



# SLOVENSKI STANDARD

SIST EN 15468:2008

01-januar-2008

---

**Laminatne talne obloge - Elementi z direktnim nanosom potiska in sloja iz umetne smole - Specifikacije, zahteve in preskusne metode**

Laminate floor coverings - Elements with directly applied printing and resin surface layer  
- Specifications, requirements and test methods

Laminatböden - Direktbedruckte Elemente mit Kunstharz-Deckschicht - Spezifikationen, Anforderungen und Prüfverfahren

**iTeh STANDARD PREVIEW**

Revetements de sol stratifiés - Éléments comportant une couche d'impression appliquée directement et une couche de surface à base de résine - Spécifications, exigences et méthodes d'essai

[SIST EN 15468:2008](https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008)

[https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-](https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008)

[5affa938aa0d/sist-en-15468-2008](https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008)

**Ta slovenski standard je istoveten z: EN 15468:2007**

---

**ICS:**

97.150

Netekstilne talne obloge

Non-textile floor coverings

**SIST EN 15468:2008**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 15468:2008

<https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008>

ICS 97.150

English Version

Laminate floor coverings - Elements with directly applied printing  
and resin surface layer - Specifications, requirements and test  
methods

Revêtements de sol stratifiés - Eléments comportant une  
couche d'impression appliquée directement et une couche  
de surface à base de résine - Spécifications, exigences et  
méthodes d'essai

Laminatböden - Direktbedruckte Elemente mit Kunstharz-  
Deckschicht - Spezifikationen, Anforderungen und  
Prüfverfahren

This European Standard was approved by CEN on 1 September 2007.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, 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
1 Scope .....	4
2 Normative references .....	4
3 Terms and definitions .....	5
4 Requirements .....	5
4.1 General requirements.....	5
4.2 Classification requirements, Floor coverings using the PDL technologies.....	5
4.3 Additional characteristics and requirements .....	7
5 Marking, designation and packaging.....	7
5.1 Marking .....	7
5.2 Designation .....	7
5.3 Packaging .....	8
6 Test report .....	8
Bibliography .....	9

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 15468:2008](https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008)

<https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008>

## Foreword

This document (EN 15468:2007) has been prepared by Technical Committee CEN/TC 134 “Resilient, textile and laminate 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 April 2008, and conflicting national standards shall be withdrawn at the latest by April 2008.

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.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 15468:2008](#)

<https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008>

## 1 Scope

This European Standard specifies characteristics, states requirements and references test methods for laminate floor coverings with a directly applied printing and resin surface layer.

It includes a classification system, based on EN 685, providing practical requirements for areas of use and levels of use, to indicate where laminate floor coverings will give satisfactory service and to encourage the consumer to make an informed choice. It also specifies requirements for marking and packaging.

Laminate floor coverings are considered for domestic and commercial levels of use. This standard does not specify requirements relating to areas that are subject to frequent wetting, such as bathrooms, laundry rooms or saunas, but it does apply to domestic kitchens.

## 2 Normative references

The following referenced documents are indispensable for the application 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 322, *Wood-based panels — Determination of moisture content*

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

EN 425, *Resilient and laminate floor coverings - Castor chair test*

EN 438-2, *High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (usually called Laminates) - Part 2: Determination of properties*

[SIST EN 15468:2008](#)

EN 685, *Resilient, textile and laminate floor coverings — Classification*

[http://standards.iteh.org/en/standards/sist/en-15468-2008/5affa938aa0d/sist-en-15468-2008](#)

EN 12529:1998, *Castors and wheels - Castors for furniture - Castors for swivel chairs — Requirements*

EN 13329:2006, *Laminate floor coverings — Elements with a surface layer based on aminoplastic thermosetting resins - Specifications, requirements and test methods*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13329:2006 and the following apply.

#### 3.1

##### Laminate floor covering

floor-covering with a single or multi-layered decorative layer, generally enhanced decoratively by the addition of paper, paint or varnish, whereby the surface coat has aminoplastic, thermosettable resins (generally melamine resins), acrylate resins, methacrylate resins or any suitable resin

NOTE 1 By the simultaneous action of heat and pressure, the sheets impregnated with aminoplastic resins, are either pressed as such (HPL, CPL, Compact), and in the case of HPL and CPL bonded to a substrate (usually wood-based panels), or in the case of DPL directly pressed to a substrate (usually wood-based panels).

NOTE 2 When using acrylate and/or methacrylate resins, these resins are cured through the simultaneous application of electron beams and pressure or by applying UV radiation. These resins are manufactured as separate layers and glued to a carrier material (generally wood materials) or they are applied directly onto a carrier material (generally wood materials) and cured.

NOTE 3 The product is usually finished with a backing (e.g. HPL, CPL, EPL (Electron-beam Pressed Laminates), impregnated papers and veneers), primarily used as a balancing material or with a coat as backing.

#### 3.2

##### Resin based surface layer

upper decorative layer intended to be the visible side when the floor is installed

NOTE The surface coat consists of resins (usually acrylate, methacrylate or similar) which are cured using UV radiation or other curing methods. It can exhibit impregnated and coated materials (generally paper), or at least one paint or varnish layer applied direct on the board using indirect printing, direct printing or digital printing. The combination of the multi-layered surface produced with this technique is called Printed Décor Laminate (PDL).

<https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008>

### 4 Requirements

#### 4.1 General requirements

Laminate floor coverings according to this standard shall conform to the general requirements given in EN 13329 when tested by the methods given therein.

For special applications, such as decorative pattern effects, tighter tolerances might be required.

The tolerances of the tongue and groove shall be such that when, for testing, the elements are assembled without glue, the maximum permissible opening and height difference values are not exceeded.

To determine the capability of laminate floor coverings to withstand ambient humidity variations, a laboratory test in controlled conditions shall be made.

#### 4.2 Classification requirements, Floor coverings using the PDL technologies

Laminate floor coverings, according to this standard, shall be classified as suitable for different levels of use according to the *classification requirements* specified in Table 1, when tested by the methods given therein. Classification shall conform to the scheme specified in EN 685.

Table 1 — Classification requirements and levels of use for floor coverings using PDL technologies

Class:	Levels of use						Test method
	Domestic			Commercial			
	Moderate	General	Heavy	Moderate	General	Heavy	
	21	22	23	31	32	33	
<b>Abrasion resistance</b>	AC1	AC2	AC3		AC4	AC5	EN 13329
<b>Impact resistance</b>	IC1				IC2	IC3	EN 13329
<b>Resistance to staining</b>	4, (groups 1 and 2) 3, (group 3)	5, (groups 1 and 2) 4, (group 3)					EN 438-2
<b>Effect of a furniture leg</b>	—		No damage shall be visible, when tested with foot type 0				EN 424
<b>Effect of a castor chair</b>	—		No change in appearance or damage, as defined in EN 425. Single-wheel castors, as defined in EN 12529:1998, 5.4.4.2 (Type W) shall be used.				EN 425
<b>Thickness swelling</b>	≤ 20,0 %		≤ 18,0 %				EN 13329



### 4.3 Additional characteristics and requirements

When any of the characteristics given to Table 1 are called for specific applications, the laminate floor coverings shall be tested by the methods given therein. The properties that are stated in Table 2 are considered important for some specific products or applications.

**Table 2 — Additional characteristics and requirements**

Characteristic	Requirement	Test method
<b>Humidity</b> at dispatch from the manufacturer	The elements shall have a moisture content of 4 to 10 %. Any single batch shall be homogeneous with $H_{\max.} - H_{\min.} \leq 3 \%$	EN 322
<b>Appearance</b> , surface defects	Minor surface defects are permitted	EN 438-2

## 5 Marking, designation and packaging

### 5.1 Marking

Laminate floor coverings, which conform to the requirements of this standard, shall have the following information clearly marked by the manufacturer, either on their packaging, or on a label or information sheet included in the packaging:

number of this European Standard followed by suffix according to clause 5.2;

manufacturer's and/or supplier's identification; <https://standards.iteh.ai/catalog/standards/sist/cccede05-826e-4674-93d2-5affa938aa0d/sist-en-15468-2008>

product name;

colour/pattern and batch number;

symbol appropriate to the class of product according to EN 685 or taken from the FCSS, floor covering standard symbols system, [www.floorsymbols.com](http://www.floorsymbols.com);

general requirements may also be marked using symbols taken from the FCSS;

nominal dimensions of one floor covering element in millimetres;

number of elements contained in a package;

area in square metres contained in a package.

### 5.2 Designation

The appropriate class for level of use according to Table 1 shall be shown as a suffix to the EN 15468 reference. Example for the designation of a laminate floor covering for general domestic use according to class 22:

Laminate floor covering EN 15468-22