

Australian Standard™

Methods of sampling and testing ceramic tiles

Method 16: Determination of small colour differences (ISO 10545-16:1999 MOD)

AS 4459.16—2005

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee BD-044, Fixing of Ceramic Tiles. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

This Standard is technically modified and reproduced from ISO 10545-16:1999, *Ceramic tiles, Part 16: Determination of small colour differences*.

Appendix ZA details a variation to ISO 10545-16:1999 for Australian conditions. Explanation for the basis of this variation is as follows:

- (a) Clause 1 has been modified to—
 - (i) remove the restriction on the application only to ‘plain coloured glazed tiles’ to allow unglazed tiles to be tested; and
 - (ii) remove the note suggesting restriction to use if only in a specification.
- (b) The Notes to Clause 3.5 and Clause 7.2 have been modified to provide guidance on the *cf* value for unglazed tiles.
- (c) Clause 7.1.3 has been modified to provide guidance on the *l:c* ratio for matt tiles.

The changes to ISO 10545-16:1999 are indicated by a marginal bar set adjacent to the clause, table, figure, or part thereof.

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 International Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

Currently in preview, click buy full version

Ceramic tiles —

Part 16:

Determination of small colour differences

1 Scope

This part of ISO 10545 describes a method for utilizing colour measuring instruments for quantifying the small colour differences between plain coloured glazed ceramic tiles, which are designed to be of uniform and consistent colour. It permits the specification of a maximum acceptable value which depends only on the closeness of match and not on the nature of the colour difference.

Colour variations produced for artistic purposes are not covered in this part of ISO 10545.

NOTE This test should only be used when small colour differences between plain coloured glazed tiles are important in a specification.

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 10545. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 10545 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.

CIE Publication No. 15.2:1986, *Colorimetry*.

ISO 105-J03:1995, *Textiles — Tests for colour fastness — Part J03: Calculation of colour differences*.

3 Definitions

For the purposes of this part of ISO 10545, the following definitions apply.

3.1

chroma

attribute of colour which is defined as deviation from grey of the same lightness

NOTE The more a colour deviates from grey, the higher the chroma.

3.2

lightness

parameter which relates the colour to a continuous grey scale between white and black