

Australian Standard[®]

**Methods of sampling and testing
ceramic tiles**

**Part 9: Determination of resistance
to thermal shock**

[ISO title: Ceramic tiles, Part 9: Determination of resistance to thermal shock]

This Australian Standard was prepared by Committee BD/44, Fixing of Ceramic Tiles. It was approved on behalf of the Council of Standards Australia on 28 February 1997 and published on 5 June 1997.

The following interests are represented on Committee BD/44:

Adhesives and Sealants Manufacturers Association of Australia
The Association of Consulting Engineers Australia
Australian Chamber of Commerce and Industry
Australian Stone and Terrazzo Association
Australian Stone Industry Association
Australian Tile Council
Ceramic Tile Manufacturers Association
Construction, Forestry, Mining and Energy Union
CSIRO, Division of Building, Construction and Engineering
Department of Fair Trading, N.S.W.
Master Builders Australia
New South Wales TAFE Commission
N.S.W. Tile Industry Training Committee

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD/44, Fixing of Ceramic Tiles. It is identical with and has been reproduced from ISO 10545-9:1994, *Ceramic tiles, Part 9: Determination of resistance to thermal shock*, and is the result of a consensus among the representatives on the Joint Committee that it be produced as an Australian Standard.

The Standard is one of a series of methods of sampling and testing ceramic tiles that are currently under development.

For the purpose of this Australian Standard, the ISO/IEC text should be modified as follows:

- (a) *Terminology* The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.
- (b) *Decimal marker* A full point should be substituted for a comma where it appears on a decimal marker.
- (c) *References* The references to International Standards should be replaced by references to the following Australian Standards:

<i>Reference to International Standard or other Publication</i>	<i>Australian Standard</i>
ISO	AS
13006 Ceramic tiles— Definitions, classification, characteristics and marking	—
10545-3 Ceramic tiles— Part 3: Determination of water absorption, apparent porosity, apparent relative density and bulk density	—

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10545-9 was prepared by Technical Committee ISO/TC 189, *Ceramic tile*.

ISO 10545 consists of the following parts, under the general title *Ceramic tiles*:

- *Part 1: Sampling and basis for acceptance*
- *Part 2: Determination of dimensions and surface quality*
- *Part 3: Determination of water absorption, apparent porosity, apparent relative density and bulk density*
- *Part 4: Determination of modulus of rupture and breaking strength*
- *Part 5: Determination of impact resistance by measurement of coefficient of restitution*
- *Part 6: Determination of resistance to deep abrasion for unglazed tiles*
- *Part 7: Determination of resistance to surface abrasion for glazed tiles*
- *Part 8: Determination of linear thermal expansion*
- *Part 9: Determination of resistance to thermal shock*
- *Part 10: Determination of moisture expansion*
- *Part 11: Determination of crazing resistance for glazed tiles*
- *Part 12: Determination of frost resistance*
- *Part 13: Determination of chemical resistance*
- *Part 14: Determination of resistance to stains*
- *Part 15: Extraction of lead and cadmium from glazed tiles*
- *Part 16: Determination of colour differences*
- *Part 17: Determination of coefficient of friction*