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Natural stone test methods - Petrographic examination

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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## Natural stone test methods - Petrographic examination

Méthodes d'essai de pierres naturelles - Examen  
péetrographique

Prüfverfahren für Naturstein - Petrographische  
Prüfung

This European Standard was approved by CEN on 15 April 2019.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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## European foreword

This document (EN 12407:2019) has been prepared by Technical Committee CEN/TC 246 “Natural stones”, 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of an identical text or by endorsement, at the latest by November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12407:2007.

In comparison with the previous edition, the following changes have been made:

— the changes concern essentially the proper scientific definitions, terminology, and diagrams.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Introduction**

A petrographic description of natural stones is important not only for the purposes of petrographic classification but also in order to highlight features affecting its chemical, physical and mechanical behaviour. In the same way the determination of the stone's origin could be necessary (e.g. in the case of restoration of historical monuments). It is therefore essential to characterize the natural stones for their mineral components and for their fabric and structure but also in terms of any features as: colour, presence of veins, of fossils, of discontinuities, etc.

To ensure that the petrographic classification is objective, it is essential that the characterization of the material is, as far as possible, quantitative.

The interpretation of the results obtained from the petrographic examination of natural stone should include evidences of a possible relationship between petrographic features and technical properties (pores/cleavages/schistosity with water absorption/gelivity/flexure resistance etc.).

## **1 Scope**

This document specifies methods for making technical petrographic descriptions of natural stone, except for roofing slates. For this product, the method for the petrographic examination is defined in EN 12326-2. Although chemical and physical methods of analysis are required for petrographic classification of some stone types, these methods will not be described in this standard.

## **2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 12440, *Natural stone - Denomination criteria*

EN 12670, *Natural stone - Terminology*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**