



BSI Standards Publication

## Wall and floor tiling

Part 3: Design and installation of internal and external ceramic and mosaic, natural stone and terrazzo flooring, and internal agglomerate stone flooring in normal conditions – Code of practice

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# Foreword

## Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 May 2024. It was prepared by Technical Committee B/539, *Ceramic tiles and other rigid tiling*. A list of organizations represented on this committee can be obtained on request to the committee manager.

## Supersession

This part of BS 5385 supersedes [BS 5385-3:2014](#) and [BS 5385-5:2009](#), which are withdrawn.

## Relationship with other publications

This part of BS 5385 is one of a series dealing with the installation of floor and wall tiling, the other parts being:

- Part 1: Design and installation of ceramic natural stone and mosaic wall tiling in normal internal conditions – Code of practice;
- Part 2: Design and installation of external ceramic and mosaic wall tiling in normal conditions – Code of practice; and
- Part 4: Design and installation of ceramic and mosaic tiling in special conditions – Code of practice.

## Information about this document

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

- a) inclusion of natural stone, resin agglomerated stone and terrazzo;
- b) inclusion of calcium sulfate-based boards;
- c) recommendations on movement joints have been updated;
- d) inclusion of a subclause on steps, stairs and slopes (see [6.2.4](#));
- e) inclusion of a subclause on light reflectance values (see [6.2.5](#));
- f) inclusion of a subclause on the safe handling of materials (see [6.2.6](#));
- g) inclusion of slabs to pedestals; and
- h) updated recommendations on slip resistance.

**Assessed capability.** Users of this British Standard are advised to consider the desirability of quality system assessment and registration against the appropriate standard in the BS EN ISO 9000 series by an accredited third-party certification body.

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Users may substitute any of the recommendations in this British Standard with practices or procedures that result in an equivalent or better outcome. Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

## Presentational conventions

The provisions of 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.*

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

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

Attention is drawn to the following statutory regulations:

- Building and Construction Regulations under the Factories Act 1961 [1];
- Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 [2];
- Manual Handling Operations Regulations 1992 [3].

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# Section 1 General

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## 1 Scope

This part of BS 5385 specifies recommendations for the design, installation and maintenance of floor tiling using ceramic tiles, mosaic, terrazzo tile and slab and natural stone internal and external floorings, and agglomerated stone for internal flooring.

*NOTE 1* Tiles and slabs can be installed on concrete, cement and sand screed, calcium sulfate-based screeds, timber, flooring grade asphalt or existing hard floor finishes in normal conditions, using the methodology detailed in this British Standard. In addition, terrazzo and natural stone slabs can be laid on a cement:sand or mortar bed. For special conditions, see [BS 5385-4](#). Tile fittings for use as skirting, step treads and channels are given in [Annex A](#).

*NOTE 2* Stone tiles and slabs selected for use as external flooring laid only on an adhesive bed are limited to balconies, roof terraces and patios in residential applications. For all other external applications for natural stone flooring/paving, see [BS 7533-101](#).

*NOTE 3* Tiles and slabs can be installed on appropriate acoustic floors and pedestal systems.

*NOTE 4* Where the floor tiling installation needs to meet specific functional or environmental requirements, or to assist in counteracting potentially detrimental effects on the installation and/or the structure, see [BS 5385-4](#).

*NOTE 5* The special conditions described in [BS 5385-4](#), e.g. swimming pools, shower areas, etc. are given in [Annex B](#). [Annex C](#) specifies recommendations for tiling onto underfloor heated substrates and [Annex D](#) contains information on pumped calcium sulfate-based screeds. Recommendations for the design and laying of levelling screeds are given in [Annex E](#). Reference is made to tiles bedded directly to a concrete substrate, however for the design and construction of concrete substrates, see [BS 8204-1](#). [Annex F](#) contains a method for assessing levels and surface regularity and [Annex G](#) has guidance on cement and sand bedding. [Annex H](#) provides guidance on the reduction of slip hazards.

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## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions of this document<sup>1)</sup>. 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 4483](#), *Steel fabric for the reinforcement of concrete – Specification*

[BS 4551](#), *Mortar – Methods of test for mortar – Chemical analysis and physical testing*

[BS 5385-4](#), *Wall and floor tiling – Part 4: Design and installation of ceramic and mosaic tiling in special conditions – Code of practice*

[BS 6100-0](#), *Building and civil engineering – Vocabulary – Part 0: Introduction and index*

[BS 6213](#), *Selection of construction sealants – Guide*

[BS 6925:1988](#), *Specification for mastic asphalt for building and civil engineering (limestone aggregate)*

[BS 8000-11](#), *Workmanship on building sites – Part 11: Internal and external wall and floor tiling – Ceramic and agglomerated stone tiles, natural stone and terrazzo tiles and slabs, and mosaics – Code of practice*<sup>2)</sup>

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<sup>1)</sup> Documents that are referred to solely in an informative manner are listed in the Bibliography.

<sup>2)</sup> This document also gives informative references to [BS 8000-11:2011](#).