

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

**ILNAS-EN 13845:2017** 

Resilient floor coverings - Polyvinyl chloride floor coverings with particle based enhanced slip resistance - Specification

Elastische Bodenbeläge -Polyvinylchlorid-Bodenbeläge mit partikelbasiertem erhöhten Gleitwiderstand - Spezifikation

Revêtements de sol résilients -Revêtements de sol en chlorure de polyvinyle à résistance accrue au glissement - Spécification

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#### **National Foreword**

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# ILNAS-EN 13845:2017**EN 13845**

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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Supersedes EN 13845:2005

## **English Version**

# Resilient floor coverings - Polyvinyl chloride floor coverings with particle based enhanced slip resistance - Specification

Revêtements de sol résilients - Revêtements de sol en chlorure de polyvinyle à résistance accrue au glissement - Spécification Elastische Bodenbeläge - Polyvinylchlorid-Bodenbeläge mit partikelbasiertem erhöhten Gleitwiderstand - Spezifikation

This European Standard was approved by CEN on 22 May 2017.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 6 September 2017.

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.

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

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# **European foreword**

This document (EN 13845:2017) has been prepared by Technical Committee CEN/TC 134 "Resilient, textile and laminate floor coverings", the secretariat of which is held by NBN.

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 February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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 13845:2005.

The main technical changes compared to EN 13845:2005 are:

- a) Where EN standards have been superseded by equivalent ISO standards these have been substituted in the document;
- b) The pendulum slip test has been added to the General Requirements in Table 1.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

# Introduction

The ramp test is a means of assessing the slipperiness of floors under wet conditions. Ramps of different designs exist and CEN/TC 134 therefore decided not to standardise on a ramp design. The aim of this European Standard is to establish and standardise the principle of testing and specify the parameters to be followed when designing a ramp device and when testing with it.

## 1 Scope

This European Standard specifies the characteristics of floor coverings with sustainable enhanced slip resistant characteristics under specified conditions based on polyvinyl chloride and modifications thereof, supplied in either tile or roll form.

To encourage the consumer to make an informed choice, this European Standard includes a classification system (see EN ISO 10874) based on intensity of use, which shows where resilient floor coverings should give satisfactory service.

In addition, this European Standard details the requirements for the information to be included on the packaging labels.

The slip measurements are made in a laboratory on ex-factory floor covering surfaces only. The method described is suitable for testing on wet surfaces.

#### 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 425, Resilient and laminate floor coverings — Castor chair test

EN 660-2, Resilient floor coverings — Determination of wear resistance — Part 2: Frick-Taber test

EN 684, Resilient floor coverings — Determination of seam strength

EN 12466:1998, Resilient floor coverings — Vocabulary

CEN/TS 16165:2016, Determination of slip resistance of pedestrian surfaces — Methods of evaluation

EN ISO 105-B02, Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO 105-B02)

EN ISO 10874, Resilient, textile and laminate floor coverings — Classification (ISO 10874)

EN ISO 23997, Resilient floor coverings — Determination of mass per unit area (ISO 23997)

EN ISO 23999, Resilient floor coverings — Determination of dimensional stability and curling after exposure to heat (ISO 23999)

EN ISO 24341, Resilient and textile floor coverings — Determination of length, width and straightness of sheet (ISO 24341)

EN ISO 24342, Resilient and textile floor-coverings — Determination of side length, edge, straightness and squareness of tiles (ISO 24342)

EN ISO 24343-1, Resilient and laminate floor coverings — Determination of indentation and residual indentation — Part 1: Residual indentation (ISO 24343-1)

EN ISO 24344, Resilient floor coverings — Determination of flexibility and deflection (ISO 24344)

EN ISO 24346, Resilient floor coverings — Determination of overall thickness (ISO 24346)

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12466:1998 and the following apply.

#### 3.1

#### enhanced slip resistance

capacity of a floor covering to counteract slipping under wet conditions

#### 3.2

#### floor covering with particle based enhanced slip resistance

floor covering with a wear surface modified to provide sustainable enhanced slip resisting properties under specified conditions. The floor covering can have other solid layers which may differ in composition and/or design and may contain a reinforcement. This type of floor covering contains various aggregate or identifiable particles of different hardness to the surface layer such as cork which are to be present in the surface layer throughout the normal wear life of the product. They do not necessarily form a distinctive, measurable surface layer and have specific tests designed to measure the performance

#### 3.3

# polyvinyl chloride floor covering

floor covering with surface layers produced using polyvinyl chloride and modifications thereof as binder

#### 3.4

#### aggregate

natural or synthetically coloured mineral granules, such as quartz and aluminium trioxide, that can be used to provide and maintain the surface roughness of a resilient floor covering

#### 3.5

#### wet-loaded area

area in which the floor coverings are generally wet and walked on. These are in buildings used by the public and for industrial purposes, such as for example in baths, changing rooms, washrooms, toilets, sluice rooms, kitchens, etc.

#### 3.6

#### barefoot area

area where the floor is primarily intended for barefoot use such as in shower trays and pool surrounds

#### 3.7

#### footwear area

area where the floor is intended for use with shoes and other types of footwear

#### 4 Requirements

#### 4.1 General requirements

Floor coverings described in this European Standard shall comply with the appropriate general requirements specified in Table 1, when tested in accordance with the methods given therein.

#### 4.2 Classification requirements

Floor coverings described in this European Standard shall be classified as suitable for different levels of use in accordance with the performance requirements specified in Table 2, when tested with the methods given therein. Classification shall conform to the scheme established in EN ISO 10874.