

**Müürikivide katsemeetodid.**

**Osa 9: Savi- ja silikaattelliste tühikute mahu  
ja protsendi ning netomahu määramine  
liivatäitega**

Methods of test for masonry units - Part 9:  
Determination of volume and percentage of voids  
and net volume of clay and calcium silicate masonry  
units by sand filling

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Käesolev Eesti standard EVS-EN 772-9:2005 sisaldab Euroopa standardi EN 772-9:1998 + A1:2005 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 772-9:2005 consists of the English text of the European standard EN 772-9:1998 + A1:2005.</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> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

ICS 91.100.15

### Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
Aru 10 Tallinn 10317 Eesti; [www.evs.ee](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

### Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:  
Aru str 10 Tallinn 10317 Estonia; [www.evs.ee](http://www.evs.ee); Phone: +372 605 5050; E-mail: [info@evs.ee](mailto:info@evs.ee)

EUROPEAN STANDARD

EN 772-9

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 1998

ICS 91.100.20

Descriptors: construction, masonry, units, calcium silicate, tests, determination, volume of voids, percentage of voids, sand filling

English version

**Methods of test for masonry units - Part 9: Determination of volume and percentage of voids and net volume of calcium silicate masonry units by sand filling**

Méthodes d'essai des éléments de maçonnerie - Partie 9:  
Détermination du volume et du pourcentage de vides et du  
volume net absolu des éléments de maçonnerie en silico-  
calcaire par remplissage de sable

Prüfverfahren für Mauersteine - Teil 9: Bestimmung des  
Loch- und Nettovolumens sowie des prozentualen  
Lochanteils von Kalksandsteinen mittels Sandfüllung

This European Standard was approved by CEN on 2 July 1998.

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.

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 Central Secretariat 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

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

| <b>Contents</b>                         | <b>Page</b> |
|-----------------------------------------|-------------|
| Foreword                                | 3           |
| 1 Scope                                 | 3           |
| 2 Normative references                  | 3           |
| 3 Principle                             | 3           |
| 4 Symbols                               | 3           |
| 5 Materials                             | 3           |
| 6 Apparatus                             | 3           |
| 7 Preparation of specimens              | 4           |
| 8 Procedure                             | 4           |
| 9 Calculation and expression of results | 4           |
| 10 Evaluation of results                | 5           |
| 11 Test report                          | 5           |

## Foreword

This European Standard 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 February 1999, and conflicting national standards shall be withdrawn at the latest by September 2000.

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, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies a method of determining the volume and percentage of voids and net volume of calcium silicate masonry units containing cells, frogs and holes.

## 2 Normative references

This European Standard incorporates by dated and 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 reference the latest edition of the publication referred to applies.

pr EN 771-2 Specification for masonry units - Part 2: Calcium silicate masonry units

pr EN 772-16 Methods of test for masonry units - Part 16: Determination of size and dimensions

## 3 Principle

The principle of this test is to measure the volume of voids in a masonry unit by measuring the volume of sand required to fill them.

## 4 Symbols

$V_{n,u}$  is the net volume of each unit, ( $10^4 \text{ mm}^3$ )

$V_{s,u}$  is the volume of voids, ( $10^4 \text{ mm}^3$ )

$V_{g,u}$  is the gross volume of each unit, ( $10^4 \text{ mm}^3$ )

## 5 Materials

Dry graded sand with a grain size above 0,5 mm and passing a 1 mm test sieve (6.4).

## 6 Apparatus

6.1 A thin sheet of foam rubber or other resilient material.