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





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NATIONAL FOREWORD

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EUROPEAN STANDARD NORME EUROPÉENNE

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

Spécifications pour éléments de maçonnerie - Partie 4: Éléments de maconnerie en béton cellulaire autoclavé Festlegungen für Mauersteine - Teil 4: Porenbetonsteine

This European Standard was approved by CEN on 17 March 2011.

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

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Foreword

This document (EN 771-4:2011) 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of an identical text or by endorsement, at the latest by November 2011, and conflicting national standards shall be withdrawn at the latest by November 2011.

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 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 Directive(s), see informative Annex ZA, which is an integral part of this document.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland 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).

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 772-1:2011, 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)