

MÜÜRIKIVIDE SPETSIFIKATSIOON. OSA 4:
AUTOKLAAVITUD POORBETOONIST MÜÜRIKIVID

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 771-4:2011+A1:2015 sisaldab Euroopa standardi EN 771-4:2011+A1:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 771-4:2011+A1:2015 consists of the English text of the European standard EN 771-4:2011+A1:2015.
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English Version

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

Spécifications pour éléments de maçonnerie - Partie 4:
Éléments de maçonnerie en béton cellulaire autoclavé

Festlegungen für Mauersteine - Teil 4: Porenbetonsteine

This European Standard was approved by CEN on 17 March 2011 and includes Amendment 1 approved by CEN on 11 January 2015.

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European foreword

This document (EN 771-4:2011+A1:2015) 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of an identical text or by endorsement, at the latest by February 2016, and conflicting national standards shall be withdrawn at the latest by May 2017.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 A1 EN 771-4:2011 A1.

This document includes Amendment 1 approved by CEN on 2015-01-11.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

A1 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. A1

This European Standard 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*

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 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).

A1) This European Standard includes AAC masonry units with an incorporated insulation not exposed to fire, and masonry units of an overall rectangular parallelepiped shape, specially shaped and accessory units. AAC masonry units may consist of layers of different densities where not all of the layers are loadbearing. **A1)**

A1) It provides for the assessment and verification of constancy of performance (AVCP) of the product to this European Standard.

The marking requirement for products covered by this European Standard is included. **A1)**

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 772-1:2011, *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 772-16:2011, *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*

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*

EN 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)*

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 ^{A1} 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 and cured with high pressure steam in autoclaves
- Note 1 to entry: AAC masonry units may be provided with recesses, tongued and grooved jointing systems and other interlocking features and different hollow forms such as units with a 'U' shape or with vertical or rectangular perforation. ^{A1}
- 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