# Paints and varnishes - Coating materials and coating systems for exterior wood - Part 2: Performance specification

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#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 927-
2:2006 sisaldab Euroopa standardi EN
927-2:2006 ingliskeelset teksti.

Käesolev dokument on jõustatud 29.06.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 927-2:2006 consists of the English text of the European standard EN 927-2:2006.

This document is endorsed on 29.06.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This part of EN 927 specifies performance requirements for coating systems on exterior wood. Performance requirements are specified according to the categories of 'end use' and 'exposure conditions' (defined in EN 927-1) in terms of the results of natural weathering performance testing carried out in accordance with EN 927-3.

#### Scope:

This part of EN 927 specifies performance requirements for coating systems on exterior wood. Performance requirements are specified according to the categories of 'end use' and 'exposure conditions' (defined in EN 927-1) in terms of the results of natural weathering performance testing carried out in accordance with EN 927-3.

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### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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Supersedes ENV 927-2:2000

#### **English Version**

## Paints and varnishes - Coating materials and coating systems for exterior wood - Part 2: Performance specification

Peintures et vernis - Produits de peinture et systèmes de revêtement pour le bois en extérieur - Partie 2: Spécifications de performance

Beschichtungsstoffe - Beschichtungsstoffe und Beschichtungssysteme für Holz im Außenbereich - Teil 2: Leistungsanforderungen

This European Standard was approved by CEN on 9 March 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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 United Kingdom.



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

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#### Foreword

This European Standard (EN 927-2:2006) has been prepared by Technical Committee CEN/TC 139 "Paints and varnishes", the secretariat of which is held by DIN.

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 October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

This European Standard supersedes ENV 927-2:2000.

EN 927 consists of the following parts under the general title: Paints and varnishes – Coating materials and coating systems for exterior wood

- Part 1: Classification and selection
- Part 2: Performance specification
- Part 3: Natural weathering test
- Part 5: Assessment of the liquid water permeability
- Part 6: Exposure of wood coatings to artificial weathering using fluorescent UV lamps and water

This second edition cancels and replaces the first edition (ENV 927-2:2000), which has been technically revised. The main changes are:

- values for adhesion and maximum sum value in Table 1 were changed;
- former Annex A was deleted and the former Annex B became Annex A.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 United Kingdom.

#### Introduction

This is one of a number of parts of EN 927. Part 1 addresses the issue of an unequivocal terminology for the wide variety of exterior coatings for wood that are now available. Part 1 also provides a framework for communicating information on the suitability of a coating for particular specific end-use categories. Improved ene, ucts tes ests specific . communication is beneficial in the removal of technical barriers to trade. However there remains the problem of comparing products tested, or likely to be exposed, in different climatic regions. EN 927-2 addresses this latter issue and sets specific performance criteria.

#### 1 Scope

This part of EN 927 specifies performance requirements for coating systems on exterior wood. Performance requirements are specified according to the categories of 'end use' and 'exposure conditions' (defined in EN 927-1) in terms of the results of natural weathering performance testing carried out in accordance with EN 927-3. A mandatory water permeability test in accordance with EN 927-5 is also specified. Additional optional tests are identified which may be used by suppliers to provide voluntary additional information, to a standardized format, on aspects of performance relevant to specific building components such as windows.

#### 2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 927-1:1996, Paints and varnishes — Coating materials and coating systems for exterior wood — Part 1: Classification and selection

EN 927-3:2000, Paints and varnishes — Coating materials and coating systems for exterior wood — Part 3: Natural weathering test

EN 927-5, Paints and varnishes — Coating materials and coating systems for exterior wood — Part 5: Assessment of the liquid water permeability

prEN ISO 4618:2004, Paints and varnishes — Terms and definitions (ISO/DIS 4618:2004)

#### 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 927-1:1996 and prEN ISO 4618:2004 apply.

#### 4 Performance tests

#### 4.1 Resistance to natural weathering

#### 4.1.1 General

The assessment of a coating material to this specification will require a natural weathering test to be carried out in accordance with EN 927-3, using a flat wood panel of pine (*Pinus silvestris*) with a planed surface. A manufacturer of a coating system that meets one or more of the performance profiles described in 4.1.2 can claim conformity to the specification, as described in Clause 6. If a coating system does not meet the performance criteria the manufacturer cannot claim full conformity but might provide information gained from one or more of the optional tests.

The external durability of the coating system under test is assessed by a number of performance criteria. Guide values enable an assessment to be made of the suitability of the system for the proposed end-use. Comparative trials have shown that conformity to the criteria outlined below (Table 1) sets a performance standard capable of verification, but they do not in themselves constitute a certification procedure. Further guidance on the interpretation of the results is given in Annex A.