

INTERNATIONAL  
STANDARD

**ISO**  
**3813**

Third edition  
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**Resilient floor coverings — Cork floor  
tiles — Specification**

*Revêtements de sol résilients — Dalles en aggloméré de liège —  
Spécification*



Reference number  
ISO 3813:2004(E)

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Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 3813 was prepared by the European Committee for Standardization as EN 12104 and was adopted, under a special “fast-track procedure”, by Technical Committee ISO/TC 87, *Cork*, in parallel with its approval by the ISO member bodies.

This third edition cancels and replaces the second edition (ISO 3813:1987), of which it constitutes a technical revision.

In Clause 5, item a), “EN 12104:1999” has been replaced with “ISO 3813:2004”, for the purposes of international standardization.

For the purposes of international standardization, a list of corresponding International and European Standards for which equivalents are not given in EN 12104 has been added as Annex ZZ.

## **Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 134 "Resilient and textile floor coverings", the secretariat of which is held by BSI.

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 2000, and conflicting national standards shall be withdrawn at the latest by November 2000.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association. This European Standard is considered to be a supporting standard to those application and product standards which in themselves support an essential safety requirement of a New Approach Directive and which make reference to this European Standard.

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.

This European Standard includes three informative annexes:

Annex A: Optional properties

Annex B: Supplementary information

Annex C: Bibliography

## 1 Scope

This European Standard specifies the requirements for cork floor coverings made from agglomerated composition cork supplied in tile form which are designed to be used with a factory finish and/or an insitu finish.

Cork floor coverings can be covered with other complementary layers of decorative materials, e.g. decorative cork or wood veneers, with or without applied colours.

This European Standard includes a classification system based on intensity of use which shows where cork floor tiles should give satisfactory service (see EN 685). It also specifies requirements for marking, labelling and packing.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references subsequent amendments to, or revisions of, any of this publication apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 424, *Resilient floor coverings - Determination of the effect of the simulated movement of a furniture leg*

EN 425, *Resilient floor coverings - Determination of the effect of a castor chair*

EN 427, *Resilient floor coverings - Determination of the side length and the squareness and straightness of tiles*

EN 428, *Resilient floor coverings - Determination of the overall thickness*

EN 430, *Resilient floor coverings - Determination of mass per unit area*

EN 433, *Resilient floor coverings - Determination of residual indentation after static load*

EN 434, *Resilient floor coverings - Determination of dimensional stability and curling after exposure to heat*

EN 672, *Resilient floor coverings - Determination of apparent density of agglomerated cork*

EN 685, *Resilient floor coverings – Classification*

EN 12105, *Resilient floor coverings - Determination of moisture content of agglomerated cork*

EN 12466, *Resilient floor coverings – Vocabulary*

## 3 Definitions

For the purposes of this European Standard the following definition and those given in EN 12466 apply:

### 3.1

#### **agglomerated composition cork**

product obtained from the agglutination of cork granules with the addition of a binder

### 3.2

#### **cork floor covering**

floor covering the main component of which is agglomerated composition cork, intended to be used with a finish [EN 12466]

## **4 Requirements**

### **4.1 General requirements**

Cork floor coverings described in this standard shall conform to the appropriate general requirements specified in table 1, when tested in accordance with methods given therein.

### **4.2 Classification requirements**

Cork floor coverings described in this standard shall be classified as suitable for different levels of intensity of use in accordance with the performance requirements specified in table 2, when tested in accordance with the test methods stated therein.

Classification shall conform to the system specified in EN 685.

## **5 Marking, labelling and packing**







Cork floor coverings that conform to the requirements of this standard shall be clearly and indelibly marked by the manufacturer either in their package or on an adhesive label with the following information:

- a) number and the year of this standard, i.e. ISO 3813:2004;
- b) manufacturer's and/or or supplier's identification;
- c) product name including the finishing and batch number (possibly in code form);
- d) year of manufacture (last two digits);
- e) class/symbol of level of use;
- f) nominal dimensions and the area in square metres contained in a package;
- g) the warning that packages shall be stored shielded from direct sunlight and humidity.

Table 1: General requirements

Property	Requirements	Test method
<b>Side length</b> mm <b>Squareness and straightness of edges</b> mm for side length $\leq 400$ mm $> 400$ mm	deviation from nominal: $\leq 0,2$ % up to 1,0 mm maximum  deviation allowed $\leq 0,5$ $\leq 1,0$	EN 427
<b>Overall thickness</b> mm  individual results Sanded or finished <sup>1</sup> tiles  Unsanded tiles	nominal value: 0 + 0,25  nominal value: 0 + 0,50	EN 428
<b>Apparent density</b> kg/m <sup>3</sup> average individual results	$\geq$ nominal value $\geq 95$ % nominal value	EN 672
<b>Mass per unit area</b> g/m <sup>2</sup> average	nominal value $\pm 10$ %	EN 430
<b>Dimensional stability</b> %	$\leq 0,4$	EN 434
<b>Curling</b> mm	$\leq 6$	EN 434
<b>Moisture content</b> %	Shall be stated by the manufacturer	EN 12105
<sup>1</sup> Finishing coat(s) should be varnish, wax or others		

Table 2: Classification requirements

Class	Symbol	Level of use	Overall thickness (mm)	Apparent density (kg/m <sup>3</sup> )	Residual indentation (mm)	Castor chair	Simulated movement of a furniture leg
21		domestic moderate	≥ 3,2	≥ 400	≤ 0,4	No requirement	No requirement
22		domestic general	≥ 4,0	≥ 450 with or without veneer	≤ 0,4		
23		domestic heavy	≥ 4,0	≥ 450 with or without veneer	≤ 0,4		
31		commercial moderate	≥ 4,0	≥ 450 with or without veneer	≤ 0,4		
32		commercial general	≥ 4,0	≥ 500 with or without veneer	≤ 0,3	No disturbance to the surface other than slight change in appearance and no delamination shall occur	No damage shall be visible after testing with type 2 foot
41		industrial moderate	≥ 4,0	≥ 500 with or without veneer	≤ 0,3		
Relevant standard		EN 685	EN 428	EN 672	EN 433	EN 425	EN 424



## **Annex A (informative) Optional properties**

The following properties are considered important for some specific uses, as appropriate:

- effect of stains (see EN 423)
- electrical resistance (see EN 1081)
- thermal resistance (see EN 12664 and/or EN 12667)
- acoustic properties (see EN ISO 140-8)

## **Annex B (informative) Supplementary information**

The manufacturer should provide information on the maintenance cycle of its products and prepare and issue a manual for the laying of cork floor coverings.

Cork floor coverings with a veneer layer should not be sanded.

## **Annex C (informative) Bibliography**

EN 423, *Resilient floor coverings - Determination of the effect of stains*

EN 1081, *Resilient floor coverings - Determination of the electrical resistance*

EN 12664, *Building materials - Determination of thermal resistance by means of hot guarded plate and heat flow meter methods - Dry and moist products of low and medium thermal resistance*

EN 12667, *Building materials - Determination of thermal resistance by means of hot guarded plate and heat flow meter methods - Products of high and medium thermal resistance*

EN ISO 140-8, *Acoustics - Measurement of sound insulation in buildings and of building elements - Part 8: Laboratory measurement of the reduction of transmitted impact noise by floor coverings on a standard floor.*

**Annex ZZ**  
(informative)

**List of International Standards equivalent to the European Standards  
referenced in Clause 2**

European Standard	International Standard
EN 427	ISO 3810 <sup>a</sup>
EN 428	ISO 3810 <sup>a</sup>
EN 433	ISO 3810 <sup>a</sup>
EN 672	ISO 3850
EN 12105	ISO 2066, ISO 3810 <sup>a</sup>
<sup>a</sup> Partially equivalent.	



