



NSAI
Standards

Irish Standard
I.S. EN ISO 10545-4:2012

Ceramic tiles - Part 4: Determination of modulus of rupture and breaking strength (ISO 10545-4:2004)

I.S. EN ISO 10545-4:2012

Incorporating amendments/corrigenda/National Annexes issued since publication:

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English Version

**Ceramic tiles - Part 4: Determination of modulus of rupture and
breaking strength (ISO 10545-4:2004)**

Carreaux et dalles céramiques - Partie 4: Détermination de
la résistance à la flexion et de la force de rupture (ISO
10545-4:2004)

Keramische Fliesen und Platten - Teil 4: Bestimmung der
Biegefestigkeit und der Bruchlast (ISO 10545-4:2004)

This European Standard was approved by CEN on 8 January 2012.

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Foreword

The text of ISO 10545-4:2004 has been prepared by Technical Committee ISO/TC 189 “Ceramic tile” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 10545-4:2012 by Technical Committee CEN/TC 67 “Ceramic tiles” the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2012, and conflicting national standards shall be withdrawn at the latest by August 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 10545-4:2004 has been approved by CEN as a EN ISO 10545-4:2012 without any modification.

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I.S. EN ISO 10545-4:2012
**INTERNATIONAL
STANDARD**

**ISO
10545-4**

Second edition
2004-11-01

Ceramic tiles —

Part 4:
**Determination of modulus of rupture and
breaking strength**

Carreaux et dalles céramiques —

*Partie 4: Détermination de la résistance à la flexion et de la force de
rupture*



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ISO 10545-4:2004(E)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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

ISO 10545-4 was prepared by Technical Committee ISO/TC 189, *Ceramic tile*.

This second edition cancels and replaces the first edition (ISO 10545-4:1994), which has been technically revised.

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: Determination of lead and cadmium given off by glazed tiles*
- *Part 16: Determination of small colour differences*

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