

**MÜÜRIKIVIDE SPETSIFIKATSIOON. OSA 5:
TEHISMÜÜRIKIVID**

**Specification for masonry units - Part 5: Manufactured
stone masonry units**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN 771-5:2011+A1:2015 sisaldab Euroopa standardi EN 771-5:2011+A1:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 771-5:2011+A1:2015 consists of the English text of the European standard EN 771-5:2011+A1:2015.
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English Version

Specification for masonry units - Part 5: Manufactured stone masonry units

Spécifications pour éléments de maçonnerie - Partie 5:
Eléments de maçonnerie en pierre reconstituée

Festlegungen für Mauersteine - Teil 5: Betonwerksteine

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 771-5:2011+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of an identical text or by endorsement, at the latest by February 2016, and conflicting national standards shall be withdrawn at the latest by May 2017.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 771-5:2011 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 unreinforced and reinforced 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 manufactured stone masonry units for which the main intended uses are facing or exposed masonry in load bearing or non-load bearing building and civil engineering applications. The units are suitable for all forms of coursed or random masonry walling, including single leaf, cavity, partition, retaining and the external masonry to chimneys. They can provide fire protection, thermal insulation, sound insulation and sound absorption.

This standard covers concrete masonry units manufactured to resemble natural stone using casting or pressing techniques with or without textured surfaces produced, by casting, splitting, washing, blasting or tooling and with or without variable outline effects. It covers homogeneous masonry units and those consisting of different facing and backing concrete mixes, but excludes those manufactured with an adhesive bonded decorative face. This standard does not cover masonry units intended to conform to EN 771-3.

It defines the performance related to e.g. strength, density, dimensional accuracy, surface appearance and provides for the A_1 assessment and verification of constancy of performance (AVCP) A_1 of the product to this European Standard. The marking requirements for products covered by this European Standard are also included.

This European Standard does not apply to storey height panels, masonry units used for chimney flues or units manufactured with an adhesive bonded decorative face. It does not include products intended to be used as a damp proof course nor does it specify standard sizes for manufactured stone masonry units or work dimensions and angles of specially shaped units. 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, *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 772-14, *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 and definitions

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

- 3.1 masonry unit**
prefomed component intended for use in masonry construction
- 3.2 facing masonry unit**
masonry unit intended for use with one or more faces visible in use which may or may not be exposed
- 3.3 exposed face**
face intended to be exposed to external climatic conditions
- 3.4 manufactured stone masonry unit**
facing masonry unit having at least one exposed face with a close structure formed from either one or two homogeneous mixtures of aggregate, cementitious binder and other materials moulded under pressure and/or vibration and with or without further processing, intended to resemble and be used as an alternative to natural stone
- 3.5 two-part masonry unit**
masonry unit manufactured with different facing and backing concretes
- 3.6 co-ordinating size**
size of the co-ordinating space allocated to a masonry unit including an allowance for joints
- 3.7 work size**
size of a masonry unit specified for its manufacture to which the actual size conforms within permissible deviations
- 3.8 actual size**
size of a masonry unit as measured
- 3.9 regular shaped masonry unit**
masonry unit with an overall rectangular parallelepiped shape
- 3.10 specially shaped masonry unit**
masonry unit which is not a rectangular parallelepiped