

# SLOVENSKI STANDARD kSIST FprEN 772-5:2015

01-september-2015

## Metode preskušanja zidakov - 5. del: Določevanje vodotopnih soli v opečnih zidakih

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

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

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

Ta slovenski standard je istoveten z: FprEN 772-5 rev

ICS:

91.100.25 Keramični gradbeni izdelki Ceramic building products

kSIST FprEN 772-5:2015 en,fr,de

**kSIST FprEN 772-5:2015** 

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### FINAL DRAFT FprEN 772-5

July 2015

ICS 91.100.25

Will supersede EN 772-5:2001

#### **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 maconnerie en terre cuite Prüfverfahren für Mauersteine - Teil 5: Bestimmung des Gehalts an aktiven löslichen Salzen von Mauerziegeln

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 125.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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### FprEN 772-5:2015 (E)

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FprEN 772-5:2015 (E)

#### **Foreword**

This document (FprEN 772-5:2015) has been prepared by Technical Committee CEN/TC 125 "Masonry", the secretariat of which is held by BSI.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede 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.

#### FprEN 772-5:2015 (E)

#### 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

 $M_{\rm Mg}$  is the number of milligrams of Mg equivalent to 1 ml of EDTA

x,y is the volume of EDTA titrated, en millilitres (ml)

C<sub>1</sub> 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.