



SLOVENSKI STANDARD
SIST EN 771-6:2011/kFprA1:2014
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Specifikacija za zidake - 6. del: Zidaki iz naravnega kamna

Specification for masonry units - Part 6: Natural stone masonry units

Festlegungen für Mauersteine - Teil 6: Natursteine

Spécification pour éléments de maçonnerie - Partie 6: Eléments de maçonnerie en pierre naturelle

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ICS:

91.100.15 Mineralni materiali in izdelki Mineral materials and products

SIST EN 771-6:2011/kFprA1:2014 **en,fr,de**

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Specification for masonry units - Part 6: Natural stone masonry units

Spécification pour éléments de maçonnerie - Partie 6:
Éléments de maçonnerie en pierre naturelle

Festlegungen für Mauersteine - Teil 6: Natursteine

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

This draft amendment A1, if approved, will modify the European Standard EN 771-6:2011. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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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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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Foreword

This document (EN 771-6:2011/FprA1:2014) 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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

NOTE Due to fact that the Framework Partnership Agreement between the Commission and CEN & CENELEC is not signed yet, there are currently no New Approach Consultants in place for 2014. Therefore the provisions of CEN-CENELEC Guide 15 cannot be met.

This shall not prevent the processing of draft standards nor the offering of harmonized standards to the Commission. In particular, draft standards can be sent to vote without Consultant assessment.

This note will be removed from the Foreword of the finalized publication.

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EN 771-6:2011/FprA1:2014 (E)**1 Modification to the Foreword**

Replace the 5th and the 6th paragraphs with the following:

“This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports basic requirements for construction works of the EU Construction Products Regulation (Regulation (EU) No 305/2011).

For relationship with EU Regulation/Directive(s), see informative Annex ZA, which is an integral part of this document.”.

2 Modification to the Scope

In the 3rd paragraph, replace “evaluation of conformity” with “assessment and verification of constancy of performance (AVCP)”.

3 Modification to 5.1, General

In the 3rd paragraph, replace “initial type tests” with “product type determination.”

4 Modification to 5.2, Denomination

In the 1st paragraph, replace “petrological” with “petrographic”.

5 Modification to 5.4, Configuration

Replace the title with the following:

“Configuration and appearance”.

6 Modification to 5.4.1, General

Replace 5.4.1 with the following:

“5.4.1 Configuration

When relevant to the uses, for which they are put on the market, the geometry, shape and features of natural stone masonry units shall be declared by the manufacturer. The declaration may be made by reference to one or another of the groups defined in EN 1996-1-1.

NOTE Dimensioned natural stone units are considered to be Group 1.

The test shall be carried out according to EN 772-16.”.

7 Modification to 5.4.2, Surface appearance

In the 1st paragraph, add “shall be delivered to the customer upon request. It shall” after “An indicative sample” to read:

“An indicative sample shall be delivered to the customer upon request. It shall show the general tonality and finish of the natural stone, but does not imply any total uniformity in colour, and veins between the sample and supply.”.

8 Modification to 5.6.1, Compressive strength

In the 1st paragraph, delete “In addition the manufacturer may declare the characteristic compressive strength (5 % fractile).”.

9 Modification to 5.6.2, Flexural strength

After the 1st paragraph, add the following paragraph:

“When the stone shows bedding planes or anisotropy features, the declaration shall give the orientation of the force relatively to them.”.

10 Modification to 5.7.1, General

Delete “intended”.

11 Addition of a new subclause 5.15

Add a new clause:

“5.15 Dangerous substances [SIST EN 771-6:2011/kFprA1:2014](https://standards.iteh.ai/catalog/standards/sist/204920cd-0913-4e9b-80b1-01b11205-bdc/sist-en-771-6-2011-kfpr-a1-2014)

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National regulations on dangerous substances may require verification and declaration on release, and sometimes content, when construction products covered by this standard are placed on those markets.

In the absence of European harmonized test methods, verification and declaration on release/content should be done taking into account national provisions in the place of use.

NOTE An informative database covering European and national provisions on dangerous substances is available at the Construction web site on EUROPA accessed through: <http://ec.europa.eu/enterprise/construction/cpd-ds/>.”.

12 Modification to 6.1, Description and designation

After item m), add the following:

“n) dangerous substances (see 5.15).”.

13 Modification to Clause 8, Evaluation of conformity

Replace the title with the following:

“Assessment and verification of constancy of performance (AVCP)”.

EN 771-6:2011/FprA1:2014 (E)**14 Modification to 8.1, General**

Replace the text of 8.1 with the following:

"The manufacturer shall demonstrate compliance of his product with the requirements of this European Standard and with the declared performance for the product properties by carrying out both:

- product type determination (see 8.2), which can be physical testing, calculation, reference to tabulated values or combinations of these methods;
- factory production control (see 8.3).

Alternative methods of test to the reference methods specified in this European Standard may be adopted except for the product type determination tests and in case of dispute, provided that these alternative methods satisfy the following:

- a) a correlation can be shown to exist between the results from the reference method and those from the alternative method; or
- b) a safe relationship can be demonstrated when using the alternative method compared to the reference methods and
- c) the information on which the relationship is based is available."

15 Modification to 8.2, Initial type testing

Replace 8.2 with the following:

"8.2 Product type determination

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After completion of the development of a new product type and before placing on the market, appropriate product type determination shall be carried out to confirm that the properties predicted from the development meet the requirements of this standard and the performance of the characteristics to be declared for the product.

Whenever a major change in the source, blend, or nature of raw materials occurs, or when there is a change in processing conditions, leading to what the manufacturer considers will constitute a new product type being produced, the appropriate product type determination shall be repeated.

The manufacturer may define product groups. The product group may differ according to the characteristics in question.

In the product type determination process a manufacturer may take in consideration already existing test results.

A manufacturer may use the product type determination results determined by someone else (e.g. another manufacturer or a research technology & development service provider) to justify his own declaration of performances regarding a product that is manufactured according to the same design and with raw materials, constituents and manufacturing methods of the same kind, provided that permission is given by the owner of the results, and the results are valid for both products.

The tests to be conducted shall be the tests or calculations as described in Table A.1 for the properties selected from the following list relevant to the manufacturer's declaration for the product type's intended use:

- dimensions and tolerances;
- configuration;

- apparent density;
- compressive strength;
- flexural strength;
- shear bond strength;
- flexural bond strength;
- open porosity;
- water absorption coefficient by capillarity;
- freeze/thaw resistance;
- thermal properties;
- reaction to fire;
- water vapour permeability.

Sampling for type testing shall be in accordance with Annex A.

The results of type tests shall be recorded.

NOTE For the performance characteristics to be determined in order to address the Declaration of Performance and CE marking provisions, see Table ZA.1.”.

16 Modification to 8.3.1, General

In the 1st paragraph, replace “values” with “performance of the characteristics”.

In the 2nd paragraph, replace “8.3.6” with “8.3.5” (twice).

17 Modification to 8.3.3, Production equipment

Replace the paragraph with the following:

“When the factory production control system includes process control procedures, all production equipment, that forms part of these procedures and has an influence on the declared values, shall be regularly inspected.”.

18 Modification to 8.3.10, Nonconforming products

Replace the 1st paragraph with the following:

“The procedure for dealing with nonconforming products shall be documented. Products that do not conform with the requirements or the performance of the product type shall be segregated and marked accordingly. However, these products may be reassessed by the manufacturer and assigned to a different product type.”.

EN 771-6:2011/FprA1:2014 (E)

19 Modification to Annex A

Replace the title with the following:

“Sampling for type testing and for independent testing of consignment”.

20 Modification to A.1

Replace A.1 with the following:

“A.1 General

This sampling procedure shall apply for product type determination tests and in the event that there is a requirement for an assessment of product compliance.

Only those characteristics declared by the manufacturer shall be assessed by this procedure.

The number of units required to determine compliance with the specification shall be sampled from a consignment of up to 100 m³ of gross volume or part thereof (see Table A.1).”.

21 Modification to A.2.5

Replace Table A.1 with:

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“Table A.1 — Number of units required for testing

Property	Clause number	Test method(s)	Number of specimens ^a	
			Type I specimen	Type II specimen
Dimensions and dimensional tolerances	5.3	EN 772-16, EN 772-20 and EN 13373	6	
Configuration	5.4	EN 772-16	6	
Apparent density	5.5	EN 1936	6	
Compressive strength	5.6.1	EN 772-1	10	
Flexural strength	5.6.2	EN 12372	10	
Flexural bond strength	5.8	EN 1052-2	3	
Shear bond strength	5.7	EN 1052-3	Type I specimen	Type II specimen
		Procedure A	27	18
		Procedure B	18	12
Open porosity	5.9	EN 1936	6	
Water absorption by capillarity	5.10	EN 772-11	6	
Freeze/thaw resistance	5.11	EN 12371	7	
Thermal properties	5.12	EN 1745	—	
Water vapour permeability	5.14	EN ISO 10456, EN ISO 12572	—	
Reaction to fire	5.13	EN 13501-1	—	

^a If appropriate, e.g. when units are not damaged by a test procedure, the same units may be used for different tests.

”.

22 Modifications to Annex B

Replace the title with the following:

“Guidance for test frequencies for designing a FPC system to demonstrate conformity of finished products with the requirements of the standard and the declaration of the manufacturer”.

Replace Table B.1 with:

“

Table B.1 — Checking of finished products

Subject	Purpose of checking	Test method in accordance with b	Frequency of checking by the manufacturer for product range
Dimensions	Conformity with the declared dimensions and the permissible dimensional deviations determined by EN 771-6	EN 772-16 and EN 13373	— every production lot or — as given in the FPC documentation
Apparent density and open porosity	Conformity with the declared apparent density and open porosity	EN 1936	— every 2 years or — as given in the FPC documentation
Compressive strength	Conformity with the declared compressive strength and determined by EN 771-6	EN 772-1	— at least every 2 years ^a or — as given in the FPC documentation
Flexural strength	Conformity with the declared flexural strength and determined by EN 771-6	EN 12372	— every 2 years or — as given in the FPC documentation
Petrographic examination	Conformity with the declared petrographic examination	EN 12407	— every 10 years or — as given in the FPC documentation
Durability (Freeze/thaw resistance)	Conformity with the declared freeze/thaw resistance according to EN 771-6	EN 12371	— every 10 years or — as given in the FPC documentation
Water absorption by capillarity	Conformity with declared value	EN 772-11	— every 10 years or — as given in the FPC documentation
Shear bond strength	Conformity with declared value	EN 1052-3	— every 10 years or — as given in the FPC documentation
Flexural bond strength	Conformity with declared value	EN 1052-2	— every 10 years or — as given in the FPC documentation
Thermal conductivity	Conformity with declared value	EN 1745	— every 10 years or — as given in the FPC documentation
Water vapour permeability	Conformity with declared value	EN ISO 12572	— upon request or — as given in the FPC documentation