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Specifikacija za zidake - 4. del: Zidaki iz avtoklaviranega celičnega betona

Specification for masonry units - Part 4: Autoclaved aerated concrete masonry units

Festlegungen für Mauersteine - Teil 4: Porenbetonsteine

Spécifications pour éléments de maçonnerie - Partie 4 : Eléments de maçonnerie en béton cellulaire autoclave

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ICS:

91.100.30	Beton in betonski izdelki	Concrete and concrete products
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English Version

Specification for masonry units - Part 4: Autoclaved aerated concrete masonry units

Spécifications pour éléments de maçonnerie - Partie 4 :
Eléments de maçonnerie en béton cellulaire autoclave

Festlegungen für Mauersteine - Teil 4: Porenbetonsteine

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (FprEN 771-4:2010) 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 771-4:2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports the essential requirements of the EU Construction Products Directive (89/106/EEC).

For relationship with EU Directives, see informative Annex ZA which is an integral part of this document.

It also takes into account the general rules for reinforced and unreinforced masonry in Eurocode 6.

EN 771, *Specification for masonry units* consists of:

- *Part 1: Clay masonry units*
- *Part 2: Calcium silicate masonry units*
- *Part 3: Aggregate concrete masonry units (Dense and light weight aggregates)*
- *Part 4: Autoclaved aerated concrete masonry units*
- *Part 5: Manufactured stone masonry units*
- *Part 6: Natural stone masonry units*

1 Scope

This European Standard specifies the characteristics and performance requirements of autoclaved aerated concrete (AAC) masonry units for which the main intended uses are different types of load bearing and non-load bearing applications in all forms of walling including single leaf, cavity, partitions, retaining, basement and general use below ground level, including walling for fire protection, thermal insulation, sound insulation and the fabric of chimneys (excluding chimney flue units).

It defines the performance related to e.g. strength, density, dimensional accuracy etc. and provides for the evaluation of conformity of the product to this European Standard.

The marking requirement for products covered by this European Standard is included.

This European Standard does not cover the requirements for storey height panels, flue linings and masonry units with an incorporated thermal insulation material bonded to the faces of the unit susceptible to be exposed to fire. It does not specify standard sizes for autoclaved aerated concrete units nor standard work dimensions and angles of specially shaped and accessory units. It does not give permissible deviations for specially shaped and accessory units. It does not cover products intended for use as a damp proof course or the lining of a chimney.

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 680, *Determination of the drying shrinkage of autoclaved aerated concrete*

EN 772-1:2000, *Methods of test for masonry units — Part 1: Determination of compressive strength*

EN 772-11, *Methods of test for masonry units — Part 11: Determination of water absorption of aggregate concrete, autoclaved aerated concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units*

EN 772-13, *Methods of test for masonry units — Part 13: Determination of net and gross dry density of masonry units (except for natural stone)*

EN 772-16, *Methods of test for masonry units — Part 16: Determination of dimensions*

EN 772-20, *Methods of test for masonry units — Part 20: Determination of flatness of faces of aggregate concrete, manufactured stone and natural stone masonry units*

FprEN 998-2:2010, *Specification for mortar for masonry — Part 2: Masonry mortar*

EN 1052-2, *Methods of test for masonry — Part 2: Determination of flexural strength*

EN 1052-3, *Methods of test for masonry — Part 3: Determination of initial shear strength*

prEN 1745, *Masonry and masonry products — Methods for determining thermal properties*

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN ISO 12572, *Hygrothermal performance of building materials and products — Determination of water vapour transmission properties (ISO 12572:2001)*

FprEN 771-4:2010 (E)**3 Terms and definitions**

For the purposes of this document, the following terms and definitions apply.

- 3.1 masonry unit**
preformed component intended for use in masonry construction
- 3.2 autoclaved aerated concrete (AAC) masonry unit**
masonry unit manufactured from hydraulic binders such as cement and/or lime, combined with siliceous based fine material, cell generating material and water
- NOTE AAC masonry units may be provided with recesses, tongued and grooved jointing systems and other interlocking features.
- 3.3 co-ordinating size**
size of the co-ordinating space allocated to a masonry unit including allowances for joints and tolerances
- 3.4 work size**
size of masonry unit specified for its manufacture, to which the actual size conforms within permissible deviations
- 3.5 actual size**
size of a masonry unit as measured
- 3.6 regular shaped masonry unit**
masonry unit with an overall rectangular parallelepiped shape
- 3.7 specially shaped masonry unit**
masonry unit which is not a rectangular parallelepiped
- 3.8 accessory unit**
masonry unit which is shaped to provide a particular function
- 3.9 interlocking features**
shaped matched projections and indentations on masonry units, e.g. tongue and groove systems
- 3.10 hole**
formed void which may or may not pass completely through a masonry unit
- 3.11 vertical perforation**
formed void which passes completely through a masonry unit perpendicular to the bed face
- 3.12 horizontal perforation**
formed void which passes completely through a masonry unit parallel to the bed faces