

RESILIENT, TEXTILE AND LAMINATE FLOOR COVERINGS FLOOR COVERING STANDARD SYMBOLS

ELASTISCHE, TEXTILE UND LAMINAT BODENBELÄGE STANDARDISIERTE SYMBOLEN FÜR FUSSBODENBELÄGE REVÊTEMENTS DE SOL RÉSILIENTS, TEXTILES ET EN STRATIFIÉS SYMBOLES STANDARDISÉES DE REVÊTEMENTS DE SOL



INTRODUCTION

Resilient, textile and laminate floor coverings and in case of floating installation with underlays, the combination of these floorcoverings with underlays, have a number of specific characteristics and are classified in a number of use classes.

In order to make the classification and these specific characteristics understandable and recognizable to the consumer, graphic symbols have been developed.

For practical reasons, only symbols for characteristics linked directly to a European or ISO Standard have been developed.

FOREWORD

This document (FprCEN/TS 15398:2015) has been prepared by Technical Committee CEN/TC 134 "Resilient, textile and laminate floor coverings", the secretariat of which is held by NBN.

This document is currently submitted to the Formal Vote. This document will supersede CEN/TS 15398:2008.

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1. SCOPE

This draft Technical Specification establishes a system of graphic symbols for use in the marking of the following floor coverings and specifies the use of these symbols:

- resilient floor coverings manufactured from plastics, linoleum, cork or rubber, excluding loose-laid mats;
- textile floor coverings, excluding loose-laid mats;
- laminate floor coverings;
- floor panels for floating 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 425

Resilient and laminate floor coverings — Castor chair test

EN 438-1

High-pressure decorative laminates (HPL) — Sheets based on thermosetting resins (Usually called Laminates) — Part 1: Introduction and general information

EN 660-2

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

EN 669

Resilient floor coverings — Determination of dimensional stability of linoleum tiles caused by changes in atmospheric humidity

EN 717-1

Wood-based panels — Determination of formaldehyde release — Part 1: Formaldehyde emission by the chamber method

EN 717-2

Wood-based panels — Determination of formaldehyde release — Part 2: Formaldehyde release by the gas analysis method

EN 985

Textile floor coverings — Castor chair test

EN 986

Textile floor coverings — Tiles — Determination of dimensional changes due to the effects of varied water and heat conditions and distortion out of plane

EN 994

Textile floor coverings — Determination of the side length, squareness and straightness of tiles

EN 1081

Resilient floor coverings — Determination of the electrical resistance

EN 1307

Textile floor coverings — Classification

EN 1399

Resilient floor coverings — Determination of resistance to stubbed and burning cigarettes

EN 1814

Textile floor coverings — Determination of resistance to damage at cut edges using the modified Vettermann drum test

EN 1815

Resilient and laminate floor coverings — Assessment of static electrical propensity

EN 1963

Textile floor coverings — Tests using the Lisson Tretrad Machine

EN 13329

Laminate floor coverings — Elements with a surface layer based on aminoplastic thermosetting resins — Specifications, requirements and test methods

EN 13501-1

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

EN 13553

Resilient floor coverings — Polyvinyl chloride floor coverings for use in special wet areas — Specification

EN 13745

Surfaces for sports areas — Determination of specular reflectance

EN 13845

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

EN 13893

Resilient, laminate and textile floor coverings — Measurement of dynamic coefficient of friction on dry floor surfaces

EN 14041

Resilient, textile and laminate floor coverings — Essential characteristics

EN 14215

Textile floor coverings — Classification of machine-made pile rugs and runners

EN 14978

Laminate floor coverings — Elements with acrylic based surface layer, electron beam cured — Specifications, requirements and test methods

EN 15468

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

EN 16205

Laboratory measurement of walking noise on floors CEN/TS 16354, Laminate floor coverings — Underlays — Specification, requirements and test methods

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 354

Acoustics — Measurement of sound absorption in a reverberation room (ISO 354)

EN ISO 717-2

Acoustics — Rating of sound insulation in buildings and of building elements — Part 2: Impact sound insulation (ISO 717-2)

EN ISO 10874

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

EN ISO 11654

Acoustics — Sound absorbers for use in buildings — Rating of sound absorption (ISO 11654)

EN ISO 14025

Environmental labels and declarations — Type III environmental declarations — Principles and procedures (ISO 14025)

EN ISO 23997

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

EN ISO 24340

Resilient floor coverings — Determination of thickness of layers (ISO 24340)

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 24344

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

EN ISO 24346

Resilient floor coverings - Determination of overall thickness (ISO 24346)

EN ISO 26987

Resilient floor coverings — Determination of staining and resistance to chemicals (ISO 26987)

ISO 1765

Machine-made textile floor coverings — Determination of thickness

ISO 6356

Textile and laminate floor coverings — Assessment of static electrical propensity — Walking test

ISO 8302

Thermal insulation — Determination of steady-state thermal resistance and related properties — Guarded hot plate apparatus

ISO 8543

Textile floor coverings — Methods for determination of mass

ISO 10965

Textile floor coverings — Determination of electrical resistance

ISO 24334

Laminate floor coverings — Determination of locking strength for mechanically assembled panels

ISO 24338

Laminate floor coverings — Determination of abrasion resistance

ISO 24343 (all parts)

Resilient and laminate floor coverings — Determination of indentation and residual indentation

3. DESCRIPTIONS AND DEFINITIONS OF SYMBOLS

3.1. GENERAL

If a specific standard is not valid for all three product groups, the relevant product group(s) will be mentioned below using one of the following abbreviations: T = Textile floor coverings; R = Resilient floor coverings; L = Laminate floor coverings. Where relevant the value of the technical characteristic needs to be given in the technical documentation. For example the pictogram for thermal resistance (Figure 34) should be accompanied by the value of the thermal resistance.

3.2. CLASSIFICATION ACCORDING TO EN ISO 10874

In EN ISO 10874 a classification system for different use classes is described, with references to the relevant product standards. In the following the pictograms, as defined in EN ISO 10874.

3.2.1.1. Class 21 Domestic moderate/light



3.2.1.2. Class 22 Domestic general/medium



3.2.1.3. Class 22+ Domestic general



3.2.1.4. Class 23 Domestic heavy



3.2.1.5. Class 31 Commercial moderate



3.2.1.6. Class 32 Commercial general



3.2.1.7. Class 33 Commercial heavy



3.2.1.8. Class 34 Commercial very heavy



3.2.1.9. Class 41 Industrial moderate



3.2.1.10. Class 42 Industrial general



3.2.1.11. Class 43 Industrial heavy



3.3. PICTOGRAMS RELATED TO ESSENTIAL REQUIREMENTS

3.3.1. General

EN 14041 specifies the health, safety and energy saving requirements of floor coverings under the CE marking.

3.3.2. CE marking

3.3.2.1. CE mark REGULATION (EU)

No 305/2011 - Council Directive 89/106/EEC



3.3.3. Electrical behaviour

The electrical behaviour of textile, laminate and resilient floor coverings – antistatic floor covering - is specified in EN 14041 (R + L + T), EN 1815 (R+L), ISO 6356 (T).

3.3.3.1. Electrical behaviour – Antistatic floor covering



The electrical behaviour of textile, laminate and resilient floor covering – vertical resistance is specified in EN 14041(R+L+T), EN 1081 (R+L), ISO 10965 (T).

3.3.3.2. Electrical behaviour Vertical resistance - Static dissipative floor covering



3.3.3.3. Electrical behaviour Vertical resistance - Conductive floor covering



3.3.4. Fire

The reaction to fire of textile, laminate and resilient floor coverings is specified in 13501-1.

3.3.4.1. Reaction to fire – Class A1,



3.3.4.2. Reaction to fire – Class A2,-s1



3.3.4.3. Reaction to fire – Class A2_f-s2







3.3.4.5. **Reaction to fire – Class B**_{ff}-s2



3.3.4.6. Reaction to fire – Class C_n-s1



3.3.4.7. Reaction to fire – Class C_n -s2



3.3.4.8. Reaction to fire – Class D_n -s1



3.3.4.9. Reaction to fire – Class D_{ff} -s2



3.3.4.10. Reaction to fire – Class E_n



3.3.4.11. Reaction to fire – Class F_{ft}



3.3.5. Slip

The slip resistance of textile, resilient and laminate floor coverings is specified in EN 14041 (R+L+T) and EN 13893.

3.3.5.1. Slip resistance – Class NPD



3.3.5.1. Slip resistance – Class DS



3.3.6. Water tightness

The water tightness resilient floor coverings is specified in EN 14041 and EN 13553 (R).

3.3.6.1. Water tightness for resilient floor coverings



3.3.7. Dangerous substances

The content of dangerous substances and the emissions of volatile org compounds in textile, resilient and laminate floor coverings is specified in 14041, EN 717-1 and EN 717-2.

3.3.7.1. Formaldehyde emission HCHO – Class E1



3.3.7.2. Formaldehyde emission HCHO – Class E2



3.3.7.3. Formaldehyde emission HCHO – Class NA (not added)



3.3.7.4. PCP emission – Class DL (detection limit)



3.3.7.5. VOC classes, class A(f1-f6)



3.3.7.6. VOC classes, example class B(f1-f6)



3.3.7.7. VOC classes, example class C(f1-f6)



3.3.7.8. VOC classes, example class D(f1-f6)



3.3.7.9. VOC classes, example class E(f1-f6)



3.3.8. Thermal resistance

The thermal resistance of textile, resilient and laminate floor covering determined according to EN 14041 (R+L+T), EN 1307 (T) and ISO 8302. pictogram should be accompanied by the determined value.

3.3.8.1. Thermal resistance



3.4. ADDITIONAL CHARACTERISTICS

3.4.1. General

Besides essential requirements a number of additional characteristics can be claimed.

3.4.2. Castor chair suitability

The suitability for castor chair use of textile, resilient and laminate floor coverings is specified in EN 1307 (T), EN 985 (T), EN 14215 (T), EN 425 (R+L), EN 13329 (L), EN 14978 (L), EN 15468 (L).

3.4.2.1. Castor chair occasional use



3.4.2.2. Castor chair continuous use



3.4.3 Stairs suitability

The stair suitability for textile floor coverings is specified in EN 1307 (T), EN 1963 (T), EN 14215 (T).

3.4.3.1. Stairs occasional use



3.4.3.2. Stairs continuous use



3.4.4 Fraying behaviour

The fraying behaviour of textile floor coverings is specified in EN 1307 (T), EN 1814 (T).

3.4.4.1. Resistance to fraying



3.4.5. Luxury classes

The luxury class of textile floor coverings is specified in EN 1307 (T), EN 14215 (T).

3.4.5.1. Luxury class LC1



3.4.5.2. Luxury class LC2



3.4.5.3. Luxury class LC3



3.4.5.4. Luxury class LC4



3.4.5.5. Luxury class LC5



3.4.6. Light fastness

The light fastness of textile floor coverings is specified in EN 1307 (T), EN ISO 105-B02.

3.4.6.1. Light fastness



3.4.7. Acoustic properties

The sound absorption properties of textile resilient and laminate floor coverings are determined according to EN ISO 354, EN ISO 11654. The pictogram should be accompanied by the determined value.

3.4.7.1. Acoustical - Sound absorption



The walking noise properties of textile resilient and laminate floor coverings are determined according to EN 16205. The pictogram should be accompanied by the determined value.

3.4.7.2. Acoustical - Walking noise



The impact noise reduction properties of textile resilient and laminate floor coverings are determined according to EN ISO 717-2. The pictogram should be accompanied by the determined value.

3.4.7.3. Acoustical - Impact noise reduction



3.4.8. Resistance

The abrasion resistance of laminate and resilient floor coverings is specified in ISO 24338 (L), EN 660-2 (R).

3.4.8.1. Abrasion resistance



The cigarette resistance of laminate floor coverings is specified in EN 438-1 (L).

3.4.8.2. Cigarette resistance



The impact resistance of laminate and resilient floor coverings is specified in EN 13329 (L), EN 14978 (L), EN 15468 (L) and EN 1399 (R).

3.4.8.3. Impact resistance



The staining resistance of laminate and resilient floor coverings is specified in EN ISO 26987 (R), EN 438-1 (L).

3.4.8.4. Staining resistance



The resistance to chemicals of resilient floor coverings is specified in EN ISO 26987 (R).

3.4.8.5. **Resistance to chemicals**



3.4.9. Locking strength

The locking strength of laminate floor coverings is specified in ISO 24334 (L).

3.4.9.1. Locking strength of mechanically assembled panels



3.4.10. Swelling

The swelling behaviour of laminate floor coverings is specified in EN 13329 (L), EN 14978 (L), EN 15468 (L).

3.4.10.1. Thickness swelling - Residential



3.4.10.2. Thickness swelling - Commercial



3.4.11. Flexibility

The flexibility of resilient floor coverings is specified in EN ISO 24344 (R).

3.4.11.1. Flexibility



3.4.12. Dimensional stability

The dimensional stability of textile, resilient and laminate floor coverings is specified in EN 669 (R), EN 13329 (L), EN 14978 (L), EN 15468 (L), EN 986 (T), EN 1307 (T).

3.4.12.1. Dimensional stability



3.4.13. Residual indentation

The residual indentation of resilient and laminate floor coverings is determined according to ISO 24343 (all parts) (R+L). The pictogram should be accompanied by the determined value.

3.4.13.1. Indentation - Residual



3.4.14. Effect of a furniture leg

The effect of a furniture leg on resilient floor coverings is determined according to ISO 24343 (all parts) (R+L). The pictogram should be accompanied by the determined value.

3.4.14.1. Effect of a furniture leg



3.4.15. Enhanced slip property

The enhanced slip property of a resilient floor covering is specified in EN 13845 (R).

3.4.15.1. Enhanced slip



3.4.16. Suitability for use in incidental humid conditions

The suitability for use in incidental humid conditions of textile floor coverings is specified in EN 1307 (T).

3.4.16.1. Suitability for use in incidental humid conditions



3.4.17. Horizontal electrical resistance

The horizontal resistance of textile, resilient and laminate floor coverings is determined according to EN 1081 (R+L), ISO 10965 (T).

3.4.17.1 Horizontal resistance \leq **10**⁹ Ω



3.4.17.2. Horizontal resistance $\leq 10^6 \Omega$



3.4.18. Roll length and roll width

The roll length and roll width of textile, resilient and laminate floor coverings are determined according to EN ISO 24341(R+T). The pictogram should be accompanied by the determined value.

3.4.18.1. Roll length



3.4.18.2. Roll width



3.4.19. Thickness characteristics

The total thickness of textile, resilient and laminate floor coverings is determined according to EN ISO 24346 (R), EN ISO 24340 (R), ISO 1765 (T). The pictogram should be accompanied by the determined value.

3.4.19.1. Total thickness



3.4.19.2. Thickness of wear layer



3.4.20. Tile size

The size of tiles of textiles and resilient floor coverings is determined according to EN ISO 24342 (R+T), EN 994 (T). The pictogram should be accompanied by the determined value.

3.4.20.1 Tile size



3.4.21. Total mass

The total mass of textiles and resilient floor coverings is determined according to EN ISO 23997 (R), ISO 8543 (T). The pictogram should be accompanied by the determined value.

3.4.21.1 Total weight



3.4.22. Light reflection

The light reflection for resilient floor coverings is specified in EN 13745 (R).

3.4.22.1. Light reflection



3.5. FIBRE COMPOSITION (ONLY OF RELEVANCE FOR TEXTILE FLOORCOVERINGS)

The fibre composition of the use surface of textiles floor coverings can be identified by the following pictograms and are related to the EU regulation (EU) No 1007/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 September 2011 on textile fibre names and related labelling and marking of the fibre composition of textile products and repealing Council Directive 73/44/EEC and Directives 96/73/EC and 2008/121/EC of the European Parliament and of the Council.



3.6. UNDERLAYS FOR LAMINATE FLOORCOVERINGS

The following pictograms are related to the characteristics of underlays of laminate floor coverings and are determined according to CEN/TS 16354 (L). (All symbols below need to be accompanied by the corresponding value of the characteristic, e.g. $R = 0.05 \text{ m}^2\text{K/W}$ or CS = 10kPa).

3.6.1.1. **CS Compressive strength**



3.6.1.2. DL Dynamic loading



3.6.1.3. RWS Reflected walking sound



3.6.1.4. IS Impact sound reduction



3.6.1.5. **R Thermal resistance**



3.6.1.6. **SD Water vapour diffusion resistance**



3.7. ENVIRONMENTAL PRODUCT DECLARATION

Claims are made for EPD according to EN ISO 14025, EN 15804 can be visualized with, the following pictogram:

3.7.1.1. EPD Environmental product declaration



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