

Specification for masonry units —

Part 2: Calcium silicate masonry units

The European Standard EN 771-2:2000 has the status of a
British Standard

ICS 91.100.15

National foreword

This British Standard is the official English text version of the “ordinary” version of EN 771-2. This edition of EN 771-2 will be superseded in due course by a “Harmonized European Standard” EN 771-2 which fully takes into account the requirements of the European Commission mandate M116 for masonry products. EN 771-2 is the subject of transitional arrangements agreed under the Commission mandate which is intended to lead to CE marking in support of the Construction Products Directive. In order to allow for any changes in national regulations, the Member States have agreed a transition period of 21 months for the co-existence of:

- BS 187:1978, *Specification for calcium silicate (sandlime and flintlime) bricks*;
 - BS 6649:1985, *Specification for clay and calcium silicate modular bricks*;
- and the future “Harmonized European Standard” EN 771-2. At the end of this period BS 187 and BS 6649 will be withdrawn, and this will be notified in *Update Standards*.
- The UK participation in its preparation was entrusted by Technical Committee B/519, Masonry and associated tests, to Subcommittee B/519/1, Masonry units, which has the responsibility to:
- aid enquirers to understand the text;
 - present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
 - monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Additional information

National Annex NA to this British Standard provides informative commentary on the differences between BS EN 771-2 and BS 187. Nothing in this National Annex should be construed as specifying requirements other than those given in the normative parts of this European Standard.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

- BS 187:1978, *Specification for calcium silicate (sandlime and flintlime) bricks*;
- BS 4729, *Specification for dimensions of bricks of special shapes and sizes*;
- BS 5628, *Code of practice for use of masonry*;
- BS 6649:1985, *Specification for clay and calcium silicate modular bricks*;
- BS EN 772-1, *Methods of test for masonry units — Part 1: Determination of compressive strength*;
- BS EN 772-18, *Methods of test for masonry units — Part 18: Determination of freeze-thaw resistance of calcium silicate masonry units*;
- DD ENV 1996-1, *Eurocode 6 — Design of masonry structures — General rules for buildings*.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 27 and a back cover.
The BSI copyright date displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments

This British Standard, having been prepared under the direction of the Sector Committee for Building and Civil Engineering, was published under the authority of the Standards Committee and comes into effect on 15 May 2001

English version

Specification for masonry units — Part 2: Calcium silicate masonry units

Spécifications pour éléments de maçonnerie — Partie 2:
Éléments de maçonnerie en silico-calcaire

Festlegungen für Mauersteine — Teil 2: Kalksandsteine

This European Standard was approved by CEN on 17 February 2000.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
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Contents	Page
Foreword	3
1 Scope	4
2 Normative references	5
3 Definitions and symbols	6
4 Materials and manufacture	9
5 Requirements for calcium silicate masonry units	9
6 Description, designation and classification of calcium silicate masonry units	12
7 Marking	13
8 Evaluation of conformity	13
Annex A (normative) Sampling for initial type testing and for independent testing of consignments	15
Annex B (normative) Cutting schemes	17
Annex C (normative) Tolerances on Accessory Units	19
Annex D (informative) Classification systems	23

Foreword

This European Standard 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 September 2000, and conflicting national standards shall be withdrawn at the latest by September 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The annexes A, B and C of this European Standard are normative, annex D is informative.

1 Scope

This European Standard specifies the characteristics and performance requirements of calcium silicate masonry units for which the main intended uses are inner walls, outer walls, cellars, foundations and chimneys, including those of an overall non-rectangular parallelepiped shape, specially shaped and accessory units.

This European Standard is intended to apply to all calcium silicate masonry units.

This European Standard does not cover units with more than 60 % volume of voids.

This European Standard does not cover products made from shale as a major raw material.

This European Standard does not cover storey height panels.

This European Standard does not cover units intended for use as a damp proof course.

This European Standard does not specify standard sizes for calcium silicate masonry units, nor standard work dimensions.

This European Standard does not cover units with an incorporated thermal insulating material placed on a face susceptible to be exposed to fire. It defines the performance related to strength, density, dimensional accuracy, geometry and freeze/thaw resistance, measured according to the corresponding test methods contained in separate European Standards.

It provides for the evaluation of conformity of the product to this European Standard. The marking requirement for products covered by this European Standard is also included.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

prEN 772-1:1999, *Methods of test for masonry units — Part 1: Determination of compressive strength*

EN 772-9, *Methods of test for masonry units — Part 9: Determination of volume and percentage of voids and net volume of calcium silicate units by sand filling*

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

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

EN 772-18:2000, *Methods of test for masonry units — Part 18: Determination of freeze-thaw resistance of calcium silicate masonry units*

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

prEN 1745, *Masonry and masonry products — Methods for determining declared and design thermal values*

3 Definitions and symbols

For the purposes of this European Standard, the following definitions apply.

3.1 Unit related definition

3.1.1

masonry unit

preformed component intended for use in masonry construction

3.2 Material related definition

3.2.1

calcium silicate masonry unit

masonry unit made predominantly from lime and siliceous materials, agglomerated and combined by the action of steam under pressure (see clause 4)

3.2.2

shale

fine grained sedimentary rock, finely laminated and consisting of mainly quartz and clay minerals

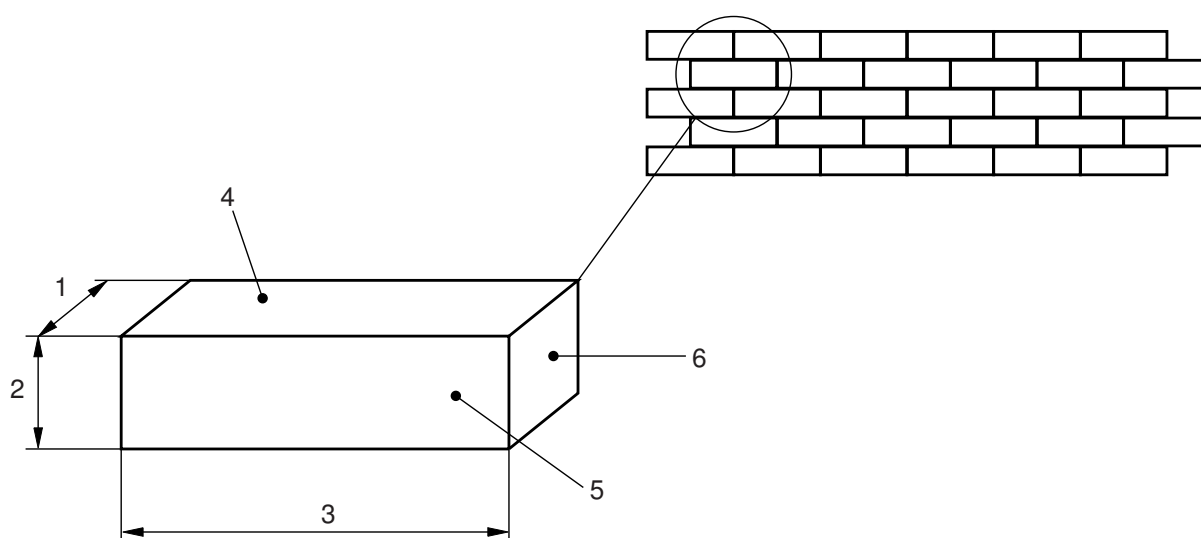
3.3 Size related definitions

3.3.1

dimensions and surfaces

dimensions and surfaces of a calcium silicate masonry unit are defined by reference to Figure 1. Figure 1 relates to the normal use of the masonry unit in a wall

NOTE Calcium silicate masonry units may be provided with recesses, tongued and grooved jointing systems.



Key

- 1 Width
- 2 Height
- 3 Length
- 4 Bed
- 5 Face
- 6 Header

NOTE This relates to the normal use of the masonry in the wall.

Figure 1 — Dimensions and surfaces

3.3.2

co-ordinating size

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

3.3.3

work size

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

3.3.4

actual size

size of a masonry unit as measured

3.4 Shape related definitions

3.4.1

regular shaped masonry unit

masonry unit with an overall rectangular parallelepiped shape