# Grouts for tiles - Part 3: Determination of flexural and compressive strength

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# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12808-3:2002 sisaldab Euroopa standardi EN 12808-3:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 19.06.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12808-3:2002 consists of the English text of the European standard EN 12808-3:2001.

This document is endorsed on 19.06.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

## Käsitlusala:

This European Standard applies to all ceramic tile grouts for internal and external tile installations on walls and floors. This standard describes the test methods to be used to determine the compressive and flexural strength of ceramic tile grouts.

# Scope:

This European Standard applies to all ceramic tile grouts for internal and external tile installations on walls and floors. This standard describes the test methods to be used to determine the compressive and flexural strength of ceramic tile grouts.

ICS 91.100.10

**Võtmesõnad:** adhesives, bending strength, ceramic tiles, ceramics, compressive strength, determination, joint mortars, material, mortars, reaction resin mortar, testing, tiles

# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 12808-3

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### **English version**

# Grouts for tiles - Part 3: Determination of flexural and compressive strength

Mortiers de joints pour carrelages - Partie 3: Détermination de la résistance à la flexion et à la compression

Klebstoffe und Fugenmörtel für Fliesen und Platten - Teil 3: Bestimmung der Biege- und Druckfestigkeit

This European Standard was approved by CEN on 3 November 2001.

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 Management Centre or to any CEN member.

This European Standard exists 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 Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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# **Foreword**

This European Standard has been prepared 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 June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, is a provious sono and a parties Switzerland and the United Kingdom.

# 1 Scope

This European Standard applies to all ceramic tile grouts for internal and external tile installations on walls and floors.

This standard describes the test method to be used to determine the compressive and flexural strength of ceramic tile grouts.

This European Standard does not contain performance requirements or recommendations for the design and installation of ceramic tiles.

NOTE Ceramic tile grouts can also be used for other types of tiles (natural and agglomerated stones, etc. ), where these do not adversely affect the stones.

### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references subsequent amendments to, or revisions of, any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1066, Adhesives - Sampling.

EN 1067, Adhesives - Examination and preparation of samples for testing.

EN 196-1:1994, Method of testing cement - Determination of strength.

EN 1348:1997, Adhesives for tiles - Determination of tensile adhesion strength for cementitious adhesives.

# 3 Sampling

Take a sample of at least 2 kg of the product to be tested in accordance with EN 1066 and EN 1067.

# 4 Test conditions

Standard conditions shall be  $(23 \pm 2)$  °C and  $(50 \pm 5)$  % R.H. and a circulation of air in the working area less than 0,2 m/s.

#### 5 Test materials

Condition all test materials for at least 24 hours under standard conditions.

# 6 Apparatus

- **6.1** Three-gang mould shall consist of three horizontal compartments so that three prismatic specimens 40 mm x 40 mm x 160 mm can be prepared simultaneously. (See EN 196-1:1994, 4.5)
- **6.2** Jolting apparatus or jolting table used for the compaction of 40 mm x 40 mm x 160 mm grout specimen; shall comply with 4.6 of EN 196-1:1994.
- **6.3** Flexural strength testing machine shall be capable of applying the load with suitable capacity and sensitivity for the test. The machine shall be provided with a flexure device in accordance with 4.7 of EN 196–1:1994. (See Figure 1)
- **6.4** Compressive strength testing machine shall comply with 4.8 of EN 196-1:1994. The test requires the use of a jig (in accordance with 4.9 of EN 196-1:1994) to be incorporated in the lower platen; the upper platen receives the load from the machine through an intermediate spherical seating. (See Figure 2)