



**NSAI**  
Standards

Irish Standard  
I.S. EN 12058:2015

# Natural stone products - Slabs for floors and stairs - Requirements

**I.S. EN 12058:2015**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 12058:2015

*Published:*

2015-03-11

*This document was published under the authority of the NSAI and comes into effect on:*

2015-03-28

ICS number:

91.100.15

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

**EN 12058**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2015

ICS 91.100.15

Supersedes EN 12058:2004

English Version

## Natural stone products - Slabs for floors and stairs - Requirements

Produits en pierre naturelle - Dalles de revêtement de sol et  
d'escalier - Exigences

Natursteinprodukte - Bodenplatten und Stufenbeläge -  
Anforderungen

This European Standard was approved by CEN on 3 January 2015.

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

CEN members are the national standards bodies of 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 United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Contents

	Page
Foreword.....	4
<b>1</b> <b>Scope .....</b>	<b>5</b>
<b>2</b> <b>Normative references .....</b>	<b>5</b>
<b>3</b> <b>Terms and definitions .....</b>	<b>5</b>
<b>4</b> <b>Characteristics of natural stone slabs .....</b>	<b>7</b>
<b>4.1</b> <b>Geometrical characteristics.....</b>	<b>7</b>
<b>4.1.1</b> <b>General.....</b>	<b>7</b>
<b>4.1.2</b> <b>Dimensions.....</b>	<b>7</b>
<b>4.1.3</b> <b>Flatness .....</b>	<b>7</b>
<b>4.1.4</b> <b>Length and width .....</b>	<b>8</b>
<b>4.1.5</b> <b>Special shapes .....</b>	<b>8</b>
<b>4.1.6</b> <b>Commercial sizes of slabs for floors and stairs .....</b>	<b>8</b>
<b>4.1.7</b> <b>Surface finish .....</b>	<b>9</b>
<b>4.2</b> <b>Physical and mechanical characteristics.....</b>	<b>9</b>
<b>4.2.1</b> <b>General.....</b>	<b>9</b>
<b>4.2.2</b> <b>Denomination .....</b>	<b>9</b>
<b>4.2.3</b> <b>Visual appearance .....</b>	<b>9</b>
<b>4.2.4</b> <b>Flexural strength.....</b>	<b>11</b>
<b>4.2.5</b> <b>Bond strength/adhesion .....</b>	<b>11</b>
<b>4.2.6</b> <b>Water absorption at atmospheric pressure .....</b>	<b>11</b>
<b>4.2.7</b> <b>Reaction to fire.....</b>	<b>11</b>
<b>4.2.8</b> <b>Water absorption by capillarity .....</b>	<b>11</b>
<b>4.2.9</b> <b>Apparent density and open porosity .....</b>	<b>11</b>
<b>4.2.10</b> <b>Durability .....</b>	<b>12</b>
<b>4.2.11</b> <b>Thermal shock resistance.....</b>	<b>12</b>
<b>4.2.12</b> <b>Water vapour permeability.....</b>	<b>12</b>
<b>4.2.13</b> <b>Slip resistance.....</b>	<b>12</b>
<b>4.2.14</b> <b>Skid resistance.....</b>	<b>12</b>
<b>4.2.15</b> <b>Tactility .....</b>	<b>13</b>
<b>4.2.16</b> <b>Direct airborne sound insulation .....</b>	<b>13</b>
<b>4.2.17</b> <b>Thermal conductivity.....</b>	<b>13</b>
<b>4.2.18</b> <b>Release of dangerous substances.....</b>	<b>13</b>
<b>5</b> <b>Testing, assessment and sampling methods .....</b>	<b>13</b>
<b>5.1</b> <b>Testing .....</b>	<b>13</b>
<b>5.2</b> <b>Sampling.....</b>	<b>13</b>
<b>5.2.1</b> <b>General.....</b>	<b>13</b>
<b>5.2.2</b> <b>Principles of sampling .....</b>	<b>14</b>
<b>5.2.3</b> <b>Taking bulk samples .....</b>	<b>14</b>
<b>5.2.4</b> <b>Preparing a sampling plan.....</b>	<b>14</b>
<b>5.2.5</b> <b>Sampling apparatus .....</b>	<b>14</b>
<b>5.2.6</b> <b>Sampling methods.....</b>	<b>14</b>
<b>5.2.7</b> <b>Marking, packaging and dispatch of the samples.....</b>	<b>16</b>
<b>5.2.8</b> <b>Sampling report .....</b>	<b>16</b>
<b>6</b> <b>Assessment and verification of constancy of performance - AVCP .....</b>	<b>17</b>
<b>6.1</b> <b>General.....</b>	<b>17</b>
<b>6.2</b> <b>Type Testing.....</b>	<b>18</b>
<b>6.2.1</b> <b>General.....</b>	<b>18</b>
<b>6.2.2</b> <b>Test samples, testing and compliance criteria.....</b>	<b>18</b>

<b>6.2.3</b>	<b>Test reports .....</b>	<b>19</b>
<b>6.2.4</b>	<b>Shared other party results .....</b>	<b>20</b>
<b>6.2.5</b>	<b>Cascading determination of the product type results .....</b>	<b>20</b>
<b>6.3</b>	<b>Factory production control (FPC) .....</b>	<b>21</b>
<b>6.3.1</b>	<b>General .....</b>	<b>21</b>
<b>6.3.2</b>	<b>Requirements .....</b>	<b>22</b>
<b>6.3.3</b>	<b>Product specific requirements .....</b>	<b>25</b>
<b>6.3.4</b>	<b>One-off products, pre-production products (e.g. prototypes) and products produced in very low quantity .....</b>	<b>26</b>
<b>6.3.5</b>	<b>Procedure for modifications .....</b>	<b>27</b>
<b>7</b>	<b>Marking and packaging .....</b>	<b>27</b>
<b>Annex ZA (informative)</b>	<b>Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation .....</b>	<b>29</b>
<b>ZA.1</b>	<b>Scope and relevant characteristics .....</b>	<b>29</b>
<b>ZA.2</b>	<b>Procedure for AVCP of natural stone for floorings and stairs .....</b>	<b>32</b>
<b>ZA.2.1</b>	<b>System(s) of AVCP .....</b>	<b>32</b>
<b>ZA.2.2</b>	<b>Declaration of performance (DoP) .....</b>	<b>35</b>
<b>ZA.2.2.1</b>	<b>General .....</b>	<b>35</b>
<b>ZA.2.2.2</b>	<b>Content .....</b>	<b>36</b>
<b>ZA.2.2.3</b>	<b>Example of DoP .....</b>	<b>36</b>
<b>ZA.2.2.3.1</b>	<b>Example of DoP for slabs for internal use .....</b>	<b>36</b>
<b>ZA.2.2.3.2</b>	<b>Example of DoP for slabs for external use .....</b>	<b>38</b>
<b>ZA.3</b>	<b>CE marking and labelling .....</b>	<b>40</b>
	<b>Bibliography .....</b>	<b>44</b>

## EN 12058:2015 (E)

### Foreword

This document (EN 12058:2015) 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 September 2015, and conflicting national standards shall be withdrawn at the latest by December 2016.

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 12058:2004.

EN 12058:2015 includes the following significant technical changes with respect to EN 12058:2004:

- nominal thickness tolerances changed;
- durability, skid resistance, direct airborne sound insulation, thermal conductivity, release of dangerous substances added to requirements;
- sampling at the point of delivery added to the sampling;
- assessment and verification of constancy of performance added;
- Annex ZA substantially changed.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports basic requirements for construction works of Regulation (EU) No.305/2011 on Construction Products.

For relationship with the Regulation, see informative Annex ZA, which is an integral part of this document.

This European Standard is one of a series of standards for specifications of natural stone products which includes the following:

- EN 1467, *Natural stone — Rough blocks — Requirements*;
- EN 1468, *Natural stone — Rough slabs — Requirements*;
- EN 1469, *Natural stone products — Slabs for cladding — Requirements*;
- EN 12057, *Natural stone products — Modular tiles — Requirements*;
- EN 12058, *Natural stone products — Slabs for floors and stairs — Requirements*;
- EN 12059, *Natural stone products — Dimensional stone work — Requirements*.

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.

## 1 Scope

This European Standard specifies requirements for flat natural stone slabs used as paving units for internal (including enclosed public transport premises) and/or external uses in floors and stairs including skirtings. This European Standard does not cover mineral aggregates and artificial agglomerated stone material and does not cover installation.

## 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 1745, *Masonry and masonry products - Methods for determining thermal properties*

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

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

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 12670:2001, *Natural stone - Terminology*

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

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

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

CEN/TS 16165:2012, *Determination of slip resistance of pedestrian surfaces - Methods of evaluation*

EN ISO 10456, *Building materials and products - Hygrothermal properties - Tabulated design values and procedures for determining declared and design thermal values (ISO 10456)*

EN ISO 12572, *Hygrothermal performance of building materials and products - Determination of water vapour transmission properties (ISO 12572)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12670:2001 and the following apply.

### 3.1

#### **slab for floors**

flat piece of natural stone obtained by cutting or splitting at a nominal thickness > 12 mm

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-