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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 459-1

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Supersedes ENV 459-1:1994

### English version

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

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

Baukalk - Teil 1: Definitionen, Anforderungen und Konformitätskriterien

This European Standard was approved by CEN on 16 February 2001.

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 Management Centre 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 Management Centre 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.



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### **Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 51 "Cement and building limes", the secretariat of which is held by IBN.

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of an identical text or by endorsement, at the latest by April 2002, and conflicting national standards shall be withdrawn at the latest by July 2003.

This European Standard supersedes ENV 459-1:1994.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

The European Standard EN 459 for 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 459-1:2001 are based on the results of tests on building lime according to EN 459-2:2001.

Annex A and C are informative. Annex B is normative.

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.

#### Introduction

The preparation of a European Standard for building lime was initiated by Resolution No 107 taken by CEN/TC 51 "Cement and building limes" in 1988.

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

An attempt has been made to include all the different types of building lime which exist in Europe in this European Standard. To this end, it was necessary to establish a number of classes.

When mixed with water, building limes form a paste that improves the workability (values of flow and penetration) and water retention of mortars. The carbonation of hydrates in contact with atmospheric carbon dioxide provides the strength and durability of masonry mortars containing building lime. In lime mortars a recrystallisation of calcium carbonate occurs (this property is called "self healing").

The previous national standards for building limes generally also formed the basis for other areas of application (see Annex A (informative)). The classification chosen therefore also attempts to take into consideration these circumstances as far as possible.

### 1 Scope

This European Standard applies to building limes used as binders for preparation of mortar (for masonry, rendering and plastering) and production of other construction products.

It gives definitions for the different types of building limes 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 lime, are outside the scope of this European Standard.

NOTE Additional requirements are needed in special applications e. g. civil engineering.