

MÜÜRIKIVIDE KATSEMEETODID. OSA 5: AKTIIVSETE
LAHUSTUVATE SOOLADE SISALDUSE MÄÄRAMINE
KERAAMILISTES MÜÜRIKIVIDES

Methods of test for masonry units - Part 5:
Determination of the active soluble salts content of clay
masonry units

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 772-5:2016 sisaldab Euroopa standardi EN 772-5:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 772-5:2016 consists of the English text of the European standard EN 772-5:2016.
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English Version

Methods of test for masonry units - Part 5: Determination of the active soluble salts content of clay masonry units

Méthodes d'essai des éléments de maçonnerie - Partie
5: Détermination de la teneur en sels solubles actifs des
éléments de maçonnerie en terre cuite

Prüfverfahren für Mauersteine - Teil 5: Bestimmung
des Gehalts an aktiven löslichen Salzen von
Mauerziegeln

This European Standard was approved by CEN on 3 January 2016.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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This document consolidates EN 772-5:2016 and the corrigendum EN 772-5:2016/AC:2017.



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

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European foreword

This document (EN 772-5:2016) 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of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by December 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 772-5:2001.

The crushing procedure in 7.2 has been amended so that the sample, after reducing to particles of not greater than approximately 1 mm in size, is dried in a ventilated oven to constant mass prior to further grinding and sieving.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document includes the corrigendum EN 772-5:2016/AC:2017 which corrects 9.2.2a), 10.4 and 10.5.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies a method for determining the active soluble salts content of clay masonry units.

2 Normative references

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

EN 771-1, *Specification for masonry units — Part 1: Clay masonry units*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 3310-2, *Test sieves — Technical requirements and testing — Part 2: Test sieves of perforated metal plate*

3 Principle

The method adopted is based on water extraction from a crushed representative sample of the clay masonry units, and determines the amounts of soluble magnesium, sodium and potassium ions, released under the test conditions, which may be correlated with the potentially damaging effect of salts of those ions on cementitious mortars in certain circumstances, or even on the units themselves. These salts are known as «active» soluble salts in EN 771-1.

4 Symbols

M_{Mg}	is the number of milligrams of Mg equivalent to 1 ml of EDTA
x, y	is the volume of EDTA titrated, in millilitres (ml)
C_1	is the lower reference sample concentration, in percentage (%)
C_2	is the higher reference sample, concentration, in percentage (%)
C_x	is the sample concentration, in percentage (%)
E_1	is the measured signal for the lower reference sample concentration C_1
E_2	is the measured signal for the higher reference sample, concentration C_2
E_x	is the measured signal for sample
d	is the dilution factor

5 Materials

5.1 For all methods

Distilled or deionized water for extraction of active soluble salts from the sample, and for preparation of analytical test solutions.

Hydrochloric acid (relative density 1,18).

All chemicals shall be of analytical reagent grade.