

ICS 91.100.15

English Version

## Natural stones - Guidance for use of natural stones

Pierres naturelles - Guide d'emploi des pierres  
naturelles

Naturstein - Leitfaden für die Anwendung von  
Natursteinen

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

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## Contents

Page

European foreword.....	3
Introduction .....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions .....	6
4 General specifications .....	7
4.1 General principles.....	7
4.2 Characterization tests .....	10
4.2.1 Origin of the stone.....	10
4.2.2 Petrographic analysis.....	10
4.2.3 Visual characteristics: reference sample .....	10
4.2.4 Apparent density .....	11
4.2.5 Open porosity .....	11
4.2.6 Water absorption .....	12
4.2.7 Determination of uniaxial compressive strength.....	13
4.2.8 Determination of flexural strength .....	13
4.2.9 Modulus of elasticity .....	14
4.2.10 Sound speed propagation.....	14
4.2.11 Thermal expansion coefficient.....	14
4.3 Tests relating to performance in use .....	15
4.3.1 Resistance to breaking load at dowel hole .....	15
4.3.2 Rupture energy .....	15
4.3.3 Sensitivity to staining .....	15
4.3.4 Slip resistance .....	16
4.4 Durability tests.....	17
4.4.1 Frost resistance.....	17
4.4.2 Determination of abrasion resistance.....	18
4.5 Dimensional tolerances - Corresponding standards.....	19
4.6 Suitability for the intended use.....	19
5 Delivery acceptance .....	22
5.1 Conditions of delivery acceptance .....	22
5.1.1 General.....	22
5.1.2 Objective of the delivery acceptance process .....	23
5.1.3 Location .....	23
5.1.4 Date .....	23
5.1.5 Staff and equipment for delivery acceptance .....	23
5.2 Proceedings of delivery acceptance process.....	23
5.2.1 General.....	23
5.2.2 Evaluation of the delivered quantity.....	23
5.2.3 Sampling.....	23
5.2.4 Testing of the material's nature.....	24
5.2.5 Testing of geometric characteristics.....	24
5.2.6 Testing of declared performance characteristics.....	25
6 Dealing with visual and dimensional non conformities.....	25

## European foreword

This document (CEN/TR 17024:2017) has been prepared by Technical Committee CEN/TC 246 “Natural stones”, the secretariat of which is held by UNI.

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.

## Introduction

Product standards for natural stone are issued by the European committee for standardization and deal with stone masonry, tiles and slabs for cladding, flooring and stairs.

Producers in countries outside the European Union might not be familiar with these product standards. Therefore, the scope of this document is to inform and assist the user in order to provide recommendations for the proper use of natural stone and the requirements of the product standards regulating their being placed on the market within the countries comprising the European Union.

## 1 Scope

This Technical Report applies to natural stone products intended for masonry elements, wall coverings (including tiles), internal floor and stair finishes (including tiles) and exterior floor and stair finishes (including paving), as well as massive stone elements.

It provides guidance for the application and use of natural stone products in accordance with European product standards.

This Technical Report does not deal with coatings or staining problems, and does not take into account treatments that could modify the performance characteristics of the materials.

This Technical Report does not apply to agglomerated stones and aggregates.

## 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 771-6, *Specification for masonry units — Part 6: Natural stone masonry units*

EN 772-1, *Test methods for masonry units — Part 1: Determination of compressive strength*

EN 772-11, *Methods of test for masonry units - Part 11: Determination of water absorption of aggregate concrete, autoclaved aerated concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units*

EN 1341, *Slabs of natural stone for external paving - Requirements and test methods*

EN 1342, *Setts of natural stone for external paving - Requirements and test methods*

EN 1343, *Kerbs of natural stone for external paving - Requirements and test methods*

EN 1467, *Natural stone - Rough blocks - Requirements*

EN 1468, *Natural stone - Rough slabs - Requirements*

EN 1469, *Natural stone products - Slabs for cladding - Requirements*

EN 1925, *Natural stone test methods - Determination of water absorption coefficient by capillarity*

EN 1926, *Natural stone test methods - Determination of uniaxial compressive strength*

EN 1936, *Natural stone test methods - Determination of real density and apparent density, and of total and open porosity*

EN 12057, *Natural stone products - Modular tiles - Requirements*

EN 12058, *Natural stone products - Slabs for floors and stairs - Requirements*

EN 12059, *Natural stone — Finished products, dimensional stone work Requirements*

EN 12371, *Natural stone test methods - Determination of frost resistance*

EN 12372, *Natural stone test methods - Determination of flexural strength under concentrated load*

EN 12407, *Natural stone test methods - Petrographic examination*

EN 12440, *Natural stone - Denomination criteria*

EN 12670, *Natural stone - Terminology*

EN 13364, *Natural stone test methods - Determination of the breaking load at dowel hole*

EN 13373, *Natural stone test methods - Determination of geometric characteristics on units*

EN 13755, *Natural stone test methods - Determination of water absorption at atmospheric pressure*

EN 14066, *Natural stone test methods - Determination of resistance to ageing by thermal shock*

EN 14146, *Natural stone test methods - Determination of the dynamic modulus of elasticity (by measuring the fundamental resonance frequency)*

EN 14157, *Natural stone test methods - Determination of the abrasion resistance*

EN 14158, *Natural stone test methods - Determination of rupture energy*

EN 14579, *Natural stone test methods - Determination of sound speed propagation*

EN 14581, *Natural stone test methods - Determination of linear thermal expansion coefficient*

EN 16140, *Natural stone test methods - Determination of sensitivity to changes in appearance produced by thermal cycles*

EN 16306, *Natural stone test methods - Determination of resistance of marble to thermal and moisture cycles*

CEN/TS 16165, *Determination of slip resistance of pedestrian surfaces - Methods of evaluation*

### 3 Terms and definitions

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

#### 3.1

##### **order**

all products to be delivered on the basis of the contract

#### 3.2

##### **order item**

one of a set of products corresponding to one single order

#### 3.3

##### **contractual sample**

reference sample which forms part of the contract