

## **Methods of test for masonry - Part 3: Determination of initial shear strength**

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of initial shear strength

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1052-3:2002 sisaldab Euroopa standardi EN 1052-3:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.10.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1052-3:2002 consists of the English text of the European standard EN 1052-3:2002.</p> <p>This document is endorsed on 18.10.2002 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>
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<p><b>Käsitlusala:</b></p> <p>This European Standard specifies a method for determining the in plane initial shear strength of horizontal bed joints in masonry using a specimen tested in shear. Guidance is given on the preparation of the specimens, the conditioning required before testing, the testing machine, the method of test, the method of calculation and the contents of the test report.</p>	<p><b>Scope:</b></p> <p>This European Standard specifies a method for determining the in plane initial shear strength of horizontal bed joints in masonry using a specimen tested in shear. Guidance is given on the preparation of the specimens, the conditioning required before testing, the testing machine, the method of test, the method of calculation and the contents of the test report.</p>
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**Võtmesõnad:** bricks, components, construction, construction materials, definition, definitions, joints, masonry, masonry walls, material, material testing machines, mortars, shear strength, strength of materials, test reports, testing, walls

**English version**

**Methods of test for masonry**

**Part 3: Determination of initial shear strength**

Méthodes d'essai de la maçonnerie –  
Partie 3: Détermination de la  
résistance initiale au cisaillement

Prüfverfahren für Mauerwerk –  
Teil 3: Bestimmung der Anfangs-  
scherfestigkeit (Haftscherfestigkeit)

This European Standard was approved by CEN on 2002-04-11.

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.

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 Management Centre 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, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

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

**Management Centre: rue de Stassart 36, B-1050 Brussels**

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## Foreword

This document EN 1052-3:2002 has been prepared by Technical Committee CEN/TC 125 "Masonry", the secretariat of which is held by BSI.

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 2003, and conflicting national standards shall be withdrawn at the latest by January 2003.

Annex A of this European Standard is informative.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies a method for determining the in plane initial shear strength of horizontal bed joints in masonry using a specimen tested in shear.

Guidance is given on the preparation of the specimens, the conditioning required before testing, the testing machine, the method of test, the method of calculation and the contents of the test report.

## 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 772-1, *Methods of test for masonry units - Part 1: Determination of compressive strength.*

EN 772-10, *Methods of test for masonry units - Part 10: Determination of moisture content of calcium silicate and autoclaved aerated concrete units.*

EN 772-16, *Methods of test for masonry units - Part 16: Determination of dimensions.*

EN 998-2, *Specification for mortar for masonry - Part 2: Masonry mortar.*

EN 1015-3, *Methods of test for mortar for masonry - Part 3: Determination of consistence of fresh mortars (by flow table).*

EN 1015-7, *Methods of test for mortar for masonry - Part 7: Determination of air content of fresh mortar.*

EN 1015-11, *Methods of test for mortar for masonry - Part 11: Determination of flexural and compressive strength of hardened mortar.*

## 3 Principle

The initial shear strength of masonry is derived from the strength of small masonry specimens tested to destruction. The specimens are tested in shear under four-point load, with precompression perpendicular to the bed joints.

Four different failure modes are considered to give valid results. The initial shear strength is defined by the linear regression curve to zero normal stress.