



BSI Standards Publication

Paints and varnishes – Coating materials and coating systems for exterior wood

Part 3: Natural weathering test

National foreword

This British Standard is the UK implementation of EN 927-3:2019. It supersedes BS EN 927-3:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee STI/28, Paint systems for non-metallic substrates.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Peintures et vernis - Produits de peinture et systèmes de peinture pour le bois en extérieur - Partie 3 : Essai de vieillissement naturel

Beschichtungsstoffe - Beschichtungsstoffe und Beschichtungssysteme für Holz im Außenbereich - Teil 3: Freibewitterung

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European foreword

This document (EN 927-3:2019) 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of an identical text or by endorsement, at the latest by March 2020, and conflicting national standards shall be withdrawn at the latest by March 2020.

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 EN 927-3:2012.

The main technical changes in comparison with the previous edition are:

- a) the provision for using alternative wood species has been updated;
- b) the Internal Comparison Product (ICP) has been replaced by a nominated reference material as Weathering Reference Material (WRM);
- c) mould growth assessment has been extended to visual disfigurement by microorganisms;
- d) former Annex A was deleted;
- e) new Annex G for typical properties for common wood species was added;
- f) new Annex H for adhesive tape testing was added;
- g) new Annex I for thermal/chemical modification of wood was added;
- h) standard editorially revised.

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1 Scope

This document specifies a natural weathering test for exterior wood coating systems mainly intended for decoration and protection of planed and sawn wood.

The test provides a means of evaluating the performance of a wood coating system during outdoor exposure. It forms the basis for the performance specification in accordance with EN 927-2. It also facilitates the comparison of coating systems performance on different substrates including the wood species, or other wood modifications.

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 927-2, *Paints and varnishes — Coating materials and coating systems for exterior wood — Part 2: Performance specification*

EN 16492, *Paints and varnishes — Evaluation of the surface disfigurement caused by fungi and algae on coatings*

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

EN ISO 2409, *Paints and varnishes — Cross-cut test (ISO 2409)*

EN ISO 2808:2007, *Paints and varnishes — Determination of film thickness (ISO 2808:2007)*

EN ISO 2810, *Paints and varnishes — Natural weathering of coatings — Exposure and assessment (ISO 2810)*

EN ISO 2813, *Paints and varnishes — Determination of gloss value at 20°, 60° and 85° (ISO 2813)*

EN ISO 4628-1:2016, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 1: General introduction and designation system (ISO 4628-1:2016)*

EN ISO 4628-2, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 2: Assessment of degree of blistering (ISO 4628-2)*

EN ISO 4628-4, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 4: Assessment of degree of cracking (ISO 4628-4)*

EN ISO 4628-5, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 5: Assessment of degree of flaking (ISO 4628-5)*

EN ISO 4628-6, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 6: Assessment of degree of chalking by tape method (ISO 4628-6)*

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