

Textile floor coverings — Classification of machine-made rugs and runners without pile

ICS 59.080.60

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**Textile floor coverings - Classification of machine-made rugs
and runners without pile**

Revêtements de sol textiles - Classification des carpettes
et passages sans velours manufacturés

Textile Bodenbeläge - Einstufung von maschinengefertigten
abgepassten Teppichen und Läufern ohne Pol

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Foreword

This document (EN 15825:2010) 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of an identical text or by endorsement, at the latest by October 2010, and conflicting national standards shall be withdrawn at the latest by October 2010.

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1 Scope

This European Standard specifies the requirements for machine-made rugs and runners without pile, including a classification for domestic use according to use intensity and luxury.

This European Standard is not applicable to hand-knotted rugs, barrier mats, bathroom rugs.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 985, *Textile floor coverings — Castor chair test*

EN 1318, *Textile floor coverings — Determination of the apparent effective thickness of the backing*

EN 1471, *Textile floor coverings — Assessment of changes in appearance*

EN 1963:2007, *Textile floor coverings — Tests using the Lisson Tretrad Machine*

CEN/TS 14159, *Textile floor coverings — Requirements for tolerances on (linear) dimensions of rugs, runners, carpet tiles and wall-to-wall carpet and for tolerances on pattern repeat*

EN ISO 105-A01:2010, *Textiles — Tests for colour fastness — Part A01: General principles of testing (ISO 105-A01:2010)*

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)*

EN ISO 105-E01, *Textiles — Tests for colour fastness — Part E01: Colour fastness to water (ISO 105-E01:2010)*

EN ISO 105-X12, *Textiles — Tests for colour fastness — Part X12: Color fastness to rubbing (ISO 105-X12:2001)*

ISO 1765, *Machine-made textile floor coverings — Determination of thickness*

ISO 2424, *Textile floor coverings — Vocabulary*

ISO 8543, *Textile floor coverings — Methods for determination of mass*

ISO 10361, *Textile floor coverings — Production of changes in appearance by means of Vettermann drum and hexapod tumbler testers*

3 Identification requirements

This clause specifies the characteristics for identifying the product and tolerance requirements for the identifying properties.

The manufacturer shall provide the following information in accordance with the definitions in ISO 2424:

- commercial references;

- type of backing;
- type of manufacture;

and shall declare values of the characteristics in Table 1.

Table 1 — Characteristic values

Characteristics	Test methods	Tolerances
Fibre composition of use surface	^a	
Dimensions	CEN/TS 14159	± 2,0%
Total thickness mm	ISO 1765	nominal +/- 10 %
Total mass per unit area g/m ²	ISO 8543	nominal mass +/- 10 %
Apparent thickness of foam backing (if applicable)	EN 1318	nominal +/- 0,5 mm

^a Attention is drawn to the European Directives 96/73/EC and 96/74/EC, which cover the fibre composition and are reflected in the national regulations.

4 Basic requirements

Machine-made rugs and runners without pile shall conform to the basic requirements specified in Table 2.

Table 2 — Basic requirements

Characteristic	Requirement	Test method
Colour fastness ^a to Light		EN ISO 105-B02
- General	≥ 5	
- Pastel shade ^b	≥ 4	
Rubbing		EN ISO 105-X12
- Wet	≥ 3	
- Dry	≥ 3 - 4	
Water (change in colour)		EN ISO 105-E01
- Plain rugs	≥ 3 - 4	
- Other rugs	≥ 4	
Water (staining)		
- All rugs	≥ 2 - 3 ^c	
Hairiness (pilling) ^d	≥ 2,5	EN 1963:2007 – Test D Assess against photoscale after 200 cycles

^a Conformity to be declared by the manufacturer for each colour.
^b Pastel shade: colour corresponding to a standard depth $\leq 1/12$ (in accordance with EN ISO 105-A01:2010).
^c On multifibre: worst result.
^d Tested production-wise and cross-wise, worst result decisive.

5 Classification for level of use intensity

Machine-made rugs and runners without pile shall be classified for level of use intensity in accordance with the requirements of Table 3 for change in appearance in accordance with ISO 10361 in either the Hexapod or the Vettermann apparatus using the number of cycles for long tests specified in Table 3. The tested specimens shall be assessed in accordance with EN 1471 and the median grade for overall change in appearance shall conform to the requirements specified in Table 3.

Table 3 — Classification Requirements

Class	Vettermann (22 000 cycles) or Hexapod (12 000 cycles) (ISO 10361)
Change of appearance rating (EN 1471)	
Light	1
Normal	2
Heavy	3
Intense	3,5
Intense Prestige(a)	4
(a) For the "class Intense Prestige", the mass of the use surface of the product shall meet shall meet the following requirements: $\geq 2\ 000\ \text{g/m}^2$.	

6 Luxury classification

Machine-made rugs and runners without pile shall be classified for luxury class LC1.

7 Additional characteristics

7.1 General

The following additional claims may be made for products described in this document.

7.2 Castor chair suitability for occasional use

The product shall meet the requirement $r \geq 2,0$ when tested to EN 985.

7.3 Suitability for use on stair (runners only)

The product shall meet the requirement specified in Annex A when tested to EN 1963:2007 test B.

8 Report

The results taken from the test reports of the individual tests required for classification shall be summarized as shown in Annex B.

Annex A (normative)

Criteria for the assessment of stair suitability

A.1 Applicability

This annex shall be used only for runners without pile that are intended to be installed without the use of protective stair nosing. For runners without pile that are intended to be installed using protective stair nosings, the overall use class shall determine the stair suitability.

A.2 Backing

If the backing can be seen on a new unused piece of the runner when bent at 90 degrees over a $12,5 \text{ mm} \pm 1 \text{ mm}$ radius, the runner shall be deemed to be unsuitable.

A.3 Assessment

Assess the appearance of each specimen using at least three independent assessors according to the characteristics given in Table A.1 (for loop pile runners).

Table A.1—Loop pile

Suitability	Criteria
Not suitable	Extreme changes at the area of the stair edge e.g.: - visible backing - more than 3 fully broken loops - cobwebbing with a fibre length of 15 mm or more.
Suitable for normal and heavy class	Moderate changes at the area of the stair edge e.g.: - not more than 3 broken loops over the whole width - cobwebbing with a fibre length of 5 mm to 15 mm; - moderate pattern changes at the stair edge compared to areas of the test specimen exposed to the flat treatment with the Lisson Tretrad.
Suitable for intense and intense prestige class	Minor changes at the area of the stair edge e.g. - limited filament destruction (no broken loops); - cobwebbing with a fibre length of less than 5 mm. - minor pattern changes at the stair edge compared to areas of the test specimen exposed to the flat treatment with the Lisson Tretrad.

Annex B
(normative)

Summary test report

Table B.1 — Identification, basic information and use classification

Identification, basic information and use classification			
Name(s) (Number) of quality		Date dd.mm.yyyy	
Manufacturer/applicant		Type of surface (ref (2))	
Type of manufacture (ref 1)		Secondary backing if applicable	
Primary backing (ref 3)		Fibre composition of use surface (ref 5)	
Colouring /patterning (ref 6)			
Total thickness (mm)		Total mass per unit area (g/m ²)	
Foam/felt apparent density (g/m ³)			
Basic requirements (Table 2)	Pass/Fail		
Drum test Vetterman long term		Drum test Hexapod long term	
Test done on an underlay	Yes/No		
Classification for use intensity		Luxury class	LC1
Additional characteristics if applicable			
Castor chair suitability	Occasional use	Stair suitability	Suitable for normal and heavy class/suitable for intense and intense prestige class
NOTE 1 The manufacturer ensures that the quality complies with the requirements for colourfastness and waterstaining			
NOTE 2 The use properties mentioned in this summary are valid for the samples tested. It is the responsibility of the producer to guarantee that the production tolerances on the identification parameters are within the values stated in Table 1 of this standard.			

List of references to Annex B:

Table B.2 — Ref 1 Type of manufacture

Ref-Nr	D	E	F	NL
M1	Gewebt	woven	tissée	geweven
M2	Gewirkt	knitted	tricotée	gebreid
M3	Geklebt	bonded pile	nappé à velours	geplakt
M4	Polvlies	pile needlefelt	aiguilletée à velours	gestructureerd naaldvilt
M5	Nadelvlies	flat needle felt	aiguilletée	vlak naaldvilt
M6	Getuftet	tufted	touffetée	getuft

Table B.3 — Ref 2 Type of surface

Ref-Nr	D	E	F	NL
A1	Schnittpol	cut pile	velours coupé	gesneden pool
A2	Schnittpol, strukturiert	cut pile, structured	velours coupé structuré	gesneden pool, gestructureerd
A3	Schlingenpol	loop pile	velours bouclé	lussenpool
A4	Schlingenpol, strukturiert	loop pile structured	velours bouclé structuré	lussenpool, gestructureerd
A5	Schlingenpolartig	loop pile like	aspect de velours bouclé	lussenpool
A6	Schlingen-Schnittpol	loop/cut pile	velours bouclé/coupé	lussen/gesneden pool
A7	Schlingen-Schnittpol,	loop/cut pile, structured	velours bouclé/coupé	lussen/gesneden pool,
A8	Schnitt-Schlingenpol	cut/loop pile	velours coupé/bouclé	gesneden/lussenpool
A9	Schnitt-Schlingenpol,	cut/loop pile, structured	velours coupé/bouclé	gesneden/lussenpool,
A10	Rippenstruktur	ribbed	côté	geribd
A11	Schnittpolartig	cut pile like	aspect de velours coupé	gesnedenpool
A12	Strukturlos	structureless	sans structure	structuurloos
A13	Gewebestruktur	woven structure	surface tissé	geweven structuur
A14	Haarig	hairy	à poils longs	harig

Table B.4 — Ref 3 Type of primary backing

Ref-Nr	D	E	F	NL
P1	Polypropylen-Bändchengewebe	woven polypropylene tape fabric	bandelettes tissées en polypropylène	polypropyleen bandjesweefsel
P2	Polypropylen-Bändchengewebe mit Faservliesauflage	woven polypropylene tape fabric with fleece face	bandelettes tissées en polypropylène nappées	polypropyleen bandjesweefsel met vezelvlies
P3	Gewebe (Chemiefaser)	woven fabric synthetic fibres)	tissu (fibres chimiques)	weefsel (synthetische vezels)
P4	Gewebe (Naturfaser)	woven fabric (natural fibres)	tissu (fibres naturelles)	weefsel (natuurvezels)
P5	Gewebe (Chemiefaser/Naturfaser)	woven fabric (synthetic/natural fibres)	tissu (fibres chimiques/naturelles)	weefsel (synthetische/natuurlijke vezels)
P6	Folie	foil	film	folie
P7	Chemiefaser-Vlies	man-made fibre fleece	voile non-tissé (fibres chimiques)	kunstvezelvlies

Table B.5 — Ref 4 Type of secondary backing

Ref-Nr	D	E	F	NL
S1	Verfestigungsstrich	finish	enduction	strijklaag
S2	Appretur	finish	apprét	appret
S3	Schaumrücken (SBR)	foam (SBR)	mousse (SBR)	schuim (SBR)
S4	Schaumrücken (PUR)	foam (polyurethane)	mousse de polyuréthane	Polyurethaanschuim
S5	Textirlücken (Chemiefaser - gewirkt)	knitted synthetic textile backing	dossier textile tricotée (fibres synthétiques)	gebreide synthetische tweede rug
S6	Textirlücken (Naturfaser - gewirkt)	knitted textile backing (natural fibre)	dossier textile tricotée (fibres naturelles)	gebreide tweede rug (natuurvezels)
S7	Textirlücken (Chemiefaser/Naturfaser - gewirkt)	knitted textile backing (natural/synthetic fibre)	dossier textile tricotée (fibres naturelles/synthétiques)	gebreide tweede rug (natuurlijk/synthetisch)
S8	Textirlücken (Chemiefaser - gewebt)	woven textile backing (synthetic)	dossier textile tissée (synthétique)	geweven rug (synthetisch)
S9	Textirlücken (Naturfaser - gewebt)	woven textile backing (natural)	dossier textile tissée (fibre naturelle)	geweven rug (natuurlijk)
S10	Textirlücken (Chemiefaser/Naturfaser - gewebt)	woven textile backing (synthetic/natural)	dossier textile tissée (fibres naturelles/synthétiques)	geweven rug (synthetisch/natuurlijk)
S11	Textirlücken (Chemiefaservlies chemisch/thermisch verfestigt)	- textile fleece backing (synthetic - thermally/chemically bonded)	dossier textile (voile synthétique thermiquement/chimiquement collé)	vliesrug (synthetisch - thermisch/chemisch gebonden)
S12	Textirlücken (Naturfaservlies chemisch/thermisch verfestigt)	- textile fleece backing (natural - thermally/chemically bonded)	dossier textile (voile naturelle thermiquement/chimiquement collé)	vliesrug (natuurlijk - thermisch/chemisch gebonden)
S13	Textirlücken (Chemiefaser/Naturfaservlies - chemisch/thermisch verfestigt)	textile fleece backing (natural/synthetic - thermally/chemically bonded)	dossier textile (voile synthétique/naturelle thermiquement/chimiquement collé)	vliesrug (synthetisch/natuurlijk - thermisch/chemisch gebonden)
S14	Textirlücken (Chemiefaservlies - vernäht)	textile fleece backing (synthetic - sewn)	dossier textile (voile synthétique surcoussé)	vliesrug (synthetisch - vernaaid)
S15	Textirlücken (Naturfaservlies - vernäht)	textile fleece backing (natural -sewn)	dossier textile (voile naturelle surcoussé)	vliesrug (natuurlijk - vernaaid)
S16	Textirlücken (Chemiefaser/Naturfaservlies - vernäht)	textile fleece backing (natural/synthetic - sewn)	dossier textile (voile synthétique/naturelle surcoussé)	vliesrug (synthetisch/natuurlijk – vernaaid)
S17	Textirlücken (Chemiefaservlies vernadelt)	- needled fleece backing (synthetic)	dossier textile (voile synthétique aiguilleté)	vilrug (synthetisch)
S18	Textirlücken (Naturfaservlies - vernadelt)	needled fleece backing (natural)	dossier textile (voile naturelle aiguilleté)	vilrug (natuurlijk)

Table B.5 — Ref 4 Type of secondary backing (*continued*)

Ref-Nr	D	E	F	NL
S19	Textilrücken (Chemiefaser/Naturfaservlies - vernadelt)	needled fleece backing (synthetic/natural)	dossier textile (voile synthétique/naturelle aiguilleté)	viltrug (natuurlijk/synthetisch)
S20	Schwerbeschichtung (Bitumen)	bitumen backing	dossier bitume	bitumenrug
S21	Schwerbeschichtung (Bitumen - mit textiler Unterseite)	bitumen backing with textile bottom	dossier bitume à envers textile	bitumenrug met textiellaag
S22	Schwerbeschichtung (Bitumen - mit Verstärkung)	bitumen backing (reinforced)	dossier bitume (renforcé)	bitumenrug met versterking
S23	Schwerbeschichtung (Bitumen - mit textiler Unterseite und Verstärkung)	bitumen backing with textile bottom (reinforced)	dossier bitume à envers textile (renforcé)	bitumenrug met textiellaag en versterking
S24	Schwerbeschichtung (PVC)	heavy backing (PVC)	deuxième dossier lourd PVC	PVC rug
S25	Schwerbeschichtung (PVC - mit textiler Unterseite)	PVC backing with textile bottom	dossier PVC lourd à envers textile	PVC rug met textiellaag
S26	Schwerbeschichtung (PVC - mit Verstärkung)	PVC backing (reinforced)	dossier PVC lourd (renforcé)	PVC rug met versterking
S27	Schwerbeschichtung (PVC - mit textiler Unterseite und Verstärkung)	PVC backing with textile bottom (reinforced)	dossier PVC lourd à envers textile (renforcé)	PVC rug met textiellaag en versterking
S28	Schwerbeschichtung (PUR)	PUR heavy backing	dossier PUR lourd à envers textile	PUR rug met textiellaag
S29	Schwerbeschichtung (PUR - mit textiler Unterseite)	PUR heavy backing with textile bottom	dossier PUR lourd à envers textile	PUR rug met textiellaag
S30	Schwerbeschichtung (PUR - mit Verstärkung)	PUR heavy backing (reinforced)	dossier PUR lourd (renforcé)	PUR rug met versterking
S31	Schwerbeschichtung (PUR - mit textiler Unterseite und Verstärkung)	PUR heavy backing with textile bottom (reinforced)	dossier PUR lourd à envers textile (renforcé)	PUR rug met textiellaag en versterking
S32	Schwerbeschichtung (APO)	heavy backing (APO)	deuxième dossier lourd (PO atactique)	rug atactisch PO
S33	Schwerbeschichtung (APO - mit textiler Unterseite)	APO backing with textile bottom	dossier APO à envers textile	APO rug met textiellaag
S34	Schwerbeschichtung (APO - mit Verstärkung)	APO backing (reinforced)	dossier APO (renforcé)	APO rug met versterking
S35	Schwerbeschichtung (APO - mit textiler Unterseite und Verstärkung)	APO backing with textile bottom (reinforced)	dossier APO à envers textile (renforcé)	APO rug met textiellaag en versterking
S36	Noppenrücken (SBR)	latex nep back	enduction latex à boutons	latex noppenrug
S37	Noppenrücken (PUR)	PVC nep back	enduction PVC à boutons	PVC noppenrug

Table B.6 — Ref 5 Type of pile fibre composition

NR	D	E	F	NL
F1	Polyamid	polyamide	polyamide	polyamide
F2	Polyamid 6	polyamide 6	polyamide 6	polyamide 6
F3	Polyamid 66	polyamide 66	polyamide 66	polyamide 66
F4	Polyacryl	acrylic	acrylique	polyacryl
F5	Polyester	polyester	polyester	polyester
F6	Polypropylen	polypropylene	polypropylène	polypropyleen
F7	Polyvinylchlorid	polyvinyl chloride	chlorure de polyvinyle	polyvinylchloride
F8	Viskose	viscose	viscose	viscose
F9	Schurwolle	virgin wool	laine vierge	scheerwol
F10	Wolle	wool	laine	wol
F11	tierische Fasern	animal fibre	poil animal	dierenhaar
F12	Baumwolle	cotton	cotton	katoen
F13	Kokos	coconut fibre	fibre de coco	kokosvezel
F14	Sisal	sisal fibre	fibre de sisal	sisal
F15	Seide	silk	soie	zijde
F16	Seegras	sea grass	jonc de mer	zeegras
F17	Jute	jute	jute	jute
F18	Papier	paper	papier	papier

Table B.7 — Ref 6 Type of colouring/patterning

NR	D	E	F	NL
C1	Uni ungemustert	plain	uni	uni
C2	Gemustert	patterned	à dessin	met dessin
C3	Mehrfarbig ungemustert	tonal effect	à effet de couleur	met kleureffect

Bibliography

- [1] European Directive 96/73/EC of the European Parliament and the Council of 16 December 1996 on certain methods for the quantitative analysis of binary textile fibre mixtures
- [2] European Directive 96/74/EC of the European Parliament and the Council of 16 December 1996 on textile names

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