AS 4662—2003
ISO 13006:1998

Australian Standard™

Ceramic tiles—Definitions, classification, characteristics and marking

Standards Australia

This Australian Standard was prepared by Committee BD-044, Fixing of Ceramic Tiles. It was approved on behalf of the Council of Standards Australia on 31 January 2003 and published on 10 March 2003.

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Association of Consulting Engineers Australia

Australian Building Codes Board

Australian Chamber of Commerce and Industry

Australian Industry Group

Australian Stone and Terrazzo Association

Australian Stone Industry Association

Australian Tile Council

Ceramic Tile Manufacturers Association

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Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

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PREFACE

This Standard was prepared by the Standards Australia Committee BD-044, Fixing of Ceramic Tiles.

This Standard is identical with and has been reproduced from ISO 13006:1998(E), Ceramic tiles—Definitions, classification, characteristics and marking.`

This Standard is the result of consensus among the representatives on the Joint Committee that it be produced as an Australian Standard.

Appendix ZA details a variation to ISO 13006:1998 for Australian conditions. Explanation for the basis of the variation is as follows:

A note has been added to Clause 8.1(b), Paragraphs A3.1(b), B3.1(b), C3.1(b), D3.1(b), E3.1(b), F3.1(b), G3.1(b), H3.1(b), J3.1(b), K3.1(b), L3.1(b), and L3.3(d) to assist with local interpretation and understanding of 'First Quality'.

An additional sentence to Note 2 of Table 1 has been added to provide guidance for dry-pressed unglazed tiles with water absorption greater than 10%.

A change of the glazing classification in second example in Paragraph L3.3 was made to make the classification consistent with Table 1.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text 'this standard' should read 'this Australian Standard'.

(c) A full point should be substituted for a comma when referring to a decimal marker.

(d) References to International Standards should be replaced by reference to the following Australian/New Zealand Standards:

Reference to International Standard or other Publication		Australian or Australian/New Zealand Standard	
ISO		AS	
10545	Ceramic tiles	4459	Methods of sampling and testing ceramic tiles
10545-1	Part 1: Sampling and basis for acceptance	4459.1	Part 1: Sampling and basis for acceptance
10545-2	Part 2: Determination of dimensions and surface quality	4459.2	Part 2: Determination of dimensions and surface quality
10545-3	Part 3: Determination of water absorption, apparent porosity, apparent relative density and bulk density	4459.3	Part 3: Determination of water absorption, apparent porosity, apparent relative density and bulk density
10545-4	Part 4: Determination of modulus of rupture and breaking strength	4459.4	Part 4: Determination of modulus of rupture and breaking strength

Reference to International Standard or other Publication			Australian or Australian/New Zealand Standard		
10545-5	Part 5:	Determination of impact resistance by measurement of coefficient of restitution	4459.5	Part 5:	Determination of impact resistance by measurement of coefficient of restitution
10545-6	Part 6:	Determination of resistance to deep abrasion for unglazed tiles	4459.6	Part 6:	Determination of resistance to deep abrasion for unglazed tiles
10545-7	Part 7:	Determination of resistance to surface abrasion for glazed tiles	4459.7	Part 7:	Determination of resistance to surface abrasion for glazed tiles
10545-8	Part 8:	Determination of linear thermal expansion	4459.8	Part 8:	Determination of linear thermal expansion
10545-9	Part 9:	Determination of resistance to thermal shock	4459.9	Part 9:	Determination of resistance to thermal shock
10545-10	Part 10:	Determination of moisture expansion	4459.10	Part 10:	Determination of moisture expansion
10545-11	Part 11:	Determination of crazing resistance for glazed tiles	4459.11	Part 11:	Determination of crazing resistance for glazed tiles
10545-12	Part 12:	Determination of frost resistance	4459.12	Part 12:	Determination of frost resistance
10545-13	Part 13:	Determination of chemical resistance	4459.13	Part 13:	Determination of chemical resistance
10545-14	Part 14:	Determination of resistance to stains	4459.14	Part 14:	Determination of resistance to stains
10545-15	Part 15:	Determination of lead and cadmium given off by glazed tiles	4459.15	Part 15:	Determination of lead and cadmium given off by glazed tiles
10545-16	Part 16:	Determination of small colour differences	AS/NZS 4586		Slip resistance classification of new pedestrian surface materials
10545-17	Part 17:	Determination of coefficient of friction			

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 13006 was prepared by Technical Committee ISO/TC 189, *Ceramic tile*.

Annexes A to L form an integral part of this International Standard. Annexes M to P and the Bibliography are for information only.

CONTENTS

AUSTRALIAN STANDARD

Ceramic tiles — Definitions, classification, characteristics and marking

1 Scope

This International Standard defines terms and establishes classifications, characteristics and marking requirements for ceramic tiles of the best commercial quality (first quality).

NOTE ISO 10545 describes the test procedures required to determine the product characteristics listed in ISO 13006. ISO 10545 is divided into parts each describing a specific test procedure or related matter.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1006:1983, *Building construction — Modular coordination — Basic module.*

ISO 10545-1:1995, *Ceramic tiles — Part 1: Sampling and basis for acceptance.*

ISO 10545-2:1995, *Ceramic tiles — Part 2: Determination of dimensions and surface quality.*

ISO 10545-3:1995, *Ceramic tiles — Part 3: Determination of water absorption, apparent porosity, apparent relative density and bulk density.*

ISO 10545-4:1994, *Ceramic tiles — Part 4: Determination of modulus of rupture and breaking strength.*

ISO 10545-5:1996, *Ceramic tiles — Part 5: Determination of impact resistance by measurement of coefficient of restitution.*

ISO 10545-6:1995, *Ceramic tiles — Part 6: Determination of resistance to deep abrasion for unglazed tiles.*

ISO 10545-7:1996, *Ceramic tiles — Part 7: Determination of resistance to surface abrasion for glazed tiles.*

ISO 10545-8:1994, *Ceramic tiles — Part 8: Determination of linear thermal expansion.*

ISO 10545-9:1994, *Ceramic tiles — Part 9: Determination of resistance to thermal shock.*

ISO 10545-10:1995, *Ceramic tiles — Part 10: Determination of moisture expansion.*

ISO 10545-11:1994, *Ceramic tiles — Part 11: Determination of crazing resistance for glazed tiles.*

ISO 10545-12:1995, *Ceramic tiles — Part 12: Determination of frost resistance.*

ISO 10545-13:1995, *Ceramic tiles — Part 13: Determination of chemical resistance.*

ISO 10545-14:1995, *Ceramic tiles — Part 14: Determination of resistance to stains.*

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