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English Version

Resilient floor coverings - Polyvinyl chloride floor coverings with foam layer - Specification

Revêtements de sol résilients - Revêtements de sol à base de polychlorure de vinyle sur mousse - Spécifications

Elastische Bodenbeläge - Polvinylchlorid-Bodenbeläge mit einer Schaumstoffschicht - Spezifikation

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Foreword

This document (FprEN 651:2010) has been prepared by Technical Committee CEN/TC 134 “Floor coverings”, the secretariat of which is held by BSI.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 651:1996.

FprEN 651:2010 (E)

1 Scope

This European Standard specifies the characteristics of floor coverings based on polyvinyl chloride with polyvinyl chloride foam layer, supplied in either tile or roll form.

To encourage the consumer to make an informed choice, the standard includes a classification system (see EN 685) based on intensity of use, which shows where these floor coverings should give satisfactory service. It also specifies requirements for marking.

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

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

EN 426, *Resilient floor coverings — Determination of width, length, straightness and flatness of sheet material*

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

EN 428, *Resilient floor coverings — Determination of overall thickness*

EN 429, *Resilient floor coverings — Determination of the thickness of layers*

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

EN 431, *Resilient floor coverings — Determination of peel resistance*

EN 433, *Resilient floor coverings — Determination of residual indentation after static loading*

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

EN 436, *Resilient floor coverings — Determination of density*

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

EN ISO 105-B02, *Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:1994, including amendment 1:1998)*

3 Terms and definitions

For the purposes of this document, the following term and definition apply.

3.1

polyvinyl chloride floor covering

floor covering with surface layers which are produced using polyvinyl chloride (and modifications thereof) as binder

4 Requirements

4.1 General requirements

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

4.2 Classification requirements

4.2.1 Wear group classification

Polyvinyl chloride floor coverings are classified in the appropriate wear group specified in Table 2, when tested in accordance with EN 660-2.

Floor coverings described in this standard shall be classified in wear group T, P or M.

Floor coverings with a transparent wear layer are *a priori* group T and need not be tested.

4.2.2 Homogeneous wear layers

A wear layer shall retain its wear group classification throughout its thickness if tested.

4.2.3 Level of use classification

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 3, when tested with the methods given therein. Classification shall comply with the scheme specified in EN 685.

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Table 1 — General requirements

Characteristic	Requirement	Test method
Roll form: length width	m mm Not less than the nominal values	EN 426
Tiles: side length	mm Deviation $\leq 0,13\%$ of nominal length up to 0,5 mm maximum	EN 427
squareness and straightness for side length: ≤ 400 mm > 400 mm > 400 mm (intended for welding)	mm Deviation allowed at any point $\leq 0,25$ $\leq 0,35$ $\leq 0,50$	
Overall thickness: average individual results	mm Nominal value + 0,18 - 0,15 Average value $\pm 0,20$	EN 428
Thickness of foam layer	mm Nominal thickness shall be stated	EN 429
Total mass per unit area (average)	g/m^2 Nominal value + 13% - 10%	EN 430
Density of the wear layer (average)	kg/m^3 Nominal value $\pm 0,50$	EN 436
Dimensional stability after exposure to heat: sheets and tiles intended for welding tiles intended for dry-joint laying	% $\leq 0,4$ $\leq 0,25$	EN 434
Curling after exposure to heat: sheets and tiles intended for welding tiles intended for dry-joint laying	mm ≤ 8 ≤ 2	EN 434
Colour fastness to artificial light	6 minimum	EN 20 105-B02 Method 3 ^a
Peel resistance average individual results	N/50mm ≥ 50 ≥ 40	EN 431
^a Expose a full size of test specimen. Store a further test specimen in the dark, which will constitute the reference standard for assessment of colour change.		