

**Kahlid. Osa 4: Katkemooduli ja katketugevuse
määramine**

**Ceramic tiles - Part 4: Determination of modulus of
rupture and breaking strength (ISO 10545-4:2014)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 10545-4:2014 sisaldab Euroopa standardi EN ISO 10545-4:2014 inglisekeelset teksti.	This Estonian standard EVS-EN ISO 10545-4:2014 consists of the English text of the European standard EN ISO 10545-4:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

Ceramic tiles - Part 4: Determination of modulus of rupture and breaking strength (ISO 10545-4:2014)

Carreaux et dalles céramiques - Partie 4: Détermination de la résistance à la flexion et de la force de rupture (ISO 10545-4:2014)

Keramische Fliesen und Platten - Teil 4: Bestimmung der Biegefestigkeit und der Bruchlast (ISO 10545-4:2014)

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 10545-4:2014) has been prepared by Technical Committee ISO/TC 189 "Ceramic tile" in collaboration with 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of an identical text or by endorsement, at the latest by January 2015, and conflicting national standards shall be withdrawn at the latest by January 2015.

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Endorsement notice

The text of ISO 10545-4:2014 has been approved by CEN as EN ISO 10545-4:2014 without any modification.

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Ceramic tiles —

Part 4:

Determination of modulus of rupture and breaking strength

1 Scope

This part of ISO 10545 specifies a test method for determining the modulus of rupture and breaking strength of all ceramic tiles.

NOTE ISO 13006 provides property requirements for tiles and other useful information on these products.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 48:2010, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 13006, *Ceramic tiles — Definitions, classification, characteristics and marking*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 breaking load

F

force necessary to cause the test specimen to break, as read from the pressure gauge

Note 1 to entry: See [7.5](#) and [Figure 1](#).

Note 2 to entry: The breaking load is expressed in newtons.

3.2 breaking strength

S

force obtained by multiplying the breaking load by the ratio (span between support rods)/(width of the test specimen)

Note 1 to entry: See Formula (1) in [Clause 8](#).

Note 2 to entry: The breaking strength is expressed in newtons

3.3 modulus of rupture

R

quantity obtained by dividing the calculated breaking strength by the square of the minimum thickness along the broken edge

Note 1 to entry: See Formula (2) in [Clause 8](#).