

BS EN 459-2:2010



BSI Standards Publication

Building lime

Part 2: Test methods

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National foreword

This British Standard is the UK implementation of EN 459-2:2010. It supersedes BS EN 459-2:2001 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/516/11, Lime.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Building lime - Part 2: Test methods

Chaux de construction - Partie 2: Méthodes d'essai

Baukalk - Teil 2: Prüfverfahren

This European Standard was approved by CEN on 30 July 2010.

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Foreword

This document (EN 459-2:2010) has been prepared by Technical Committee CEN/TC 51 “Cement and building limes”, the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by March 2011, and conflicting national standards shall be withdrawn at the latest by March 2011.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 459-2:2001.

The following modifications have been made from EN 459-2:2001:

- description of chemical procedures for CaO, MgO, CO₂ gravimetrically, SO₃ and loss on ignition;
- amendments for the determinations of free water and available lime;
- description of the methods for particle size determination;
- description of the determination of setting times;
- amendments for the determination of strength;
- editorial changes were made and minor mistakes corrected.

EN 459, *Building lime*, consists of the following parts:

- *Part 1: Definitions, specifications and conformity criteria*
- *Part 2: Test methods*
- *Part 3: Conformity evaluation*

The existing standards from the EN 196 series were used as a basis for the testing of physical and mechanical properties in EN 459-2. For the testing of chemical properties of building limes, test methods described in EN 12485 have been incorporated into this European Standard.

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.

Introduction

The objective in this European Standard has been to adopt as many European standardized methods as possible and where this has not been possible to use other appropriate proven methods.

Unless otherwise stated, tolerance class m of ISO 2768-1:1989 should be applied (indications on drawings by "ISO 2768-m").

All dimensions are in millimetres.

1 Scope

This European Standard describes the test methods for all building limes covered by EN 459-1:2010.

This European Standard specifies the methods used for the chemical analyses and the determination of physical properties of building limes.

This document describes the reference methods and, in certain cases, an alternative method which can be considered to be equivalent. In the case of a dispute, only the reference methods are used.

Any other methods may be used provided they are calibrated, either against the reference methods or against internationally accepted reference materials, in order to demonstrate their equivalence.

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 196-1:2005, *Methods of testing cement — Part 1: Determination of strength*

EN 196-3, *Methods of testing cement — Part 3: Determination of setting times and soundness*

EN 196-7, *Methods of testing cement — Part 7: Methods of taking and preparing samples of cement*

EN 459-1:2010, *Building lime — Part 1: Definitions, specifications and conformity criteria*

EN 932-1, *Tests for general properties of aggregates — Part 1: Methods for sampling*

EN ISO 6506-1:2005, *Metallic materials — Brinell hardness test — Part 1: Test method (ISO 6506-1:2005)*

3 Sampling

3.1 General

Sampling shall be carried out as specified in 3.2 to 3.4 taking into account the need to minimize moisture and carbon dioxide absorption. Samples shall therefore be transported and stored in air-tight containers and all the handling shall be carried out as quickly as possible.

3.2 Sampling of powdered material

Sampling shall be carried out in accordance with EN 196-7.

3.3 Sampling of granular material

Sampling shall be carried out in accordance with EN 932-1.

3.4 Sampling of lime putty and milk of lime

The spot sample size shall be $(10 \pm 5) \text{ dm}^3$.

Where lime putty or milk of lime is sampled, the increments shall be blended thoroughly.