



**NSAI**  
Standards

Irish Standard  
I.S. EN 459-1:2015

# Building lime - Part 1: Definitions, specifications and conformity criteria

**I.S. EN 459-1:2015**

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## Building lime - Part 1: Definitions, specifications and conformity criteria

Chaux de construction - Partie 1 : Définitions, spécifications  
et critères de conformité

Baukalk - Teil 1: Begriffe, Anforderungen und  
Konformitätskriterien

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## Contents

Page

Foreword.....	3
Introduction .....	4
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 Air lime.....	6
4.1 General.....	6
4.2 Sub-families of air lime .....	7
4.3 Forms of air lime .....	7
4.4 Calcium lime.....	7
4.5 Dolomitic lime .....	13
5 Lime with hydraulic properties.....	18
5.1 General.....	18
5.2 Sub-families of lime with hydraulic properties.....	18
5.3 Natural hydraulic lime .....	19
5.4 Formulated lime .....	20
5.5 Hydraulic lime .....	23
5.6 Assessment and verification of constancy of performance of natural hydraulic lime, formulated lime and hydraulic lime .....	25
5.7 Standard designation of lime with hydraulic properties .....	28
Annex A (normative) Statistical evaluation methods for strength, physical and chemical properties .....	29
A.1 Statistical conformity criteria .....	29
A.2 Single result conformity criteria.....	31
Annex B (informative) Additional properties for building lime .....	36
Annex C (informative) Schematic diagram for the types of lime and fields of application .....	38
Annex D (normative) Declaration of composition for formulated lime .....	39
D.1 Main constituents content to be declared by the producer .....	39
D.2 Minor constituents.....	39
D.3 Additives .....	39
D.4 Declaration of composition .....	39
D.5 Standard designation .....	40
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Product Regulation .....	41
Bibliography .....	51

## Foreword

This document (EN 459-1:2015) 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of an identical text or by endorsement, at the latest by October 2015, and conflicting national standards shall be withdrawn at the latest by January 2017.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 EN 459-1:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

For relationship with Regulation (EU) No. 305/2011, see informative Annex ZA, which is an integral part of this document.

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 requirements in EN 459-1 are based on the results of tests on building lime determined in accordance with EN 459-2.

Annexes A and D are normative, Annexes B, C and ZA are informative.

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.

## **EN 459-1:2015 (E)**

### **Introduction**

The revision of this European Standard for building lime was initiated by Decision 4 taken by CEN/TC 51 “Cement and building limes” in 2013.

Different sources of raw materials and different climatic conditions have led to different developments in building construction and civil engineering practices and materials and therefore to different kinds of building lime in different regions of Europe.

The inclusion of a wider range of building lime which exists in Europe has made it necessary to establish a number of classes.

The previous national standards for building lime generally also formed the basis for different areas of application (see Annex C (informative)). The classification chosen therefore also takes into consideration these circumstances as far as possible.

For a better understanding, the standard makes a clear distinction between air lime (Clause 4) and lime with hydraulic properties (Clause 5). Depending on the composition and characteristics of the products, each clause is then divided into sub-paragraphs (calcium lime and dolomitic lime for air lime; natural hydraulic lime, formulated lime and hydraulic lime for lime with hydraulic properties) containing the appropriate definitions, specifications and conformity criteria.

## 1 Scope

This European Standard applies to building lime used for:

- preparation of binder for mortar (for example for masonry, rendering and plastering);
- production of other construction products (for example calcium silicate bricks, autoclaved aerated concrete, concrete, etc.);
- civil engineering applications (for example soil treatment, asphalt mixtures, etc.).

It gives definitions for the different types of building lime and their classification. It also gives requirements for their chemical and physical properties which depend on the type of building lime and specifies the conformity criteria.

Terms of delivery or other contractual conditions, normally included in documents exchanged between the supplier and the purchaser of building lime, are outside the scope of this European Standard.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 197-1, *Cement — Part 1: Composition, specifications and conformity criteria for common cements*

EN 459-2:2010, *Building lime — Part 2: Test methods*

EN 459-3:2015, *Building lime — Part 3: Conformity evaluation*

## 3 Terms and definitions

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

NOTE See also Annex C.

### 3.1

#### **lime**

calcium oxide and/or hydroxide, and calcium-magnesium oxide and/or hydroxide produced by the thermal decomposition (calcination) of naturally occurring calcium carbonate (for example limestone, chalk, shells) or naturally occurring calcium magnesium carbonate (for example dolomitic limestone, dolomite)

### 3.2

#### **building lime**

group of lime products, exclusively consisting of two families: air lime and lime with hydraulic properties, used in applications or materials for construction, building and civil engineering

### 3.3

#### **air lime<sup>1)</sup>**

lime (see 3.1) which combines and hardens with carbon dioxide present in air

Note 1 to entry: Air lime has no hydraulic properties. Air lime is divided into two sub-families, calcium lime (CL) and dolomitic lime (DL).

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1) Translation of a term used in most European countries.

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