BS 8201:2011



BSI Standards Publication

Code of practice for installation of flooring of wood and wood-based panels



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BS 8201:2011 BRITISH STANDARD

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 72, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI and came into effect on 30 October 2011. It was prepared by Technical Committee B/543, Round and sawn timber. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 8201:1987, which is withdrawn.

Information about this document

This British Standard includes recommendations relating to the work involved in laying flooring and illustrates some typical constructions on which it may be laid.

This is a full revision of the standard, and introduces the following principal changes:

- information and recommendations have been rationalized in consideration of current best practice;
- new materials and product availability;
- materials are included in a new Section 2; and
- details provided are now in relation only to wood and wood-based panels installed as, or as a component part of, finished wood flooring

General recommendations applicable to all types of wood flooring are contained within Section 1, Section 2, Section 3 and Section 9, with recommendations specific to individual types of flooring given in Sections 4 to 8. Because some recommendations are applicable to more than one individual type of floor, this involves some repetition. It was considered that a limited degree of repetition to ensure reasonable completeness of each section would be preferable to excessive cross-referencing.

Annex A describes the test method for use in conjunction with the recommendations given in **12.4.6**.

Increasingly, in addition to material selection based on performance capabilities, suitability and appearance, consideration is being given to the specification of wood and wood products with regard to legality and sustainability of source.

Whilst this aspect of material specification is not within the remit of British Standards (this might be set to change with the desire of the European Commission to see environmental criteria included in EN product standards) the committee believe it to be of sufficient importance that reference to provisions being made in the UK to address this issue is included in the new Annex B.

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

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Presentational conventions

The provisions in this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

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

Compliance with a British Standard cannot confer immunity from legal obligations.

Section 1: General

Introduction

This British Standard gives recommendations and guidance on the material, environment and installation variables that in combination have a fundamental effect on the achievement of satisfactory performance and serviceability of finished wood flooring.

The content of the document has been modified to reflect more appropriately wood and wood-based panels installed as finished flooring and, of necessity, as underlayment for finished wood flooring but not for subsequent installation of carpet or resilient flooring.

The installation and use of wood-based panels as primarily a load-bearing surface has been cross referenced to BS 8103-3.

The words "timber" and "wood" in this British Standard cover softwoods, hardwoods and wood-based panels, as appropriate in the context.

1 Scope

This British Standard gives recommendations for laying the following types of flooring:

- a) board;
- b) pre-assembled board;
- c) strip;
- d) mosaic;
- e) overlay;
- f) parquet;
- g) block;
- h) end grain flooring;
- i) multi-layer; and
- j) wood-based panels.

This British Standard does not cover the protection afforded to a floor by floor coverings or surface finishes.

This British Standard does not cover floors for temporary structures or floors intended for limited use. Different considerations might apply to these floors.

NOTE For laminate flooring, see BS 8425.

Bamboo flooring is also not covered by this British Standard.

The hygrometer test for dampness of concrete bases is given in Annex A. Guidance on the selection of wood species is given in Annex B.

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.

Standards publications

BS 1187, Specification for wood blocks for floors

BS 1202-1, Specification for nails - Part 1: Steel nails

BS 1210, Specification for wood screws

BS 1297, Specification for tongued and grooved softwood flooring

BS 4050-2, Specification for mosaic parquet panels – Part 2: Classification and quality requirements

BS 6100-8, Building and civil engineering – Vocabulary – Part 8: Work with timber and wood-based panels

BS 8103-3, Structural design of low-rise buildings – Part 3: Code of practice for timber floors and roofs for housing

BS 8204-1 Screeds, bases and in situ floorings – Part 1: Concrete bases and cementitious levelling screeds to receive floorings – Code of practice

BS 8204-4:2004 Screeds, bases and in situ floorings – Part 4: Cementitious terrazo wearing surfaces – Code of practice

BS 8417:2011, Preservation of timber

BS EN 204, Classification of thermoplastic wood adhesives for non-structural applications

BS EN 300:2006, Oriented strand boards (OSB) – Definitions, classification and specifications

BS EN 301, Adhesives, phenolic and aminoplastic, for loading bearing timber structures – Classification and performance requirements

BS EN 312:2003, Particleboards – Specifications

BS EN 636:2003, Plywood – Specifications

BS EN 1313-2, Round and sawn timber – Permitted deviations and preferred sizes – Part 2: Hardwood sawn timber

BS EN 1991-1-1, Eurocode 1 – Actions on structures. Part 1-1: General actions – Densities, self-weight, imposed loads for buildings

NA to BS EN 1991-1-1, UK National Annex to Eurocode 1 – Actions on structures. General actions – Part 1-1: Densities, self-weight, imposed loads for buildings

BS EN 1995-1-1, Eurocode 5 – Design of timber structures – Part 1-1: General – Common rules and rules for buildings

BS EN 13226, Wood flooring – Solid parquet elements with grooves and/or tongues

BS EN 13228, Wood flooring – Solid wood overlay flooring elements including blocks with an interlocking system

BS EN 13629, Wood flooring – Solid pre-assembled hardwood board

BS EN 13986, Wood-based panels for use in construction – Characteristics, evaluation of conformity and marking

BS EN 14342:2005, Wood flooring – Characteristics, evaluation of conformity and marking

BS EN 14904, Surfaces for sports areas – Indoor surfaces for multi-sports use – Specification

DD CEN/TS 15676, Wood flooring - Slip resistance - Pendulum test

Other publications

[N1] Property Care Association. *Remedial Timber Treatment Code of Practice*. Huntingdon: PCA, 2008.

3 Terms and definitions

For the purposes of this British Standard, the terms and definitions given in BS 6100-8 and the following apply.

3.1 base/subfloor

element that supports the flooring

3.2 battens

solid wood or laminated wood to enable timber flooring to be mechanically fixed and raised off a solid subfloor or base

NOTE Battens are usually floating. They may be used with cradles or other levelling systems.

3.3 block flooring

softwood or hardwood blocks either square edged or with a system of interlocking into each other

3.4 concrete subfloor

mass concrete base (floor slab) onto which wood flooring, or a finishing screed prior to installation of wood flooring, is to be applied

3.5 damp-proof membrane

continuous layer of impervious material installed under a concrete slab between the slab and the ground

3.6 end grain block flooring

flooring of softwood or hardwood blocks with the wearing surface at right angles to the grain

3.7 end matched

joint at the end of the strip or board, square-ended and tightly abutted, usually interlocking in the form of a tongued and grooved joint

NOTE This term does not in any way refer to the colour or grain pattern of the timber.

3.8 face

better or preferred surface of the element

3.9 fixed floor

method of construction where the flooring is fixed directly to the base

NOTE E.g. fixed to joists or glued down to the base. [See Figure 1 and Figure 3a).]

3.10 floating floor

method of construction where the flooring is fixed to a floating batten or laid upon a base, with a resilient underlay between, without being positively fixed to the base

NOTE See Figure 2.

3.11 flooring

upper layer of a floor providing a finished surface; including wood board and strip, block, mosaic, overlay and parquet, and wood-based panel products