



**NSAI**  
Standards

Irish Standard  
I.S. EN 927-10:2019

Paints and varnishes - Coating materials  
and coating systems for exterior wood -  
Part 10: Resistance to blocking of paints  
and varnishes on wood

**I.S. EN 927-10:2019**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 927-10:2019

*Published:*

2019-05-01

*This document was published under the authority of the NSAI and comes into effect on:*

2019-05-19

ICS number:

87.040

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

## National Foreword

I.S. EN 927-10:2019 is the adopted Irish version of the European Document EN 927-10:2019, Paints and varnishes - Coating materials and coating systems for exterior wood - Part 10: Resistance to blocking of paints and varnishes on wood

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

**Compliance with this document does not of itself confer immunity from legal obligations.**

*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

This page is intentionally left blank

EUROPEAN STANDARD

EN 927-10

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2019

ICS 87.040

Supersedes CEN/TS 16499:2013

English Version

Paints and varnishes - Coating materials and coating systems for exterior wood - Part 10: Resistance to blocking of paints and varnishes on wood

Peintures et vernis - Produits de peinture et systèmes de peinture pour le bois en extérieur - Partie 10 : Résistance au blocage des peintures et vernis sur bois

Beschichtungsstoffe - Beschichtungsstoffe und Beschichtungssysteme für Holz im Außenbereich - Teil 10: Bestimmung der Blockfestigkeit von Beschichtungsstoffen und Beschichtungssystemen für Holz

This European Standard was approved by CEN on 16 December 2018.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, 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

## Contents

Page

European foreword.....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions .....	5
4 Principle .....	6
5 Apparatus.....	6
6 Sampling.....	7
7 Substrates .....	7
7.1 General.....	7
7.2 Substrate s1 – Spruce.....	7
7.3 Substrate s2 – Other wood species .....	8
7.4 Substrate s3 – Inert substrate.....	8
7.5 Substrate s4 – Other plane substrates.....	8
8 Application .....	9
8.1 General.....	9
8.2 Application to substrate s1 – spruce, s2 – other wood substrates, or substrate s4 - other plane substrates .....	9
8.3 Application to substrate s3 – inert substrate or substrate s4 - other plane substrates .....	10
8.4 Typical dry film thickness on stable wood constructions.....	10
9 Drying time.....	10
10 Preparation of test strips and specimen.....	10
10.1 General.....	10
10.2 Determination of the dry film thickness.....	11
11 Conditioning of test strips.....	11
12 Application of load.....	11
12.1 General.....	11
12.2 Load to be applied.....	12
12.3 Climatic conditions during loading .....	13
13 Evaluation .....	14
14 Precision.....	15
15 Test report.....	15
Annex A (normative) Necessary additional information.....	16
Annex B (informative) Suggested form for specifying application parameters.....	17
B.1 General.....	17
B.2 Specifying complete coating systems.....	17
B.3 Equipment .....	17

<b>B.4</b>	<b>Process.....</b>	<b>17</b>
<b>B.5</b>	<b>Spreading rate.....</b>	<b>17</b>
<b>B.6</b>	<b>Flash-off.....</b>	<b>17</b>
<b>B.7</b>	<b>Drying and curing.....</b>	<b>18</b>
<b>B.8</b>	<b>Overcoating intervals.....</b>	<b>18</b>
<b>B.9</b>	<b>Sanding.....</b>	<b>18</b>
<b>B.10</b>	<b>Examples for specifying application parameters.....</b>	<b>18</b>
	<b>Bibliography .....</b>	<b>22</b>

## **EN 927-10:2019 (E)**

### **European foreword**

This document (EN 927-10:2019) 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 November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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 16499:2013.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



## 1 Scope

This document specifies a test method for determining, under specified optional conditions, whether a single-coat film or a multi-coat system of paints and varnishes on wood after a specified drying period is sufficiently dry to avoid damage when two painted surfaces or one painted surface and another surface are placed in contact under pressure and subsequently separated. The method is intended to simulate the conditions when painted articles come into contact with each other. In comparison to EN ISO 9117-2, the conditioning and parameters which influence the behaviour of wood coatings are more specific.

NOTE In some countries, the test is called a “block or blocking resistance” test.

## 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 927-1, *Paints and varnishes - Coating materials and coating systems for exterior wood - Part 1: Classification and selection*

EN ISO 1513, *Paints and varnishes - Examination and preparation of test samples (ISO 1513)*

EN ISO 2808, *Paints and varnishes - Determination of film thickness (ISO 2808)*

EN ISO 15528, *Paints, varnishes and raw materials for paints and varnishes - Sampling (ISO 15528)*

ISO 554, *Standard atmospheres for conditioning and/or testing - Specifications*

## 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 <http://www.iso.org/obp>

### 3.1

#### **blocking**

unwanted adhesion between two surfaces, at least one of which has been coated, when they are left in contact under load after a given drying period

Note 1 to entry: Blocking does not apply to bonding of coated surfaces after insufficient drying.

Note 2 to entry: In practice, blocking can occur if coated wood panels are stacked on each other or on windows and doors if the frames are in direct contact with the faces. Blocking depends on temperature and load (pressure).

Note 3 to entry: The term blocking is also sometimes used to describe agglomerated caked powder.

Note 4 to entry: Unwanted adhesion can lead to damage upon separation.

[SOURCE: EN ISO 4618:2014, 2.30, modified – added Notes to entry.]

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-