

Ceramic tiles - Part 7: Determination of resistance to surface abrasion for glazed tiles

Ceramic tiles - Part 7: Determination of resistance to surface abrasion for glazed tiles

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 10545-7:2000 sisaldab Euroopa standardi EN ISO 10545-7:1998+AC:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 10545-7:2000 consists of the English text of the European standard EN ISO 10545-7:1998+AC:1999.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

<p>Käsitlusala: This part of ISO 10545 specifies a method for determining the resistance to surface abrasion of all glazed ceramic tiles used for floor covering</p>	<p>Scope: This part of ISO 10545 specifies a method for determining the resistance to surface abrasion of all glazed ceramic tiles used for floor covering</p>
---	---

ICS 91.100.23

Võtmesõnad: abrasion resistance, abrasion tests, ceramics, determination, floor coverings, tiles

ICS 91.100.20

Descriptors: Ceramics, tiles, surface abrasion, testing.

English version

Ceramic tiles

**Part 7: Determination of resistance to surface abrasion for glazed tiles
(ISO 10545-7 : 1996)**

Carreaux et dalles céramiques –
Partie 7: Détermination de la
résistance à l'abrasion de surface
pour les carreaux et dalles émaillés
(ISO 10545-7 : 1996)

Keramische Fliesen und Platten –
Teil 7: Bestimmung des Widerstandes
gegen Oberflächenverschleiß –
Glasierte Fliesen und Platten
(ISO 10545-7 : 1996)

This European Standard was approved by CEN on 1998-11-29.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 10545-7 : 1996 Ceramic tiles – Part 7: Determination of resistance to surface abrasion for glazed tiles, which was prepared by ISO/TC 189 'Ceramic tiles' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 67 'Ceramic tiles', the Secretariat of which is held by UNI, as a European Standard.

EN ISO 10545 comprises the following Parts, under the common 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

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 10545-7 : 1996 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative)

1 Scope

This part of ISO 10545 specifies a method for determining the resistance to surface abrasion of all glazed ceramic tiles used for floor covering.

2 Normative reference

The following standards 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.

ISO 8486-1:—¹⁾, *Bonded abrasives — Grain size analysis — Designation and determination of grain size distribution — Part 1: Macrogrits F 4 to F 220.*

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

3 Principle

Determination of the abrasion resistance of the glaze of tiles by rotation of an abrasive load on the surface and assessment of the wear by means of visual comparison of abraded test specimens and non-abraded tiles.

4 Abrasive load

The total load on each test specimen shall consist of

- 70,0 g of steel balls of diameter 5 mm;
- 52,5 g of steel balls of diameter 3 mm;
- 43,75 g of steel balls of diameter 2 mm;
- 8,75 g of steel balls of diameter 1 mm;
- 3,0 g of white fused aluminium oxide of grain size F 80 according to ISO 8486;
- 20 ml of deionized or distilled water.

1) To be published. (Revision of ISO 8486:1986)