



BSI Standards Publication

# Textile floor coverings — Minimum requirements for needed floor coverings for single usage in events of limited duration

### **National foreword**

This British Standard is the UK implementation of EN 15772:2012.

The UK participation in its preparation was entrusted by Technical Committee PRI/3, Textile floor coverings, to Subcommittee PRI/3/60, Textile & Resilient Floor Coverings.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

## Textile floor coverings - Minimum requirements for needed floor coverings for single usage in events of limited duration

Revêtements de sol textiles - Exigences minimales relatives aux revêtements de sol aiguilletés à usage unique pour événements de durée limitée

Textile Bodenbeläge - Mindestanforderungen für Nadelvlies-Bodenbeläge im Fall von Veranstaltungen mit begrenzter Dauer

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## Foreword

This document (EN 15772:2012) 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of an identical text or by endorsement, at the latest by December 2012, and conflicting national standards shall be withdrawn at the latest by December 2012.

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## 1 Scope

This European Standard specifies the minimum requirements for needled floor coverings in sheet form for single usage in events of limited duration. These floor coverings are intended to be adhered to the substrate.

This European Standard is both applicable to needled pile floor coverings for single usage in events of limited duration and needled floor coverings without pile for single usage in events of limited duration.

This European Standard is not applicable to tiles.

## 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 984, *Textile floor coverings — Determination of the mass per unit area of the use surface of needled floor coverings*

EN 985:2001, *Textile floor coverings — Castor chair test*

EN 1269, *Textile floor coverings — Assessment of impregnations in needled floor coverings by means of a soiling test*

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

EN 1963, *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*

CEN/TS 15398, *Resilient, textile and laminate floor coverings — Floor covering standard symbols*

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)*

EN ISO 845, *Cellular plastics and rubbers — Determination of apparent density (ISO 845)*

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

ISO 2424:2007, *Textile floor coverings — Vocabulary*

ISO 2551, *Machine-made textile floor coverings — Determination of dimensional changes due to the effects of varied water and heat conditions*

ISO 6356, *Textile floor coverings — Assessment of static electrical propensity — Walking test*

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

ISO 11379, *Textile floor coverings — Laboratory cleaning procedure using spray extraction*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 2424:2007 apply.

## 4 Description of categories and level of use

### 4.1 Needed floor coverings categories

Needed floor coverings for single usage in events of limited duration shall be distributed in three categories.

- Type 1: one visible layer (homogeneous product);
- Type 2: more than one visible layer, the bonding compound of which does not reach the top of the use surface;
- Type 3: more than one visible layer, the bonding compound of which is present throughout its thickness.

NOTE Layers such as secondary backing are also to be taken in consideration for the determination of the number of layers.

### 4.2 Level of use

Needed textile floor coverings are classified as suitable for single usage in events of limited duration in accordance with the performance requirements specified in Clause 7.

## 5 Identification requirements

This clause specifies the characteristics for identification of the product and requirements for tolerances for the identifying properties.

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

- commercial references;
- type of bonding (full impregnation or back coated);
- type of backing.

The producer shall also declare the values of the characteristics listed in Table 1.

**Table 1 — Identification requirements**

Characteristics	Test methods	Tolerances
Fibre composition of use surface	European Directives 96/73/EC, 96/74/EC and 73/44/EEC	
Dimensions	CEN/TS 14159	CEN/TS 14159
Total thickness mm	ISO 1765	Nominal $\pm 15\%$ <sup>a</sup>
Total mass per unit area g/m <sup>2</sup>	ISO 8543	Nominal mass $\pm 15\%$
Mass per unit area of the use-surface (for type 2 and type 3 product) g/m <sup>2</sup>	EN 984	Nominal mass $\pm 15\%$
Foam backing (if applicable)		
◆ apparent thickness mm	EN 1318	Nominal $\pm 0,5$ mm
◆ apparent density g/cm <sup>3</sup>	EN ISO 845	
<sup>a</sup> For products with total thickness $\leq 3,5$ mm: tolerance maximum $\pm 0,5$ mm.		

## 6 Basic requirements

Needed floor coverings for single usage in events of limited duration shall conform to the basic requirements specified in Table 2.

**Table 2 — Basic requirements**

Characteristics	Requirements	Test methods
Dimensional stability	Shrinkage $\leq 1,2\%$ in either direction  Extension $\leq 0,5\%$ in either direction	ISO 2551
Assessment of impregnations	$\geq 2$	EN 1269
Colour fastness to light <sup>a</sup>	$\geq 4$	EN ISO 105-B02
Hairiness (pilling)	$\geq 2,5$ <sup>b</sup>	EN 1963 – Test D
<sup>a</sup> Conformity to be declared by the manufacturer for each colour <sup>b</sup> Tested production-wise and cross-wise, worst result decisive.		



## 7 Level of use classification

### 7.1 General

Needed floor for single usage in events of limited duration are classified taking into account general structural integrity. The change in appearance and wear resistance are not considered to be a classification property for needed floor coverings for single usage in events of limited duration.

### 7.2 General structural integrity

The general structural integrity of a specimen tested according to test C from EN 985 shall show no destruction such as described in EN 985:2001, 9.3 after 5 000 cycles.

## 8 Additional characteristics

### 8.1 Additional claims

Additional claims may be made for products described in this European Standard.

The product is considered to be antistatic if it meets the following requirement: taking into account the cleaning requirements from 8.2, the tested specimen shall have a body voltage of  $\leq 2,0$  kV as the result of tests according to ISO 6356 at 25 % relative humidity and 20 °C with any of the listed soles.

### 8.2 Cleaning requirements

For textile antistatic floor coverings, a washing and cleaning procedure similar to that used in practice is required where applicable to verify the durability of surface antistatic treatments.

In such cases the specimens to be tested shall be subjected to the laboratory spray extraction cleaning procedure according to ISO 11379 with the following modifications.

Clean the test specimens three times, with an interval of 2 h  $\pm$  15 min between cycles, each cleaning cycle consisting of two strokes:

- for the first stroke use the spray extraction machine with simultaneous spray and extraction;
- for the second stroke operate the machine only as an extraction machine.

Carry out the first cleaning cycle using the reference cleaning solution at ambient temperature 25 °C  $\pm$  10 °C and the second and third cleaning cycle with water at ambient temperature without any addition of chemicals.

After this, the test shall be repeated and the requirements satisfied.

## 9 Report

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

The contents of the report should be regarded as normative, not the lay-out.

## 10 Symbols

The symbols for suitability and additional characteristics shall be as listed in CEN/TS 15398.

**Annex A**  
(normative)

**Summary test report**

**A.1 General**

**Table A.1 — Summary test report**

<b>Identification, basic information and use classification</b>			
Name(s) (number) of quality		Date dd.mm.yyyy	
Manufacturer/applicant		Type of carpet	Type
Type of manufacture (table A.2)		Type of surface (table A.3)	
Fibre composition (table A.6) of the use-surface mass	Pass/fail	Secondary backing (table A.5)	
Colouring (table A.7)		Dimensions	
Basic requirements according to Table 2	Pass/fail		
Total thickness (mm)		Total mass (g/m <sup>2</sup> )	
Mass per unit area of the use-surface (g/m <sup>2</sup> )			
Foam/felt thickness (mm)		Foam/felt apparent density (g/m <sup>3</sup> )	
General structural integrity	Pass/fail	Surface treatment for antistatic characteristics	Yes/no
<b>Additional characteristics if applicable</b>			
Body voltage walking test (kV)			
NOTE 1 The manufacturer ensures that the quality complies with the requirements for colourfastness			
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 2.			

## A.2 List of references to Annex A

**Table A.2 — 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 needle felt	aiguilletée à velours	gestructureerd naaldvilt
M5	Nadelvlies	flat needle felt	aiguilletée	vlak naaldvilt
M6	getuftet	tufted	touffetée	getuft

**Table A.3 — 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, strukturiert	loop/cut pile, structured	velours bouclé/coupé structuré	lussen/gesneden pool, gestructureerd
A8	Schnitt-Schlingenpol	cut/loop pile	velours coupé/bouclé	gesneden/lussenpool
A9	Schnitt-Schlingenpol, strukturiert	cut/loop pile, structured	velours coupé/bouclé structuré	gesneden/lussenpool, gestructureerd
A10	Rippenstruktur	ribbed	côtelé	geribd
A11	schnittpolartig	cut pile like	aspect de velours coupé	gesneden pool
A12	strukturlos	structureless	sans structure	structuurloos
A13	Gewebestruktur	woven structure	surface tissé	geweven structuur
A14	haarig	hairy	à poils longs	harig

**Table A.4 — 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 A.5 — Type of secondary backing (1 of 3)**

Ref-Nr	D	E	F	NL
S1	Verfestigungsstrich	finish	enduction	strijklaag
S2	Appretur	finish	apprêt	appret
S3	Schaumrücken (SBR)	foam (SBR)	mousse (SBR)	schuim (SBR)
S4	Schaumrücken (PUR)	foam (polyurethane)	mousse de polyuréthane	polyurethaanschuim
S5	Textilrücken (Chemiefaser - gewirkt)	knitted synthetic textile backing	dossier textile tricotée (fibres synthétiques)	gebreide synthetische tweede rug
S6	Textilrücken (Naturfaser - gewirkt)	knitted textile backing (natural fibre)	dossier textile tricotée (fibre naturelle)	gebreide tweede rug (natuurvezel)
S7	Textilrücken (Chemiefaser/Naturfaser - gewirkt)	knitted textile backing (natural/synthetic fibre)	dossier textile tricotée (fibre naturelle/synthétique)	gebreide tweede rug (natuur/synthetische vezel)
S8	Textilrücken (Chemiefaser - gewebt)	woven textile backing (synthetic fibre)	dossier textile tissée (fibre synthétique)	geweven rug (synthetische vezel)
S9	Textilrücken (Naturfaser - gewebt)	woven textile backing (natural fibre)	dossier textile tissée (fibre naturelle)	geweven rug (natuurvezel)
S10	Textilrücken (Chemiefaser/Naturfaser - gewebt)	woven textile backing (synthetic/natural fibre)	dossier textile tissée (fibre naturelle/synthétique)	geweven rug (synthetische/natuur vezel)
S11	Textilrücken (Chemiefaservlies chemisch/thermisch verfestigt)	textile fleece backing (synthetic - thermally/chemically bonded)	dossier textile (voile synthétique thermiquement/ chimiquement collé)	vliesrug (synthetisch - thermisch/chemisch gebonden)

Table A.5 (2 of 3)

Ref-Nr	D	E	F	NL
S12	Textilrücken (Naturfaservlies - chemisch/thermisch verfestigt)	textile fleece backing (natural - thermally/chemically bonded)	dossier textile (voile naturelle thermiquement/ chimiquement collé)	vliesrug (natuurlijk - thermisch/chemisch gebonden)
S13	Textilrücken (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	Textilrücken (Chemiefaservlies - vernäht)	textile fleece backing (synthetic - sown)	dossier textile (voile synthétique surcousu)	vliesrug (synthetisch - vernaaid)
S15	Textilrücken (Naturfaservlies - vernäht)	textile fleece backing (natural -sown)	dossier textile (voile naturelle surcousu)	vliesrug (natuurlijk - vernaaid)
S16	Textilrücken (Chemiefaser/ Naturfaservlies - vernäht)	textile fleece backing (natural/synthetic - sown)	dossier textile (voile synthétique/naturelle surcousu)	vliesrug (synthetisch/natuurlijk – vernaaid)
S17	Textilrücken (Chemiefaservlies - vernadelt)	needled fleece backing (synthetic)	dossier textile (voile synthétique aiguilleté)	vilrug (synthetisch)
S18	Textilrücken (Naturfaservlies - vernadelt)	needled fleece backing (natural)	dossier textile (voile naturelle aiguilleté)	vilrug (natuurlijk)
S19	Textilrücken (Chemiefaser/ Naturfaservlies - vernadelt)	needled fleece backing (synthetic/natural)	dossier textile (voile synthétique/naturelle aiguilleté)	vilrug (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

Table A.5 (3 of 3)

Ref-Nr	D	E	F	NL
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 A.6 — 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

**Table A.7 — Type of colouring/patterning**

NR	D	E	F	NL
C1	Uni ungemustert	plain	Uni	Uni
C2	gemustert	patterned	a dessin	met dessin
C3	mehrfarbig ungemustert	tonal effect	a effet de couleur	met kleureffect



## Bibliography

Directive 96/73/EC of the European Parliament and of the Council of 16 December 1996 on certain methods for the quantitative analysis of binary textile fibre mixtures

Directive 96/74/EC of the European Parliament and of the Council of 16 December 1996 on textile names

Council Directive 73/44/EEC of 26 February 1973 on the approximation of the laws of the Member States relating to the quantitative analysis of ternary fibre mixtures





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