

MÜÜRIKIVIDE SPETSIFIKATSIOON. OSA 3:  
BETOOMMÜÜRIKIVID (TIHEDA JA  
KERGTÄITEMATERJALIGA)

Specification for masonry units - Part 3: Aggregate  
concrete masonry units (Dense and lightweight  
aggregates)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 771-3:2011+A1:2015 sisaldab Euroopa standardi EN 771-3:2011+A1:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 771-3:2011+A1:2015 consists of the English text of the European standard EN 771-3:2011+A1:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.08.2015.	Date of Availability of the European standard is 19.08.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English Version

**Specification for masonry units - Part 3: Aggregate concrete  
masonry units (Dense and lightweight aggregates)**

Spécifications pour éléments de maçonnerie - Partie 3:  
Éléments de maçonnerie en béton de granulats (granulats  
courants et légers)

Festlegungen für Mauersteine - Teil 3: Mauersteine aus  
Beton (mit dichten und porigen Zuschlägen)

This European Standard was approved by CEN on 10 March 2011 and includes Amendment 1 approved by CEN on 11 January 2015.

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









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## European foreword

This document (EN 771-3:2011+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of an identical text or by endorsement, at the latest by February 2016, and conflicting national standards shall be withdrawn at the latest by May 2017.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 771-3:2011 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/Directives, 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 aggregate concrete masonry units made from dense and lightweight aggregates or a combination of both for which the main intended uses are common, facing or exposed masonry in load bearing or non-load bearing building and civil engineering applications. The units are suitable for all forms of walling, including single leaf, external leaf to chimneys, cavity wall, partitions, retaining, and basement. They can provide fire protection, thermal insulation, sound insulation and sound absorption.

This European Standard includes aggregate concrete masonry units of an overall non-rectangular parallelepiped shape,  $\text{A}_1$  specially  $\text{A}_1$  shaped and accessory units.

$\text{A}_1$  It defines the performance related to e.g. strength, density, dimensional accuracy, and 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.  $\text{A}_1$

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

## 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 772-1:2011, *Methods of test for masonry units — Part 1: Determination of compressive strength*

EN 772-2, *Methods of test for masonry units — Part 2: Determination of percentage area of voids in aggregate concrete masonry units (by paper indentation)*

EN 772-6, *Methods of test for masonry units — Part 6: Determination of bending tensile strength of aggregate concrete masonry units*

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 772-14, *Methods of test for masonry units — Part 14: Determination of moisture movement of aggregate concrete and manufactured stone masonry units*

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, definitions and symbols

#### 3.1 Terms and definitions

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

##### 3.1.1

##### **masonry unit**

preformed component intended for use in masonry construction

##### 3.1.2

##### **common masonry unit**

masonry unit normally intended for use with no faces left visible

##### 3.1.3

##### **facing masonry unit**

masonry unit intended for use with one or more faces left visible and which may or may not be exposed to external climatic conditions

##### 3.1.4

##### **exposed masonry unit**

facing masonry unit exposed to external climatic conditions without render or other equivalent protection

##### 3.1.5

##### **aggregate concrete masonry unit**

masonry unit manufactured from, cementitious binder, aggregates and water and which may contain admixtures and additions and colouring pigments and other materials incorporated or applied during or subsequent to unit manufacture

##### 3.1.6

##### **co-ordinating size**

size of a co-ordinating space allocated to a masonry unit including allowances for joints

##### 3.1.7

##### **work size**

size of a unit specified for its manufacture, to which the actual size conforms within permissible deviations

##### 3.1.8

##### **actual size**

size of a unit as measured

##### 3.1.9

##### **regular shaped masonry unit**

masonry unit with an overall rectangular parallelepiped shape

NOTE Examples of different shapes of concrete masonry units are shown in Annex C.