint, varnish or other coating.

NOTE It is also possible to test the effectiveness in preventing blue stain in service of a combined protective system which involves the application of one preparation by a penetrating treatment technique followed by a subsequent application of a different preparation by a superficial treatment method.

2 Normative references

The following referenced documents are 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 927-6:2006, *Paints and varnishes — Coating materials and coating systems for exterior wood — Part 6: Exposure of wood coatings to artificial weathering using fluorescent UV lamps and water*

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

1) The method may also be used for first coat (primer) paints required to give protection during storage of components on-site (see Annex E). These are tested as for preparations of type C.

3 Terms and definitions

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

3.1

representative sample

sample having its physical and/or chemical characteristics identical to the volumetric average characteristics of the total volume being sampled

[EN 1001-2, 4.71]

3.2

supplier

sponsor of the test (person or company providing the sample of wood preservative to be tested)

[Adapted from EN 1001-2, 4.83]

4 Principle

The basic principles of the test method are to provide the conditions for infection by blue stain fungi into the treated face and into the cut surface behind the treated face (for surface treatments) and to observe the development of infection into the treated face.

A series of blocks of the given timber species are treated with the preparation under test on all faces except the end-grain faces. Subsequently the blocks are cut in the direction of the grain such that two specimens are produced. The treatment differs according to the type of preparation (Annex E, Table E.1) and specifications for its use:

- Type A Preparations designed to be used with unspecified varnish or paint coatings are tested using the application rate appropriate to the preparation (Annex E, Table E.2) or as otherwise specified by the supplier followed by the standard test varnish.
- Type B Preparations designed to be used with specified varnish or paint coatings are tested using the application rate appropriate to the preparation (Annex E, Table E.2) or as otherwise specified by the supplier followed by a surface coating strictly according to the supplier's specification.
- Type C Preparations designed to be used without subsequent varnish or paint coatings are tested using the application rate appropriate to the product (Annex E, Table E.2) or as otherwise specified by the supplier but with no subsequent application of coating.
- Treated test specimens are exposed to pre-conditioning (natural or artificial weathering).
- Weathered test specimens are then exposed in the laboratory to the action of a mixed culture of two fungi causing blue stain in service.

NOTE Preparations designed to be used solely in use class 2 (EN 335) may be preconditioned by using the evaporative aging method in EN 73 in place of the natural or artificial weathering procedures in this standard.