



SLOVENSKI STANDARD
SIST EN 771-1:2011/kFprA1:2014
01-oktober-2014

Specifikacija za zidake - 1. del: Opečni zidaki

Specification for masonry units - Part 1: Clay masonry units

Festlegungen für Mauersteine - Teil 1: Mauerziegel

Spécifications pour éléments de maçonnerie - Partie 1: Briques de terre cuite

Ta slovenski standard je istoveten z: EN 771-1:2011/FprA1

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ICS:

91.100.25 Keramični gradbeni izdelki Ceramic building products

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Specification for masonry units - Part 1: Clay masonry units

Spécifications pour éléments de maçonnerie - Partie 1:
Briques de terre cuite

Festlegungen für Mauersteine - Teil 1: Mauerziegel

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 771-1:2011. 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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EN 771-1:2011/FprA1:2014 (E)**Foreword**

This document (EN 771-1:2011/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 Regulation(s).

For relationship with EU Regulation(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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1 Modification to the Foreword

Replace the 5th and 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 Modifications to the Scope

Replace the 1st paragraph with the following:

"This European Standard specifies the characteristics and performance requirements for masonry units manufactured from clay for which the main intended uses are protected or unprotected masonry structure (see definitions 3.3 and 3.4) (e.g. facing and rendered masonry, loadbearing or non-loadbearing masonry structures, including internal linings and partitions, for building and civil engineering)."

Delete the whole 2nd paragraph.

Replace the 5th paragraph with the following:

"It provides for the assessment and verification of constancy of performance (AVCP) of the product to this European Standard."

Replace the last sentence in the 7th paragraph with the following:

"This European Standard does not include method of measurement of angles and radii characteristics of specially shaped clay masonry units."

3 Modification to Clause 3, Terms and definitions

Replace the existing definition 3.3 with:

"masonry which is protected against water penetration and is not in contact with soil and ground water

Note 1 to entry: It can either be masonry in external walls which is protected, (e.g. by a layer of suitable render or by cladding), or it can be the inner leaf of a cavity wall or it can be an internal wall. It may or may not be loadbearing."

Add the following new term and definition and renumber accordingly.

3.4

unprotected masonry

masonry which may be exposed to rain, freeze/thaw and/or may be in contact with soil and ground water without a suitable protection

Note 1 to entry: It can either be masonry in external walls which is fully unprotected, or which is intended to be provided by a limited protection (e.g. by a thin layer of render). It may or may not be loadbearing".

Replace the existing term and definition 3.5 (former 3.4) with:

"P unit

clay masonry unit for use in protected masonry".

Replace the existing term and definition 3.6 (former 3.5) with:

EN 771-1:2011/FprA1:2014 (E)**“U unit**

clay masonry unit for use in unprotected masonry”.

Add the following term and definition:

“3.39**product type**

the set of representative performance levels or classes of a construction product, in relation to its essential characteristics, produced using a given combination of raw materials or other elements in a specific production process”.

4 Modification to 5.1, General

In the NOTE, replace “3.10 and 3.11” with “3.11 and 3.12”.

Add a new paragraph after the NOTE:

“In general, for specially shaped masonry units it will be satisfactory to declare the properties as that determined on units of a rectangular parallelepiped shape and of the same product type which has been subjected to a similar manufacturing process.”.

In the 1st sentence of the 2nd paragraph, replace “initial type testing” with “product type determination”.

5 Modification to 5.2, LD units

Throughout the standard replace “LD” with “P” and “HD” with “U”.

Replace the title “LD units” with “P units: intended to be used in protected masonry”.

6 Modification to 5.2.2.2, Thickness of shells and webs (LD units)

In the NOTE, replace “intended” with “foreseen”.

7 Modification to 5.2.3.1, Gross dry density (LD units)

In the 1st paragraph, delete “and shall be equal to or less than 1 000 kg/m³”.

8 Modification to 5.2.6, Durability (LD units)

Replace the whole clause with:

“When the intended use of the product provides a complete protection against water penetration, no reference to freeze/thaw resistance is required (F0).

In countries where there is a requirement for freeze/thaw resistance, it shall be evaluated and declared according to the provisions valid in the intended place of use of the units.”.

9 Modification to 5.2.7, Water absorption (LD units)

Replace the whole clause with:

“Because of the intended use of P masonry units there are no requirements regarding water absorption.”.

10 Modification to 5.2.8, Active soluble salts content (LD units)

Replace the 1st paragraph, Table 1 and NOTE 1 with:

“Since the intended use of the product provides complete protection against water penetration no requirement for active soluble salts content apply (S0).”

Replace “NOTE 2” with “NOTE”.

11 Modification to 5.2.9, Moisture movement (LD units)

Replace “which are intended to” with “which are to”.

12 Addition of a new subclause 5.2.13

Add a new subclause:

“5.2.13 Dangerous substances

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/>.”

13 Modification to 5.3, HD units

Replace the title “HD units” with “U units: intended to be used in unprotected masonry”.

14 Modification to 5.3.1.1, Dimensions (HD units)

Add the following paragraph between the 1st paragraph and the NOTE:

“For units of special shape that fit within the envelope of a rectangular parallelepiped shape, the length, width and height are those for the tightest envelope. For other shapes these dimensions are defined in 5.3.2.”.

15 Modification to 5.3.2, Configuration (HD units)

Add a new paragraph after the NOTE:

“For units of special shape the dimensions to be considered as length, width and height of the unit shall be given.”.

16 Modification to 5.3.3.1, Gross dry density (HD units)

In the 2nd paragraph, add at the end: “This declaration does not apply to units of special shape.”.

17 Modification to 5.3.3.2, Net dry density (HD units)

At the end of the 2nd paragraph, add the following: “This declaration does not apply to units of special shape.”.

EN 771-1:2011/FprA1:2014 (E)**18 Modification to 5.3.4, Compressive strength (HD units)**

At the end of the 1st paragraph, add the following:

“In general, for specially shaped masonry units the compressive strength may be declared as that determined on units of a rectangular parallelepiped shape which have been subjected to a similar manufacturing process. If the shape of a specially shaped masonry unit has a function in resisting load this shall be taken into account by testing representative samples of whole units but the declaration of strength is based upon loading the largest rectangular area normal to the load expected in the brickwork.”.

Replace NOTE 3 with:

“NOTE 3 For tapered units special provisions apply, see EN 772-1.”.

19 Modification to 5.3.9, Active soluble salts content (HD units)

Replace “Table 2” with “Table 1”.

Replace NOTE 1 and NOTE 2 with:

“NOTE See B.4 for further information.”.

20 Addition of a new subclause 5.3.14

Add a new subclause:

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“5.3.14 Dangerous substances

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/>.”.

21 Modification to Clause 6, Description, designation and classification of clay masonry units

Replace the title with the following:

“Description, designation, designation code and classification of clay masonry units”.

22 Modification to 6.1.1, LD units

Replace the title “LD units” with “P units”.

Delete the paragraph after d), add a paragraph after e):

“When relevant to the uses for which the unit is placed on the market, the description and designation shall include:”.

In k), add the word “content” after “salts”.

Add the following list entry p):

“p) dangerous substances (see 5.2.13).”.

23 Modification to 6.1.2, HD units

Replace the title “HD units” with “U units”.

Delete the paragraph after d), add a paragraph after e):

“When relevant to the uses for which the unit is placed on the market, the description and designation shall include:”.

Add the following list item and update the numbering accordingly (not tagged):

“i) water absorption (see 5.3.7);”.

In l) (former k)), add the word “content” after “salts”.

Add the following list entry q):

“q) dangerous substances (see 5.2.14).”.

24 Addition of a new subclause 6.2

Add a new subclause 6.2 and update the numbering accordingly (not tagged).

6.2 Designation code

A designation code may be used as part of the designation as shown in Table 2.

If the designation code of Table 2 is used, unit type, intended use and values for the characteristics with a position number in the table shall always be declared, but NPD may be used. For the other characteristics, that do not have a fixed position number in the table, a system with given default values can be used.

NOTE NPD means ‘No Performance Determined. For the use of NPD option, see Annex ZA.

If the declaration by the manufacturer in the declaration of performance (DoP) of one of those characteristics matches the given default value of the chosen set in the table, then the characteristic can be omitted in the code.

If the declaration does not match the default value then the specified code of characteristic followed by the declared value shall be given. All the values – also NPDs – as given in the last three columns of Table 2 have to be looked upon as default values. If for characteristics the NPD option has been declared instead of the given default value from the table, the relevant code of each of those characteristics shall be given at the last position in the designation code.

In Table 2 three different sets (A, B and C) of default values are defined. Set A is a set of default values for units used in protected masonry. Set B is a set of default values for high precision units used in protected masonry and set identification C is a set of default values for units used in unprotected masonry.

A manufacturer can create his own sets of default values related to the intended use and the unit type if they are properly identified and explained.

Table 2 — Definition of the designation code and default values

Clause in the standard	Characteristic	Position in the designation code and code of characteristic (in bracket)	Unit	Code	Sets of default values of characteristics ¹⁾		
					A	B	C
	Unit type	1		CL			
	Intended use	2		P or U			
Category of masonry units 5.2.4: P Units, 5.3.4: U Units	Category	3		I or II			
Compressive strength perpendicular to bed face 5.2.4: P Units, 5.3.4: U Units	Mean compressive strength	4	N/mm ²	xxx,x			
Gross dry density 5.2.3.1: P Units, 5.3.3.1: U Units	Mean gross dry density	5	kg/m ³	xxx			
Dimensions 5.2.1.1: P Units, 5.3.1.1: U Units	Length, width and height	6	mm	lll × www × hhh			
	Identification for sets of default values linked to intended use	7		A, B and C			
Thermal properties 5.2.5: P Units, 5.3.5: U Units	$\lambda_{10,dry,unit}$ -value	No fixed position (L)	W/mK	x,xxx	NPD	NPD	NPD
Durability 5.2.6: P Units, 5.3.6: U Units	Freeze/thaw resistance category	No fixed position (F)		F0, F1, or F2	F0	F0	F2
Dimensional tolerances 5.2.1.2: P Units, 5.3.1.2: U Units	Dimensional tolerance category	No fixed position (T)	mm, when Tm	T1, T1+, T2, T2+ or Tm	T1	T1+	T1
	Range category	No fixed position (R)	mm, when Rm	R1, R1+, R2, R2+ or Rm	R1	R1+	R1
Gross dry density 5.2.3.1: P Units, 5.3.3.1: U Units	Tolerance category	In bracket after gross dry density (D)	%, when Dm	D1, D2, or Dm	D2	D2	D1
Flatness of bed faces 5.2.1.2.4: P Units, 5.3.1.2.4: U Units	Deviation from flatness (evenness)	No fixed position (E)	mm	*	NPD	1	NPD
Plane parallelism of bed faces 5.2.1.2.5: P Units, 5.3.1.2.5: U Units	Plane parallelism	No fixed position (PL)	mm	*	NPD	1	NPD
Net dry density 5.2.3.2: P Units, 5.3.3.2: U Units	Mean net dry density	No fixed position (N)	kg/m ³	xxx	NPD	NPD	NPD
	Tolerance Category	In bracket after net dry density	%, when Dm	D1, D2 or Dm	NPD	NPD	NPD
Configuration 5.2.2: P Units, 5.3.2: U Units	Illustration or Group ²⁾	No fixed position (G)		G1, G2, G3, or G4 or G1S ²⁾	G2	G3	G1
Configuration 5.3.2: U Units	Total volume of frogs	No fixed positions (FR)	% of volume	**	Not applicable	Not applicable	≤ 20