

Natural stone - Terminology

Natural stone - Terminology

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12670:2002 sisaldab Euroopa standardi EN 12670:2001 ingliskeelset teksti. Käesolev dokument on jõustatud 19.06.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12670:2002 consists of the English text of the European standard EN 12670:2001. This document is endorsed on 19.06.2002 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
--	---

Käsitlusala: This European Standard defines the recommended terminology covering scientific, and technical terms, test methods, products and the classification of Natural Stones.	Scope: This European Standard defines the recommended terminology covering scientific, and technical terms, test methods, products and the classification of Natural Stones.
--	--

ICS 01.040.73, 73.020, 91.100.15

Võtmesõnad: building stones, classification, construction, definition, definitions, designations, determinations, finishing, materials testing, natural stone, natural stones, raw material, sciences, stone, technology, terminology

ICS 01.040.73; 01.040.91; 73.020; 91.100.15

English version

Natural stone - Terminology

Pierre naturelle - Terminologie

Naturstein - Terminologie

This European Standard was approved by CEN on 20 October 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.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword.....	3
Introduction	4
1 Scope.....	5
2 Terminology of Natural Stone	5
2.1 Geological terms.....	5
2.2 Quarrying terms	27
2.3 Processing terms	29
2.4 Products and installation terms	32
3 Scientific Classifications	35
3.1 Geological Time Scale (Informative)	35
3.2 Scientific Classification Charts	36
3.2.1 Igneous Rocks Classification Charts.....	36
3.2.2 Sedimentary Rocks Classification Charts	42
3.2.3 Metamorphic Rocks Classification Chart	46
Annex A (informative) Alphabetic Index	47
Bibliography	53

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 246 "Natural Stone", the secretariat of which is held by UNI.

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 June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

This draft standard is one of a series of standards for natural stone products including denomination, test methods and product standards.

Annexes A and B 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The term Natural Stone groups several rock types with marked geological differences. The extraction elaboration and commerce of Natural Stone have set a very particular vocabulary. Many of these terms have been taken from the popular or quarrymen language, which sometimes is far from scientific definitions; this often results in a great deal of confusion.

This standard establishes the terminological bases for geological and petrologic definitions of Natural Stone and its classification. References to definitions of natural stone products, defined in other European Standards, are provided when necessary. It also incorporates most of the popular or commercial terminology.

The terminology covers the fields of geology, mining, processing, marketing and products of Natural Stone. The included scientific classifications allows to set the scientific name of the stone varieties.

1 Scope

This European Standard defines the recommended terminology covering scientific, and technical terms, test methods, products, and the classification of Natural Stones.

2 Terminology of Natural Stone

NOTE For the purposes of this European Standard the following abbreviations apply:

e.g. for example (Latin *exempli gratia*);

i.e. that is (Latin *id est*).

2.1 Geological terms

2.1.1 **accessory minerals:** Rock-forming minerals that occur in such small amounts that they are not included in the classification of the rock.

NOTE Accessory minerals can be used to state precisely the name of the rock, e.g. biotite granite. (See also EN 12440).

2.1.2 **acid rock:** Igneous rock that contains more than 65 % of silica.

2.1.3 **actinolite:** Ca-Mg-Fe-amphibole. See amphibole formula.

2.1.4 **agate:** Cryptocrystalline variety of silica, showing a variegated banded structure and waxy luster.

2.1.5 **agglomerate:** Extrusive pyroclastic rock of consolidated or unconsolidated coarse volcanic fragments (with diameters greater than 64 mm), in which rounded pyroclasts predominate.

2.1.6 **alabaster:** Fine grained, compact variety of gypsum, usually white or pale coloured and translucent.

2.1.7 **albite:** Sodium plagioclase, formula $\text{Na} [\text{Al Si}_3 \text{O}_8]$. See plagioclase.

2.1.8 **alkali feldspar:** The alkali-rich feldspars microcline, orthoclase, sanidine, albite, with less than 5% anorthite. See feldspar and plagioclase.

2.1.9 **allochems:** One of the several varieties of discrete and organized carbonate aggregates that serve as the coarser framework grains in most mechanically deposited limestones. Important allochems include: silt, sand, gravelsize intraclasts ooids; pellets; lumps and fossils or fossil fragments.

2.1.10 **allotriomorphic; anhedral; xenomorphic:** Term applied to minerals which show in thin sections no characteristic or rational faces, suggested by its crystalline structure.

2.1.11 **alteration:** Changes of the mineralogical composition of a rock brought about by physical, chemical or biological means, including actions of hydrothermal solutions and weathering processes. Differs from metamorphism in being milder, more localized and not restricted to high temperatures.

2.1.12 **alumina; corundum:** A mineral, formula Al_2O_3 . Used in fine polishing.

2.1.13 **amorphous:** Mineral that does not have a crystalline structure.

2.1.14 **amphibole:** Family of dark ferromagnesian silicate minerals, general formula $\text{A}_{2-3}\text{B}_5(\text{Si,Al})_8\text{O}_{22}(\text{OH})_2$, where A= Mg, Fe^{2+} , Ca, Na; B=Mg, Fe^{2+} , Fe^{3+} , Al.

2.1.15 **amphibolite:** Metamorphic rock consisting mainly of amphibole and plagioclase. See 3.2.3.1

2.1.16 **amygdaloidal:** Fabric of volcanic rocks where vesicles are present, which are full or partially filled with secondary minerals.

2.1.17 **analcime:** A mineral $\text{Na} [\text{AlSi}_2\text{O}_6] \cdot \text{H}_2\text{O}$ of the zeolite group, which can occur in basalts. See