

SS 665 : 2020
(ICS 91.100.23; 91.200)

SINGAPORE STANDARD

Code of practice for ceramic wall and floor tiling



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The Technical Committee set up the Working Group on Ceramic Wall and Floor Tiling to prepare this standard. The Working Group consists of the following experts who contribute in their *individual capacity*:

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Members	: Ms Wendy Ang
	Mr Mark Anthony Carolino
	Mr Ken Ho
	Mr Loo Sheau Ming
	Mr Alvin Tan

Members : Mr Raymond Tan Hai Chuan
Ms Rynne Tang Hui Shan
Ms Tay Hui Ze
Ms Wan Siew Fung
Ms Jesseline Yap

The organisations in which the experts of the Working Group are involved are:

Building and Construction Authority
Guocera Marketing (S) Pte Ltd
Housing & Development Board
Land Transport Authority
Laticrete South East Asia Pte Ltd
Maek Consulting Pte Ltd
Mapei Far East Pte Ltd
Setsco Services Pte Ltd
Singapore Green Building Council
Singapore Institute of Architects

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Foreword

This Singapore Standard was prepared by the Working Group on Ceramic Wall and Floor Tiling set up by the Technical Committee on Architectural Works under the purview of BCSC.

This development of this Singapore Standard resulted from the review of CP 68:1997 – “Code of practice for ceramic wall and floor tiling”. SS 665 replaces CP 68.

The key differences from CP 68 are as follows:

- (a) Adopting and harmonising with BS 5385-1 for internal wall tiling and BS 5385-3 for both internal and external floor tiling.
- (b) Aligning with local industrial practices such as the Construction Quality Assessment System (CONQUAS), including local terminologies.
- (c) Incorporating the latest recommendations and requirements for tile adhesives and tile grouts.
- (d) Incorporating recommendations made in the latest relevant local and overseas standards.

It is presupposed that in the course of their work, users will comply with all relevant regulatory and statutory requirements. Some examples of relevant regulations and acts are listed in the Bibliography. The Singapore Standards Council and Enterprise Singapore will not be responsible for identifying all of such legal obligations.

In preparing this standard, reference was made to the following publications:

- 1. BS 5385-1 Wall and floor tiling – Part 1: Design and installation of ceramic, natural stone and mosaic wall tiling in normal internal conditions – Code of practice
- 2. BS 5385-3 Wall and floor tiling – Part 3: Design and installation of internal and external ceramic and mosaic floor tiling in normal condition – Code of practice

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Acknowledgement is made for the use of information from the above organisations.

This standard is expected to be used by developers, architects, interior designers, contractors, suppliers and manufacturers of ceramic tiles, tile adhesives and tile grouts.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "Mature Standards". Mature Standards will not be subject to further review, unless there are requests to review such standards.*
2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

Code of practice for ceramic wall and floor tiling

1 Scope

This standard provides requirements for the design and installation of ceramic and mosaic floor and wall tiling in normal internal and external conditions. This standard also deals with classes and types of backgrounds 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 adhesives (dispersion or reaction resin) on an intermediate substrate or as a direct bedding method.

This standard does not cover both the natural and agglomerated stone tiles. It also does not cover the design and installation of ceramic tiles in specific conditions such as in a swimming pool, and in situations where there are specific environmental or functional requirements, such as the need for a sterile environment and conditions that are potentially detrimental to either the installation or the background.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 6213	Selection of construction sealants. Guide
BS 8204-1	Screeds, bases and in situ floorings. Concrete bases and cementitious levelling screeds to receive floorings. Code of practice
EN 998-1	Specification for mortar for masonry. Rendering and plastering mortar
EN 1991-1-1	Eurocode 1. Actions on structures. General actions. Densities, self-weight, imposed loads for buildings
EN 12004-1	Adhesives for ceramic tiles – Part 1: Requirements, assessment and verification of constancy of performance, classification and marking
EN 12808	Grouts for tiles <ul style="list-style-type: none"> Part 1 Determination of chemical resistance of reaction resin mortars Part 2 Determination of resistance to abrasion Part 3 Determination of flexural and compressive strength Part 4 Determination of shrinkage Part 5 Determination of water absorption
EN 13813	Screed material and floor screeds. Screed material. Properties and requirements
EN 13888	Grout for tiles. Requirements, evaluation of conformity, classification and designation
EN 13914-2	Design, preparation and application of external rendering and internal plastering. Internal plastering

ISO 11600	Building construction – Jointing products – Classification and requirements for sealants
ISO 13007-1	Ceramic tiles – Grouts and adhesives – Part 1: Terms, definitions and specifications for adhesives
ISO 13007-3	Ceramic tiles – Grouts and adhesives – Part 3: Terms, definitions and specification for grouts
SS 485	Specification for slip resistance classification of pedestrian surface materials