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BS 5385-1:2018



BSI Standards Publication

Wall and floor tiling –

Part 1: Design and installation of ceramic, natural stone and mosaic wall tiling in normal internal conditions – Code of practice

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Summary of pages

This document comprises a front cover, and inside front cover, pages i to iv, pages 1 to 49, an inside back cover and a back cover.

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Foreword

Publishing information

This part of BS 5385 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 June 2018. 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 its secretary.

Supersession

This part of BS 5385 supersedes BS 5385-1:2009, which is withdrawn.

Information about this document

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

- References have been updated to reflect changes in standards documents and in legislation.
- Consideration has been given to recent trends in backgrounds for tiling, and to the increasing variety of tiles in terms of tile type, and of size and thickness resulting in the exclusion of wood-based substrates for fixing tiles directly onto.
- Ceramic tile fittings for corners and edges etc., are less readily available than hitherto and are now excluded from the scope of BS EN 14411; details are therefore not included in this British Standard. Individual manufacturers can give advice about the range of types and sizes of fittings they produce, and their availability.
- Throughout this British Standard, references to tiles and tiling are intended to apply equally to mosaics and mosaic work, except where the recommendations for mosaics are different.
- Additional information regarding the workmanship element of ceramic tiling contained in BS 8000-11:2011.
- New annex on sand and cement (as in Part 3).

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 2: *Design and installation of external ceramic and mosaic wall tiling in normal conditions – Code of practice;*
- Part 3: *Design and installation of internal and external ceramic and mosaic floor tiling in normal conditions – Code of practice;*
- Part 4: *Design and installation of ceramic and mosaic tiling in special conditions – Code of practice;*
- Part 5: *Design and installation of terrazzo, natural stone, agglomerated stone tile and slab flooring – Code of practice.*

Attention is drawn to the following.

- The Construction (Health, Safety and Welfare) Regulations [1];
- The Lifting Operations and Lifting Equipment Regulations [2];
- The Manual Handling Operations Regulations [3]

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As a code of practice, this part of BS 5385 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 part of BS 5385 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.

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.

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1 Scope

This part of BS 5385 gives recommendations for the design and installation of ceramic, natural stone and mosaic wall tiling in normal internal conditions; a description of tile types can be found in [Annex A](#). This part of BS 5385 deals with classes and types of background and their suitability to receive tiling using the following fixing methods:

- a) bedding in cementitious adhesives on an intermediate substrate or as a direct bedding method;
- b) bedding in organic-based adhesive (dispersion or reaction resin) on an intermediate substrate or as a direct bedding method; and
- c) bedding in cement:sand mortar on rendering or as a direct bedding method.

Natural stone modular tiles as defined in BS EN 12057 are included within the scope of this British Standard, but natural stone slabs (i.e. units with nominal thickness greater than 12 mm thick) are excluded.

Ceramic tile fittings for corners and edges etc., are less readily available than hitherto, and are excluded from this British Standard.

Where the tiling installation is to meet special functional or environmental requirements, or to assist in counteracting potentially detrimental effects on the installation and/or the structure, see BS 5385-4. The special conditions dealt with in BS 5385-4, for example, swimming pools, shower areas, etc., are listed in [Annex B](#).

Agglomerated stone tiles and slabs are not included within the scope of this British Standard. Dimensionally similar to natural stone tiles, they possess different physical and chemical characteristics as a result of the various natural stone, mineral and binder constituents from which they are manufactured.

NOTE 1 Agglomerated stone tiles and slabs are natural stone and/or mineral fragments set in a binder subsequently cut to form tiles with a surface that is normally ground and polished to finish.

Metal, plastic, resin or mirror tiles and glass tiles of similar construction are not included within the scope of this British Standard, as these require different techniques, adhesives etc., to traditional tiles.

NOTE 2 Mirror tiles are tiles manufactured from float or plate glass with an applied backing.

For the purposes of this British Standard "normal conditions" means normal environmental temperatures and humidity. However, it is not to be inferred from this that all recommendations made in this British Standard are unsuitable for more extreme conditions. Manufacturers' instructions contain limitations of their products.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 4551, *Mortar — Methods of test for mortar and screed — Chemical analysis and physical testing*

BS 5385-2, *Wall and floor tiling — Part 2: Design and installation of external ceramic, natural stone and mosaic wall tiling in normal conditions — Code of practice*

BS 5385-4, *Wall and floor tiling — Part 4: Design and installation of ceramic and mosaic tiling in specific conditions — Code of practice*