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# **BSI Standards Publication**

Modular mechanical locked floor coverings (MMF) — Specification, requirements and test method for multilayer modular panels for floating installation



BS EN 16511:2023 BRITISH STANDARD

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## **National foreword**

This British Standard is the UK implementation of EN 16511:2023. It supersedes BS EN 16511:2014+A1:2019, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/60, Resilient and Laminate Floor Coverings.

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

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### Amendments/corrigenda issued since publication

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# **EUROPÄISCHE NORM**

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### **English Version**

# Modular mechanical locked floor coverings (MMF) -Specification, requirements and test method for multilayer modular panels for floating installation

Revêtements de sol modulaires à verrouillage mécanique (MMF) - Spécifications, exigences et méthodes d'essai pour panneaux multicouches modulaires pour pose flottante Modulare mechanisch verriegelnde Bodenbeläge (MMF) - Spezifikation, Anforderungen und Prüfverfahren für mehrschichtige modulare Paneele für die schwimmende Verlegung

This European Standard was approved by CEN on 10 April 2023.

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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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## EN 16511:2023 (E)

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## **European foreword**

This document (EN 16511:2023) has been prepared by Technical Committee CEN/TC 134 "Resilient, textile and laminate floor coverings", the secretariat of which is held by NBN.

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 2023, and conflicting national standards shall be withdrawn at the latest by November 2023.

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 16511:2014+A1:2019.

The main changes compared to the previous edition are listed below:

- a) title changed;
- b) terms and definitions added in Clause 3;
- c) EN 17539 included as test method for general requirements in 5.1;
- d) light fastness and dimensional stability added as general requirements in 5.1;
- e) classification requirements divided in floorings with wear layers (Table 2) and floorings with non-film-forming oil or wax finishes (Table 3);
- f) additional technical characteristics for moisture resistance added as Table 4;
- g) Annex B presenting a test method for the classification of the flexibility added.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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

#### EN 16511:2023 (E)

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### 1 Scope

This document specifies the characteristics of multilayer mechanical locked floor covering with a wear-resistant and decorative surface layer supplied in panels (either tile or plank form). The floor panels are considered suitable for domestic and commercial levels of use and designed for floating installation.

This document does not apply to resilient floor panels for loose-laying according to EN ISO 20326, to multilayer wood floorings according to EN 13489, to wood veneer floor coverings according to EN 14354, to laminate floor covering according to EN 13329, EN 14978 and EN 15468 nor to products specified in EN ISO 10581, EN ISO 10582, EN ISO 24011, EN 12104 and ISO 14486.

This document is applicable to areas which are subject to frequent wetting, e.g. bathrooms, laundry rooms or saunas, only if specified by the producer.

This document also includes requirements for marking and packaging.

In Annex A (informative), optional properties are given. In Annex B (informative), a test method for the classification of the flexibility is given.

### 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 317, Particleboards and fibreboards - Determination of swelling in thickness after immersion in water

EN 438-2, High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (usually called laminates) - Part 2: Determination of properties

EN 13329:2006+A1:2008, Laminate floor coverings - Elements with a surface layer based on aminoplastic thermosetting resins - Specifications, requirements and test methods

EN 16094, Laminate floor coverings - Test method for the determination of micro-scratch resistance

EN 17539, Modular mechanical locked floor coverings (MMF) - Determination of geometrical characteristics

EN 20105-A02, Textiles - Tests for colour fastness - Part A02: Grey scale for assessing change in colour (ISO 105-A02)

EN ISO 105-B02:2014, Textiles - Tests for colour fastness - Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:2014)

EN ISO 178:2019, Plastics - Determination of flexural properties (ISO 178:2019)

EN ISO 4918, Resilient, textile and laminate floor coverings - Castor chair test (ISO 4918)

EN ISO 10874, Resilient, textile and laminate floor coverings - Classification (ISO 10874)

EN ISO 16581, Resilient and laminate floor coverings - Determination of the effect of simulated movement of a furniture leg (ISO 16581)

EN ISO 23999, Resilient floor coverings - Determination of dimensional stability and curling after exposure to heat (ISO 23999)