



**International
Standard**

ISO 2424

**Textile floor coverings —
Vocabulary**

Revêtements de sol textiles — Vocabulaire

**Fifth edition
2024-07**

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 219, *Floor coverings*.

This fifth edition cancels and replaces the fourth edition (ISO 2424:2007), which has been technically revised.

The main changes are as follows:

- rephrasing some words and definitions;
- adding some definitions.

A list of all parts in the ISO 2424 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Textile floor coverings — Vocabulary

1 Scope

This document defines terms relating to textile floor coverings and categories of these products.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

textile floor covering

system having a *use-surface* (3.2) composed of textile material and generally used for covering floors

Note 1 to entry: Textile floor coverings may be plain or patterned.

3.2

use-surface

part of a *textile floor covering* (3.1) directly exposed to traffic

3.3

substrate

base fabric

support fabric

construction, integral with the *use-surface* (3.2) and composed of one or more layers, which serves as a support for the use-surface

Note 1 to entry: The substrate can be built, for example, by a woven, non- or needled layer in case of a tufted floor covering or needled floor covering, or by a binding warp in case of a woven floor covering.

Note 2 to entry: The substrate can stabilize the dimensions and/or act as a cushion.

Note 3 to entry: Certain *textile floor coverings* (3.1) without *pile* (5.1) don't need to have a substrate distinct from the use-surface.

4 Terms related to categories of textile floor coverings as a function of their constructions

4.1

textile floor covering with pile

pile carpet

floor covering having a textile *use-surface* (3.2) to form a layer of yarns or fibres onto a *substrate* (3.3) which can be processed like *weaving* (4.1.1), *tufting* (4.1.2), *knitting* (4.1.3) or *needling* (4.1.6).

Note 1 to entry: For the definition of pile, see 5.1.

Note 2 to entry: The floor covering can have a defined use-surface and a backing substrate (heterogeneous), or a proportion of fibres that is consistent from surface to back (homogeneous).

4.1.1

woven textile floor covering with pile

woven pile carpet

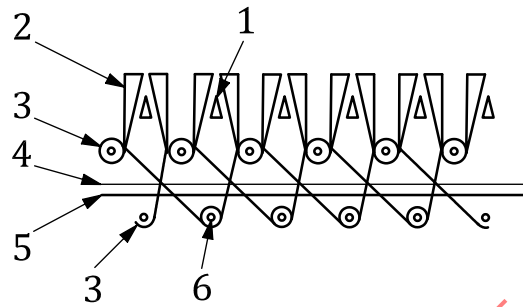
pile carpet (4.1) produced on a weaving machine so that the *pile* (5.1) is bound by interlacing with backing yarns

4.1.1.1

wire Wilton textile floor covering

a *pile carpet* (4.1) made by weft wise wire insertion on the full width of the weaving machine

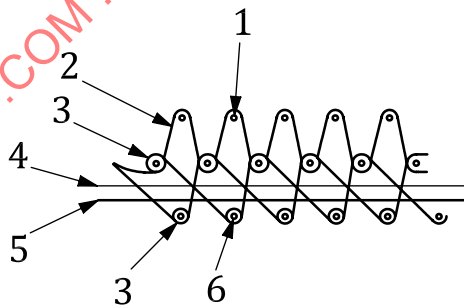
Note 1 to entry: Examples are given in [Figures 1](#) and [2](#).



Key

- 1 pile wire
- 2 cut pile
- 3 backing: chain, slack or binding warp
- 4 incorporated dead pile
- 5 backing: stuffer warp or tight warp
- 6 backing: weft

Figure 1 — Wire-Wilton-textile floor covering cut pile (warp ways cross-section)



Key

- 1 loop pile wire
- 2 loop pile yarn
- 3 backing: chain, slack or binding warp
- 4 incorporated dead pile
- 5 backing: stuffer warp or tight warp
- 6 backing: weft

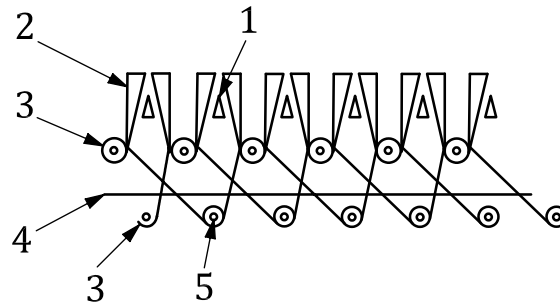
Figure 2 — Wire Wilton-textile floor covering loop pile (warp ways cross-section)

4.1.1.1.1

plain wire Wilton textile floor covering

pile carpet (4.1), generally of a single colour in the same warp course, in the production of which there is no provision for alternative selection of *pile* (5.1) yarns

Note 1 to entry: An example is given in [Figure 3](#).

**Key**

- 1 pile wire
- 2 cut pile
- 3 backing: chain, slack or binding warp
- 4 backing: stuffer warp or tight warp
- 5 backing: weft

Figure 3 — Wire-Wilton-textile floor covering plain cut pile (warp ways cross-section)

4.1.1.1.2

patterned wire Wilton textile floor covering

pile carpet (4.1) produced on a weaving machine with a Jacquard or other patterning mechanism and having a design obtained by predetermined selection of required colour of *pile* (5.1) yarns from those available in each *broche* (6.4), other pile yarns remaining as incorporated *dead pile* (6.8) yarns in the *ground weave* (6.13)

Note 1 to entry: Examples are given in [Figures 4 to 6](#).

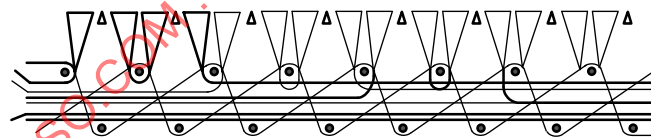


Figure 4 — 1/2 V-weave (two-shot weave) with pile not through to the back and with incorporated dead pile

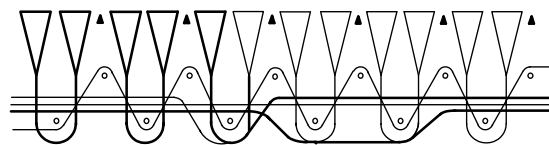


Figure 5 — 1/2 V-weave (two-shot weave) with pile through to the back and with incorporated dead pile

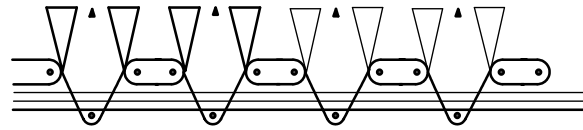


Figure 6 — 2/3 V-weave (three-shot weave) with pile not through to the back and with incorporated dead pile

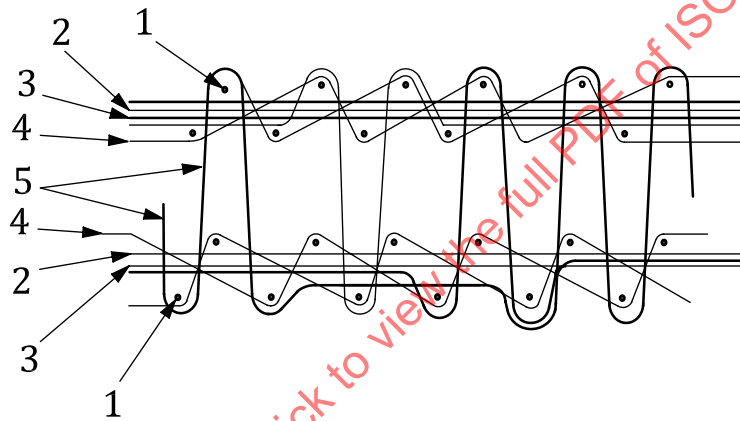
4.1.1.2

face-to-face woven pile textile floor covering

pile carpet (4.1) made on a weaving machine that produces simultaneously, face-to-face, two *ground weaves* (6.13) joined by the *pile* (5.1) yarn, which are divided by the cutting motion of the knife producing a bottom *textile floor covering* (3.1) (BC) and a top carpet (TC)

Note 1 to entry: An example is given in [Figure 7](#).

Note 2 to entry: In face-to-face textile floor coverings, three different weaving techniques are distinguished: the *single rapier weaving technique* (4.1.1.2.1), the *double rapier weaving technique* (4.1.1.2.2) and the *triple rapier weaving technique* (4.1.1.2.3).



Key

- 1 weft
- 2 backing: stuffer warp or tight warp
- 3 incorporated dead pile
- 4 backing: chain, slack or binding warp
- 5 pile

Figure 7 — Face-to-face textile floor covering (warp ways cross-section)

4.1.1.2.1

single rapier weaving technique

technique in which only one weft is introduced per weaving cycle so that, on the first weaving cycle, a shed is made for the top *carpet* (3.1) (TC) and, on the second weaving cycle, a shed is made for the bottom carpet (BC)

Note 1 to entry: The single rapier weaving technique also includes with no incorporated *dead pile* (6.8), in which case the dead pile yarn floats on the back of the bottom textile floor covering and is subsequently removed by a “scraping” process as part of the finishing process.

Note 2 to entry: Textile floor coverings woven with the single rapier technique have a pile row on every *pick* (6.11) (see [Figure 8](#)).

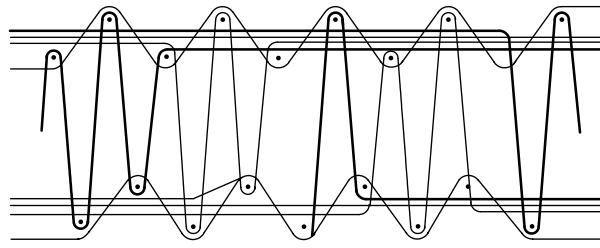


Figure 8 — 1/1 V-weave (one-shot weave) with pile through to the back and with incorporated dead pile

4.1.1.2.2

double rapier weaving technique

technique in which two wefts are inserted simultaneously per weaving cycle, one weft for the shed of the top carpet (3.1) (TC) and one weft for the shed of the bottom carpet (BC)

Note 1 to entry: Textile floor coverings woven with the double rapier technique have a *pile* (5.1) row on every two *picks* (6.11) (see Figures 9 and 10).

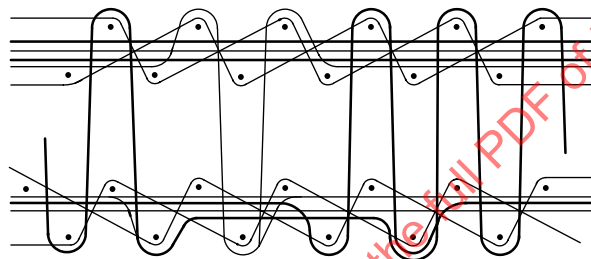


Figure 9 — 1/2 V-weave (two-shot weave) with pile through to the back and with incorporated dead pile

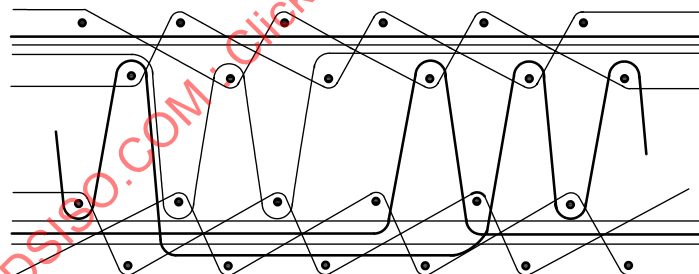


Figure 10 — 1/2 V-weave (two-shot weave) with pile not through to the back and with incorporated dead pile

4.1.1.2.3

triple rapier weaving technique

technique in which three wefts are inserted simultaneously per weaving cycle so that, on the first weaving cycle, two wefts are inserted in the shed of the top carpet (3.1) (TC) and one weft in the shed of the bottom carpet (BC) and, on the second weaving cycle, two wefts are inserted in the shed of the bottom carpet (BC) and one weft in the shed of the top carpet (TC)

Note 1 to entry: Textile floor coverings woven with the triple rapier technique have a *pile* (5.1) row every three *picks* (6.11), obtained in two machine revolutions (see Figure 11).

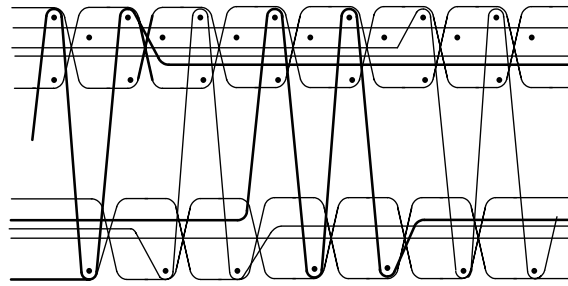


Figure 11 — 2/3 V-weave (three-shot weave) with pile through to the back and with incorporated dead pile

4.1.1.3

Axminster textile floor covering

cut pile (5.5) *textile floor covering* (3.1) produced by inserting, during weaving, successive rows of *tufts* (5.3) having colours arranged according to a predetermined order

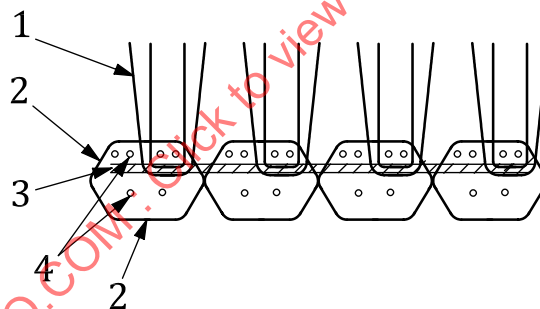
Note 1 to entry: As a consequence of its weaving, this type of textile floor covering does not contain dead yarns.

4.1.1.3.1

spool Axminster textile floor covering

pile carpet (4.1) manufactured on a weaving machine, on which the *pile* (5.1) yarns of each weft row are wrapped on a separate spool according to the required design, the spools are prepared, one per each row of the design, in a preparatory process known as spool setting, the *tufts* (5.3) being separated from the yarns presented at the point of weaving after insertion in the *substrate* (3.3)

Note 1 to entry: An example is given in [Figure 12](#).



Key

- 1 cut pile
- 2 chain warp
- 3 stuffer
- 4 weft

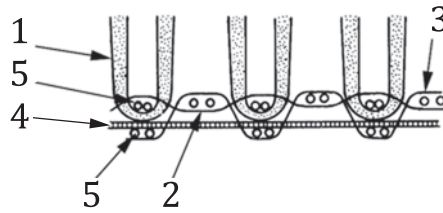
Figure 12 — Spool Axminster textile floor covering (warp ways section)

4.1.1.3.2

gripper Axminster textile floor covering

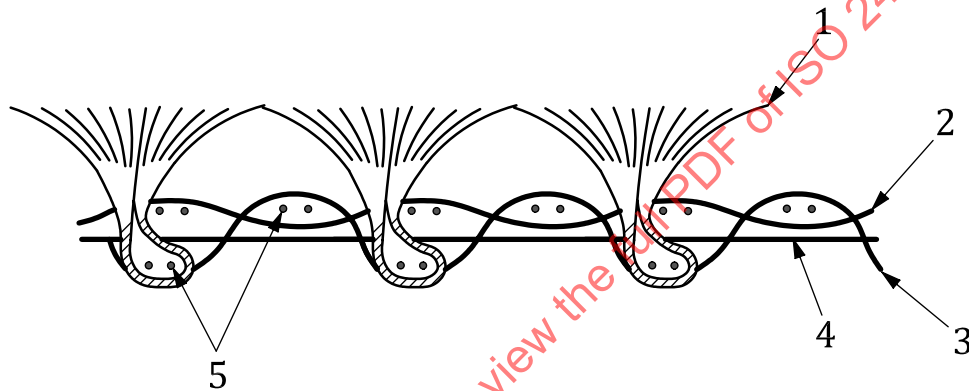
pile carpet (4.1), manufactured on a Jacquard weaving machine, in which the *tufts* (5.3) of yarn, cut after selection from appropriate bobbins in the creel, are inserted at the point of weaving by grippers

Note 1 to entry: An example is given in [Figure 13](#). [Figure 14](#) illustrates an alternative construction produced in this way, referred to as a Kardax construction.

**Key**

- 1 cut pile
- 2 short chain
- 3 long chain
- 4 stuffer
- 5 weft

Figure 13 — Gripper Axminster textile floor covering (warp ways section)

**Key**

- 1 tufts
- 2 short chain
- 3 long chain
- 4 stuffer
- 5 weft

Figure 14 — Gripper Axminster textile floor covering (Kardax construction)

4.1.1.3.3

gripper-spool Axminster textile floor covering

pile carpet (4.1) manufactured on a weaving machine, in which the *pile* (5.1) yarn for each weft ways row is wound on a separate spool, as for spool Axminster weaving, and *tufts* (5.3) severed from the yarns are inserted at the point of weaving by grippers, as in gripper Axminster weaving

4.1.2

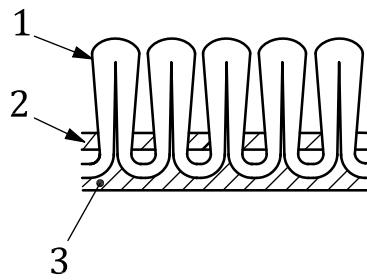
tufted textile floor covering with pile

tufted pile carpet

pile carpet (4.1) in which the *pile* (5.1) yarns are inserted into a previously manufactured *substrate* (3.3) by needles like sewing machine needles, and then secured by an adhesive or a mechanical process

Note 1 to entry: Examples are given in [Figures 15](#) and [16](#).

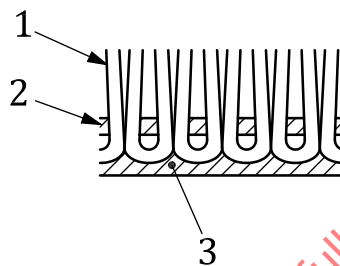
Note 2 to entry: The yarn is caught by a hook below the cloth, forming a *loop* (5.2) when the needle moves upwards out of the substrate. A knife may be added at each looper assembly to cut the loops created by the interaction between the looper and the needle, thus forming open *tufts* (5.3) of yarn termed *cut pile* (5.5). A combination of both is possible.



Key

- 1 loop pile
- 2 substrate
- 3 coating

Figure 15 — Tufted textile floor covering loop-pile (longitudinal section)



Key

- 1 cut pile
- 2 substrate
- 3 coating

Figure 16 — Tufted textile floor covering cut-pile (longitudinal section)

4.1.3

knitted textile floor covering with pile

knitted pile carpet

pile carpet (4.1) made on a warp knitting machine

Note 1 to entry: An example is given in [Figure 17](#).

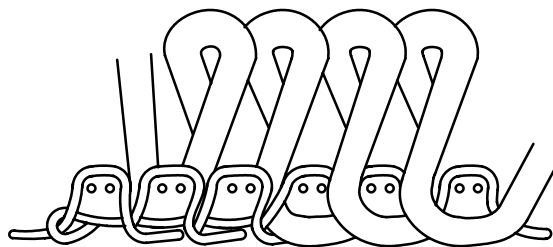


Figure 17 — Warp-knitted textile floor covering with pile (longitudinal section)

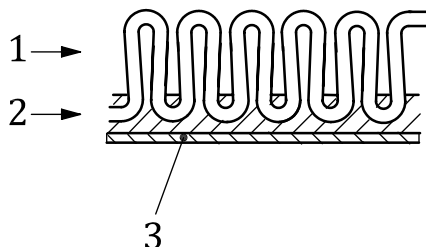
4.1.4

fusion-bonded textile floor covering with pile

bonded pile carpet

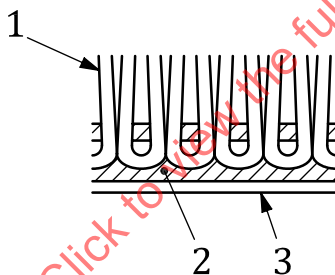
pile carpet (4.1) in which the surface *pile* (5.1) consists of a pleated sheet or assembly of textile yarns or fibres secured to a support by a hot-melt adhesive or directly to a polymer (e.g. PVC) which forms the total backing support

Note 1 to entry: Examples are given in [Figures 18](#) and [19](#).

**Key**

- 1 pleated sheet of fibres or yarns (loop pile)
- 2 adhesive (coating)
- 3 substrate

Figure 18 — Fusion-bonded textile floor covering with pile (loop pile) (longitudinal section)

**Key**

- 1 pleated sheet of yarns (cut pile)
- 2 adhesive (coating)
- 3 substrate

Figure 19 — Fusion-bonded textile floor covering with pile (cut pile) (longitudinal section)

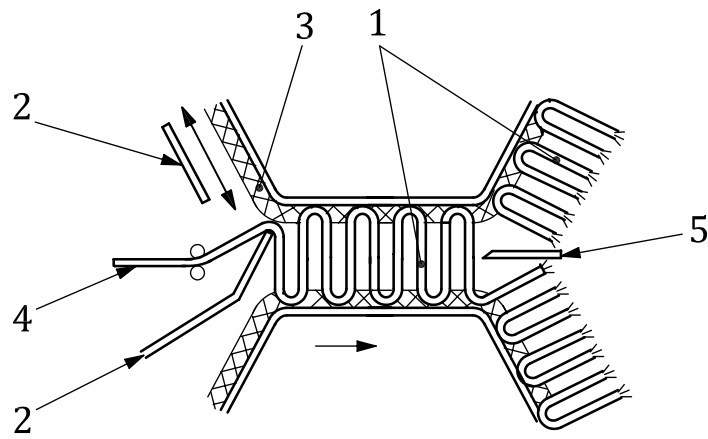
4.1.4.1

face-to-face bonded-pile textile floor covering

pile carpet (4.1) manufactured on a machine that produces face-to-face *textile floor coverings* (3.1), with the pile-forming material passing alternately from one *substrate* (3.3) to another, where it is fixed by adhesive

Note 1 to entry: An example is given in [Figure 20](#).

Note 2 to entry: Two *cut pile* (5.5) textile floor coverings are made by cutting the pile-forming material between the two substrates.

**Key**

- 1 use-surface (pile)
- 2 pile-forming blades
- 3 substrate
- 4 yarn
- 5 cutter

Figure 20 — Face-to-face bonded-pile textile floor covering (longitudinal section)

4.1.4.2**patterned fusion-bonded textile floor covering with pile**

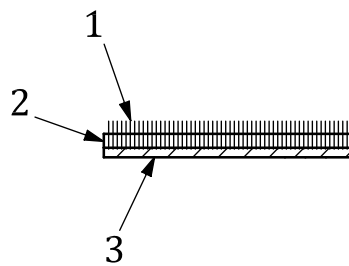
pile carpet (4.1) in which, prior to the fusion bonding process, the yarn is delivered from a patterning device, to give an Axminster-like design

4.1.5**flocked textile floor covering with pile**

flocked pile carpet

pile carpet (4.1) obtained by projecting the staple fibres by electrostatic or other forces onto a substrate coated with adhesive

Note 1 to entry: An example is given in [Figure 21](#).

**Key**

- 1 pile
- 2 adhesive (coating)
- 3 substrate

Figure 21 — Flocked pile textile floor covering

4.1.6

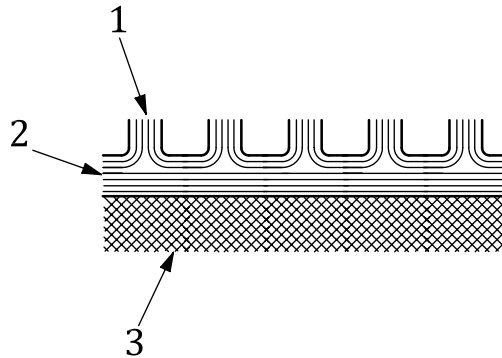
needled textile floor covering with pile

needled pile carpet

textile floor covering (3.1) produced by the needling of textile materials (see 4.2.4) and/or bonding by physical or chemical processes forming a pile.

Note 1 to entry: An example is given in [Figure 22](#).

Note 2 to entry: The *pile* (5.1) may be either *cut pile* (5.5) or *loop pile* (5.4).



Key

- 1 fibres forming the pile
- 2 fibres remaining in the substrate
- 3 substrate

Figure 22 — Example of needled textile floor covering with pile

4.1.6.1

structured needled textile floor covering with pile

needled floor covering with a structured *use-surface* (3.2) obtained by an additional structuring needling process

4.1.6.2

homogeneous needled textile floor covering with pile

needled *pile* (5.1) floor covering with identical constituents of fibre and/or bonding material throughout the whole product

4.1.6.3

heterogeneous needled textile floor covering with pile

needled *pile* (5.1) floor covering with different distinct layers of fibres and/or layers of impregnated fibres in which the bonding compound is applied to the back of the floor covering and does not reach the *use-surface* (3.2) so that it is present only in the lower part of the needled floor coverings

4.1.7

knotted textile floor covering with pile

knotted pile carpet

pile carpet (4.1) produced by knotting the pile-forming yarns around the *warp yarns* (6.1) of the *substrate* (3.3)

Note 1 to entry: Examples of Persian and Turkish knots are given in [Figures 23](#) and [24](#).



Figure 23 — Example of Persian knots (weft ways section)



Figure 24 — Example of Turkish knots (weft ways section)

4.1.7.1

hand-knotted pile textile floor covering

pile carpet (4.1) obtained by knotting the pile-forming yarns by hand

4.1.7.2

machine-knotted pile textile floor covering

pile carpet (4.1) obtained by automatic knotting

4.2

textile floor covering without pile

textile floor covering (3.1) composed of a non-pile textile *use-surface* (3.2) with or without a *substrate* (3.3)

4.2.1

woven textile floor covering without pile

textile floor covering (3.1) without *pile* (5.1), made on a weaving machine

Note 1 to entry: This can also be described as a flat-woven product.

4.2.2

knitted textile floor covering without pile

textile floor covering (3.1) without *pile* (5.1), made on a knitting machine

4.2.3

bonded textile floor covering without pile

textile floor covering (3.1) without *pile* (5.1), in which the *use-surface* (3.2) is composed of entangled textile materials bonded together by a physical and/or chemical process.

Note 1 to entry: An example of such a process is defined in 4.2.4.

4.2.4

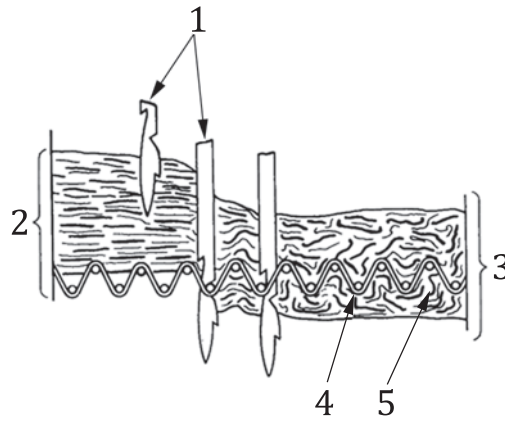
needled textile floor covering without pile

flat needled carpet

consolidation of a *batt* (5.18.21) through entanglement by multiple penetration of barbed needles in one or more layers

Note 1 to entry: An example is given in Figure 25.

Note 2 to entry: This type of floor covering may or may not contain a *substrate* (3.3) (see 4.1.6.2 and 4.1.6.3).

**Key**

- 1 barbed needles
- 2 sheet of superimposed fibres
- 3 entangled fibres
- 4 substrate
- 5 fibres thrust through substrate by needling

Figure 25 — Manufacturing principle of needled textile floor covering with substrate

4.2.5**braided textile floor coverings without pile**

textile floor covering (3.1) without *pile* (5.1), made of machine-braided cords sewn together

4.3**coir mat**

textile floor covering (3.1) made of *coir* (4.3.1)

Note 1 to entry: For the definition of mat, see 8.4.

4.3.1**coir**

fibre obtained from husks of the coconut (*Cocos nucifera*) by rotting or by mechanical extraction

4.3.2**bit mat**

mat (8.4) with the *pile* (5.1) formed by insertion of bits of yarn on every alternate strand of chain (warp)

4.3.3**corridor mat**

mat (8.4) in which both warp and weft strands are continuous without tucking in or binding

4.3.4**creel mat**

mat (8.4) made up of two or more chains, one tight (forming the binding) and the others slack forming the *pile* (5.1), the pile being produced by cutting slack chain bent over a grooved rod suitably inserted between the slack and tight chains

4.3.5**fibre mat**

mat (8.4) made up of two chains, one tight and the other binding, the *pile* (5.1) being formed by insertion of *tufts* (5.3) of *coir* (4.3.1) fibre on alternate strands of tight chain

4.3.6

gymnasia mat

mat (8.4) with the *pile* (5.1) formed by cutting three or more yarns folded together and wound around a grooved iron rod along with alternate ends of warp

Note 1 to entry: The pile can be made thicker to meet specific requirements.

4.3.7

loop mat

mat (8.4) made up of three chains, one tight and others slack working as the *pile* (5.1) or binding the pile being formed by *loops* (5.2) formed out of slack chain in the weaving process

4.3.8

mesh mat

mat (8.4) made by laying *coir* (4.3.1) yarn in a criss-cross manner between a number of nails fixed on a frame and knotting the intersecting points with coir yarn

4.3.9

rod mat

mat (8.4) with the *pile* (5.1) formed by cutting two or more strands of yarn folded together and wound around a grooved iron rod along with alternate ends of warp

4.3.10

rope mat

lover's knot mat

mat (8.4) made with a *coir* (4.3.1) rope guided through a number of upright nails fixed on a flat surface

Note 1 to entry: This mat may be made either in oval or oblong shapes.

4.3.11

sinnet mat

mat (8.4) made of plaited (or braided) *coir* (4.3.1) yarn of three or more strands stitched together in a frame

5 Terms related to the use-surface

5.1

pile

part of a *textile floor covering* (3.1) consisting of textile yarns or fibres, cut or looped, projecting from the *substrate* (3.3) and acting as a *use-surface* (3.2)

5.1.1

pile lay

direction in which most of the *pile* (5.1) fibres lean in the original, uncrushed *textile floor covering* (3.1), perpendicular to the *substrate* (3.3)

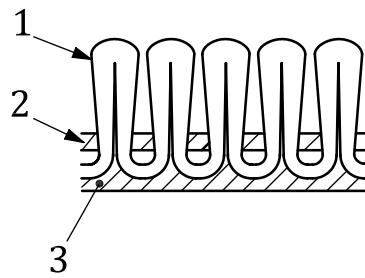
5.2

loop

length of yarn or fibres between the two successive lowest points of binding of the *pile* (5.1) in the *substrate* (3.3)

Note 1 to entry: An example is given in [Figure 26](#).

Note 2 to entry: When two or more pile yarns are delivered to a single binding site, they are considered to create one loop.

**Key**

- 1 loop pile
- 2 substrate
- 3 coating

Figure 26 — Successive loops of a pile (longitudinal section)

5.3 tuft

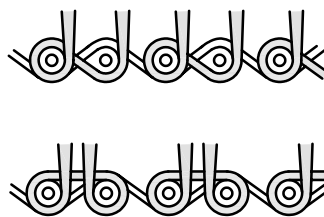
length of yarn, for example J-, U- or W-shaped (formed by a physical process [4.1.1](#) to [4.1.5](#)), or a length of yarn in the form of a knot (formed by hand or automatically [4.1.7](#)), of which the leg or legs form the *pile* ([5.1](#)) of a *textile floor covering* ([3.1](#))

Note 1 to entry: Examples of tufts are given in [Figure 26](#), [Figure 27](#) and examples of knots are given in [Figure 28](#).

Note 2 to entry: Flocked textile floor coverings and certain bonded textile floor coverings are not considered to be composed of tufts. In the case of Jacquard-weave textile floor coverings, the length shall be considered as the length of tuft taken from a portion of a textile floor covering with a surface of a single colour.

Note 3 to entry: When two or more pile yarns are delivered to a single binding site, they are considered to create one tuft.

Note 4 to entry: In certain cases the “tuft” is used in general sense implying “cut and/or loop”

**Figure 27 — Examples of “U” tuft, “W” tuft and “J” tuft****Figure 28 — Examples of tufts in the form of knots**

5.4 loop pile

pile ([5.1](#)) of a *textile floor covering* ([3.1](#)) consisting of uncut *loops* ([5.2](#))

5.5 cut pile

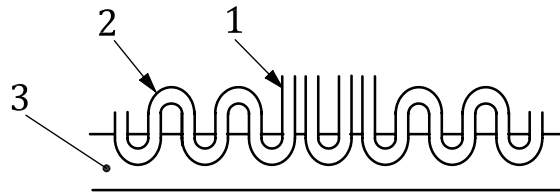
pile ([5.1](#)) of a *textile floor covering* ([3.1](#)) consisting of legs of *tufts* ([5.3](#)) or individual fibres

5.6

cut and loop pile

pile (5.1) of a *textile floor covering* (3.1) formed, during manufacture, by *loops* (5.2) and *tufts* (5.3) of different lengths or of the same length

Note 1 to entry: An example is given in [Figure 29](#).

**Key**

- 1 tuft (cut pile)
- 2 loop pile
- 3 substrate + coating

Figure 29 — Cut and loop pile (longitudinal section)

5.7

level pile

pile (5.1) in which all *loops* (5.2) or *tuft* (5.3) legs are of substantially the same length

5.8

multi-level pile

pile (5.1) in which some *loops* (5.2) or *tuft* (5.3) legs are substantially longer than others, resulting in a sculptured appearance or pattern

5.9

curled pile

pile (5.1) of a *textile floor covering* (3.1) in which curl has been induced in the pile yarn by overtwist or by other means resulting in a *friezé* (7.4) textile floor covering style

5.10

textured surface

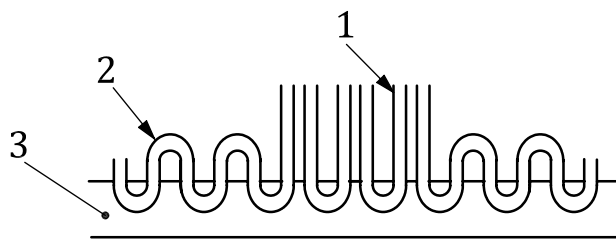
variation in heights of the fibers adding depth and dimensions to the surface that can be obtained by different process techniques.

5.11

tip-sheared pile

pile (5.1) of a *textile floor covering* (3.1), originally consisting of *loops* (5.2) of different lengths, which is subjected after manufacture to a shearing process to cut the tips of the longer pile loops

Note 1 to entry: An example is given in [Figure 30](#).

**Key**

- 1 tuft (tip-sheared pile)
- 2 loop pile
- 3 substrate + coating

Figure 30 — Tip-sheared pile (longitudinal section)**5.12****carved pile**

pile (5.1) of a *textile floor covering* (3.1) which, after manufacture, is subjected to a selective shearing operation with the object of creating different levels of pile, in general on the periphery of certain elements of design formed by the pile

5.13**sculptured pile**

pile (5.1) in which a pattern is created by having areas of different lengths of pile and/or by omitting pile in certain areas

5.14**saxony**

cut-pile *textile floor covering* (3.1), utilizing straight, twist-set *pile* (5.1) yarns, resulting in a smooth surface with *tuft* (5.3) definition

5.15**shag**

loosely tufted cut-pile *textile floor covering* (3.1) construction with greater than normal *pile* (5.1) height and spacing between *tufts* (5.3)

5.16**velour textile floor covering**

relatively dense cut-pile *textile floor covering* (3.1) of uniform, and usually short, *pile* (5.1) height with little or no *twist definition*, so that the *use-surface* (3.2) appears to consist of the ends of fibres arranged in parallel

5.17**velvet textile floor covering**

plush carpet

velvet plush carpet

cut-pile *textile floor covering* (3.1) with *pile* (5.1) yarns that have very little twist so that the ends tend to blend together to give a smooth, unbroken surface with no *tuft* (5.3) definition

5.18**technical data**

recorded information, regardless of the form or method of recording, of a scientific or technical nature

5.18.1**tuft row**

tufts (5.3) running in a line at right angles to the direction of manufacture

5.18.2

row count

beat-up

shottage

number of *tuft rows* (5.18.1) or *loop rows* (5.18.4) per unit length in the direction of manufacture

5.18.3

stitch rate

number of stitches per unit length in the direction of manufacture

5.18.4

loop row

loops (5.2) running in a line at right angles to the direction of manufacture

5.18.5

tuft column

line of *tufts* (5.3) essentially parallel to the direction of manufacture

5.18.6

column count

number of *tufts* (5.3) or *loops* (5.2) per unit length at right angles to the direction of manufacture

5.18.7

gauge

linear spacing of *tuft columns* (5.18.5) or *loop columns* (5.18.8), measured centre-to-centre on the columns at right angles to the direction of manufacture

5.18.8

loop column

line of *loops* (5.2) essentially parallel to the direction of manufacture

5.18.9

pitch

numbering of binding sites

Note 1 to entry: (hand-made carpets) number of knots per square 25,4 mm (1 inch) in the *pile* (5.1)

Note 2 to entry: (Wilton) number of binding sites in 686 mm (27 inch) of width

Note 3 to entry: (Axminster) number of binding sites in 25,4 mm (1 inch) of width

5.18.10

total pile

all yarns or fibres used to form the *tufts* (5.3) or *loops* (5.2) above, under and within the *substrate* (3.3), including the *dead yarns* (6.8)

5.18.11

effective pile

part of the *pile* (5.1) which is above the *substrate* (3.3)

Note 1 to entry: An example is given [Figure 31](#).

5.18.12

effective pile thickness

difference in the thickness of the *textile floor covering* (3.1) before and after the *pile* (5.1) above the *substrate* (3.3) has been shorn away, measured under standard pressure

5.18.13

length of effective pile

pile height

length of fibre or of one leg of a *tuft* (5.3) from the place where it emerges from the *substrate* (3.3) to its furthest extremity, or half the length of a *loop* (5.2) between the two points where it emerges from the substrate

5.18.14

total pile mass per unit area

mass of the *pile* (5.1) yarn in a unit area, including that forming the base of the *tufts* (5.3) or held in the *substrate* (3.3) but excluding any backing compound adhering to the pile yarn, determined by weighing after separating the pile yarn from the other components

5.18.15

mass of pile per unit area above substrate

difference in the mass of the *textile floor covering* (3.1) before and after the *pile* (5.1) above the *substrate* (3.3) has been shorn away

Note 1 to entry: A method for determining this value is given in ISO 8543.

5.18.16

measured surface pile density

ratio of mass to volume of the *pile* (5.1) above *substrate* (3.3) measured under standard pressure, calculated from the thickness and the mass of pile above substrate

5.18.17

measured pile fibre volume ratio

proportion of the volume of the *pile* (5.1) occupied by fibre

5.18.18

frameage

number of separate sheets of yarn, of the same or different colours, from which the Jacquard mechanism selects the pattern in *textile floor coverings* (3.1) woven over wires, in face-to-face textile floor coverings and in *gripper Axminster textile floor coverings* (4.1.1.3.2)

Note 1 to entry: Single-colour textile floor coverings can be produced from a single frame.

5.18.19

pile bursting

appearance of *cut pile* (5.5) of a *textile floor covering* (3.1) achieved by different processes producing a volume apparently greater than that which was occupied before the application of this process

5.18.20

bonding agent

material applied to fibre or yarn assemblies, with the intention of maintaining the assembly in the required conformation

5.18.21

batt

fibres in sheet form used in the manufacture of non-woven *textile floor coverings* (3.1)

5.18.22

tuft bind strength

force required to pull the *tuft* (5.3) leg from the *textile floor covering* (3.1)

5.18.23

fibre bind

anchorage of the fibres of the *use-surface* (3.2) of a *textile floor covering* (3.1) by mechanical or chemical means

6 Terms related to the substrate

6.1

warp yarn

yarn running lengthwise in a woven *textile floor covering* (3.1)

6.2

weft yarn

yarn running from *selvedge* (6.6) to selvedge at right angles to the warp in a woven *textile floor covering* (3.1)

6.3

stuffer yarn

warp threads that reinforce the *substrate* (3.3) of a woven *textile floor covering* (3.1)

6.4

broche

assemblage of yarn inserted in the same dent of the reed of the weaving machine, the group consisting usually of two ends of the *chain warp* (6.5), the yarns of the stuffer warp and those of the *pile* (5.1)

6.5

chain warp

warp threads, usually woven in pairs, alternating over and under the lower *shot* (6.12) [*weft yarn* (6.2)] and one or more top shots, which are then bound and which enclose the *stuffer yarns* (6.3) and the *tufts* (5.3) or *loops* (5.2) forming the *pile* (5.1)

6.6

selvedge

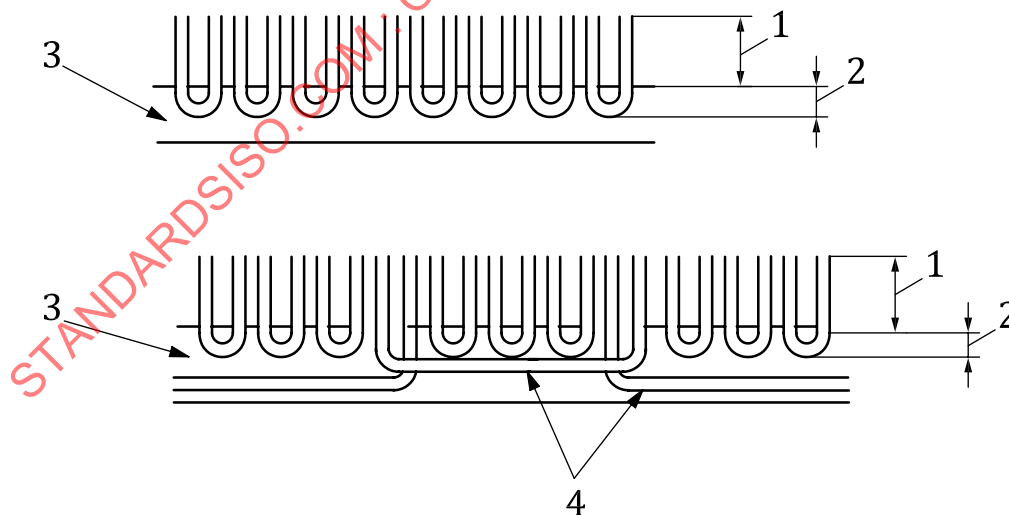
interlacing of the warp and weft threads at the edge of a woven *textile floor covering* (3.1), constructed so as to resist *fraying* (9.1.5)

6.7

pile root

part of *tufts* (5.3) and/or *loops* (5.2), excluding dead yarns, which is in the *substrate* (3.3) and pre-coat (6.27),

Note 1 to entry: An example is given in [Figure 31](#).



Key

- 1 thickness of pile above the substrate
- 2 pile root
- 3 substrate + coating
- 4 dead yarns

Figure 31 — Pile root (longitudinal section)

6.8

dead pile**dead yarn**

pile (5.1) yarn in a multi-frame *textile floor covering* (3.1) that is not raised by the Jacquard mechanism, excluding all yarn forming the thickness of the pile above the *substrate* (3.3) and *pile root* (6.7)

Note 1 to entry: The dead pile either floats (floating dead pile) underneath the substrate or is incorporated (incorporated dead pile) in the substrate. An example is given in [Figure 31](#).

6.9

dead fibre

part of the fibre, in a *needled pile textile floor covering* (4.1.6), which forms or is incorporated in the *substrate* (3.3) and which does not form part of the thickness of the *pile* (5.1) above the substrate

6.10

dead frame yarn

pile-type yarn embedded totally in the *substrate* (3.3) to replace pile-forming yarn in one or more frames, thus avoiding a variation in the thickness of the substrate, or included as complete frames to give filling and cushioning to the substrate and, in this case, substrate for stuffer *warp yarns* (6.1)

6.11

pick

individual filling yarn

6.12

shot

{woven pile floor coverings} *weft yarn* (6.2) resulting from one operation of the weft insertion mechanism

6.13

ground weave

woven backing (6.17) assembly from which the *pile* (5.1) yarn protrudes

6.14

carpet backing

all materials in a pile floor covering other than the *pile* (5.1) yarn

6.15

primary backing

support fabric

base fabric

material that acts as a carrier for the *use-surface* (3.2) and which is often additionally used as an anchor for other parts of the *substrate* (3.3)

6.16

secondary backing

additional stabilizing layer attached to or adhered to the underside of the *primary backing* (6.15)

Note 1 to entry: The secondary backing may be a textile, rubber, or elastomeric foam layer attached to or adhered to, flowed onto or coated onto the underside of the primary backing.

6.17

woven backing

carpet backing (6.14) formed by weaving, either before manufacture of the *carpet* (3.1) or in the course of its production

6.18

knitted backing

carpet backing (6.14) produced by knitting, either before manufacture or in the course of production

6.19

non-woven backing

carpet backing (6.14) produced by a technique other than weaving.

6.20

non-textile backing

carpet backing (6.14) composed of material other than textile material and consisting generally of plastic material or rubber

6.21

sized backing

carpet backing (6.14) that has been submitted to a light coating of size in order to give a better *tuft* (5.3) bind and a measure of rigidity

6.22

coated backing

layer of polymeric compound applied to the back of a *textile floor covering* (3.1)

6.23

attached underlay

combined backing

cushion backing

pre-formed *underlay* (8.10), which is attached to the back of the *textile floor covering* (3.1) to provide additional stability, thickness and padding

6.24

foam backing

mechanically or chemically foamed polymer compound applied to the back of a *textile floor covering* (3.1)

6.25

embossed backing

foamed or unfoamed polymeric compound applied to the back of a *textile floor covering* (3.1), the surface of which is impressed to form an embossed structure

6.26

impervious backing

secondary polymer backing that is non-permeable to liquids

6.27

pre-coating

operation of depositing a coating on the back of a *textile floor covering* (3.1) to ensure its penetration into the *substrate* (3.3) and *pile root* (6.7) without reaching the *use-surface* (3.2)

6.27.1

top coat

adhesive coat

a layer of compound applied wet-on-wet or wet-on-dry to the *pre-coating* (6.27) for the adhesive bonding of the textile *secondary backing* (6.16)

6.28

impregnation

operation of depositing a bonding and/or finishing agent throughout the *textile floor covering* (3.1)

6.29

creep of the backing

deformation of the backing, which is time-dependent and exhibited by material subject to a continuing force

6.30

friability of foam backing

ease of breaking down or crumbling of the *foam backing* (6.24) under an applied stress

6.31

unitary backing

backcoating of a polymer material, e.g. high rubber-content latex, or hot-melt resin compound, applied in a single operation to impart strength, *tuft* (5.3) bind and *dimensional stability* (9.2.9) to a *textile floor covering* (3.1)

7 Terms related to the patterning and colouring of textile floor coverings

7.1

plain

<textile floor covering> having a *use-surface* (3.2) composed of single-colour fibres or yarns and a uniform structure and texture

7.2

tonal effect

<textile floor covering> having a *use-surface* (3.2) composed of different coloured fibres or yarns but without a readily discernible pattern

7.2.1

heather

subtle multicolour effect achieved through blending together fibres of different colours in a spun *pile* (5.1) yarn or comingling filaments of different colours in a continuous filament pile yarn

Note 1 to entry: Heather can be achieved by air-entangling ("locking" different coloured yarns together by air jets at regular intervals), by spinning blended fibres of different colours together, or by differential dyeing.

Note 2 to entry: In differential dyeing, fibres, which have different dye affinities, are combined together to produce a multicoloured *textile floor covering* (3.1) from a single dyeing.

7.2.2

berber

textile floor coverings (3.1), produced as squares, hand-woven by North African tribes with yarn spun by hand from local sheep, which contain a proportion of naturally pigmented wool and may bear simple tribal motifs

Note 1 to entry: In recent years, the term has been commonly used to describe manufactured textile floor coverings having a homespun appearance.

7.3

patterned

<textile floor covering> having a *use-surface* (3.2) composed of yarns or fibres in readily defined areas of two or more colours, or of a single colour, present in areas of different structure and/or texture in a predetermined arrangement

7.4

friezé

textile floor covering (3.1) with *pile* (5.1) yarn which has been very tightly twisted to give a kinked or curled effect to the *use-surface* (3.2) of the finished textile floor covering

8 Terms related to the fitting and use of textile floor coverings

8.1

wall-to-wall

textile floor covering (3.1) that completely covers the floor area of the room

8.2

broadloom

textile floor covering (3.1) traditionally made 1,83 m (2 yd) or more in width

8.3

runner

textile floor covering (3.1) used along the length and part of the width of floors

Note 1 to entry: Examples of floors include corridors and stairs.

8.4

mat

rug

textile floor covering (3.1) of predetermined shape and limited dimensions, which is complete in itself and is intended for use as a partial covering of a floor or another floor covering

8.5

tile/plank

modular textile floor covering

type of textile floor covering (3.1) of predetermined shape and size intended to be used in a modular mode

Note 1 to entry: Note 1 to entry: Tiles are usually square. Planks have a ratio length divided by width superior or equal to 1,3. A modular product with a ratio inferior to 1,3 has to be considered as a tile.

8.6

seaming

joining of two or more pieces of *textile floor covering* (3.1) in the direction of manufacture

8.7

cross-joining

cross-seaming

joining of two or more pieces of *textile floor covering* (3.1) across the direction of manufacture

8.8

edge-finishing

securing of the edge of a *textile floor covering* (3.1) to prevent *fraying* (9.1.5) in use and to obtain a specific aesthetic effect for rugs and runners.

8.9

underlay

cushion

resilient layer of textile and/or other material placed between the *textile floor covering* (3.1) and the floor

8.10

interlay

thin, flexible layer used beneath a *textile floor covering* (3.1) or *underlay* (8.10) for various purposes

8.11

installation by stretching

method of installing a *textile floor covering* (3.1) in which it is stretched and fixed to the floor by various means under tension

8.12

installation by full adhesion

method of laying in which the *textile floor covering* (3.1) is adhered over the whole area of the floor to be covered

8.13

installation by perimeter fixing

method of laying in which the *textile floor covering* (3.1) is adhered to part of the floor to be covered, for example, round the edges and/or in spaced areas

8.14

loose installation

free installation

method of laying in which the *textile floor covering* (3.1) is laid on the floor without any kind of fixing

8.15

residential use

textile floor covering (3.1) used in homes or for non-business personal use

8.16

commercial use

contract use

textile floor covering (3.1) used, for example, in hotels, business offices, shopping centres

8.17

stair nosing

junction of the top edge of the riser and the forward edge of the tread

8.18

protective stair nosing

prefabricated, decorative, angled retaining strip made from metal, vinyl, wood, etc., used to eliminate the need to bend the *textile floor covering* (3.1) over the *stair nosing* (8.18), thereby extending the life of the textile floor covering

8.19

crotch

junction of the lower edge of the riser with the rearmost edge of the stair-tread

8.20

installation by double stick

double glue

method where the *underlay* (8.10) is adhered to the floor, with the *textile floor covering* (3.1) adhered subsequently to the underlay

9 Terms related to the wear behaviour for use of textile floor coverings

9.1 Wear characteristics

9.1.1

loss of use surface material

fiber or coating loss due to wear or other mechanical action.

9.1.1.1

wearing out

progressive loss of *use-surface* (3.2) material of a *textile floor covering* (3.1) by abrasive or any other mechanical action

Note 1 to entry: Between the stage of very slight wearing out [*shedding* (9.1.1.2)] and an extreme stage [*wear-to-backing* (9.1.1.4)], each intermediate form is possible, depending on the time and intensity of use

9.1.1.2

shedding

fluffing

appearance of fibres of short length (fluff) not fixed during manufacture, which come from the *use-surface* (3.2) of a *textile floor covering* (3.1) during early use and which can be removed by brushing or suction

9.1.1.3

tufting out

loss of *tufts* (5.3) from the *use-surface* (3.2) of a *textile floor covering* (3.1)

9.1.1.4

wear-to-backing

stage at which the *substrate* (3.3) or backing material of a *textile floor covering* (3.1) is exposed

9.1.2

loss of thickness

flattening (9.1.3.1.2) of a *textile floor covering* (3.1) resulting from a decrease in the *resilience* (9.1.2.1) of the fibres, *attached underlay* (6.23) or *foam backing* (6.24), from a sideways movement of the yarns and/or by a loss of material during use

9.1.2.1

resilience

ability of a *textile floor covering* (3.1) to regain thickness after a static or dynamic compression

9.1.3

change in appearance

change in structure (9.1.3.1), roughness, thickness, colour and/or pattern of a *textile floor covering* (3.1), that may contribute to change in product visual or aesthetics.

Note 1 to entry: See 9.1.3.1 and 9.1.3.2.

Note 2 to entry: It is not always possible to distinguish clearly between the above factors, since each has an interaction with the others.

Note 3 to entry: The term “appearance retention” is often used to describe the ability of a textile floor covering to resist these changes.

Note 4 to entry: roughness can be *hairiness* (9.1.3.1.5), *cobwebbing* (9.1.3.1.6), *pilling* (9.1.3.1.7), *sprouting* (9.1.3.1.8) or a combination of these.

9.1.3.1

change in structure

textural change

visible change in configuration of *loops* (5.2) and/or *tufts* (5.3) and/or fibres at the *use-surface* (3.2) of a *textile floor covering* (3.1)

9.1.3.1.1

loss of tuft definition

⟨cut or loop pile⟩ bursting, opening and untwisting of the *pile* (5.1) yarn and/or decrimping of the fibres in the *use-surface* (3.2) of a *textile floor covering* (3.1), that can cause a decrease of the pile definition

9.1.3.1.2

flattening

crushing

loss of thickness (9.1.2) of a *textile floor covering* (3.1) under the action of a static or dynamic load

9.1.3.1.3

fibrillation

fibre damage in which individual filaments break down longitudinally into finer components or fibrils

9.1.3.1.4

felting

matting

loss of *pile* (5.1) definition of a *textile floor covering* (3.1) resulting from entanglement and compression of pile fibres

9.1.3.1.5

hairiness

filamentation

protrusion of fibres above the normal level of the *use-surface* (3.2) of a *textile floor covering* (3.1) not removable by brushing or suction

9.1.3.1.6

cobwebbing

extreme form of *hairiness* (9.1.3.1.5) in which the fibres are entangled to form an interlaced web attached to the *use-surface* (3.2)

9.1.3.1.7

pilling

extreme form of *hairiness* (9.1.3.1.5) in which the fibres are entangled to form small aggregates attached to the *use-surface* (3.2), and which may or may not include fibres from other sources

9.1.3.1.8**sprouting**

release and appearance during use of extra-long *tuft* (5.3) legs, which were accidentally trapped within the *pile* (5.1) of a *textile floor covering* (3.1) during manufacture

9.1.3.1.9**change in pile lay**

change in the appearance of a *textile floor covering* (3.1) resulting from localized alterations in the orientation of the fibres, *tufts* (5.3) or *loops* (5.2)

Note 1 to entry: This is not a real change in hue, but a difference in light reflection, which can occur as *temporary shading* (9.1.3.1.9.1), *tracking* (9.1.3.1.9.2) or *pile reversal* (9.1.3.1.9.3).

9.1.3.1.9.1**temporary shading**

reversible localized change in orientation of the *pile* (5.1) of a *textile floor covering* (3.1) during normal use

Note 1 to entry: This is sometimes described as a normal characteristic of certain *cut pile* (5.5) textile floor coverings.

9.1.3.1.9.2**tracking**

gradual *change in appearance* (9.1.3) of a *textile floor covering* (3.1) from edge to middle of a narrow band, caused by repeated walking over the same area which can result in a localized change in *pile* (5.1) orientation and may be irreversible

9.1.3.1.9.3**pile reversal**

permanent shading

water-marking

paling

irreversible local change in orientation of the *pile* (5.1) of a *textile floor covering* (3.1), the boundaries of which often assume a rough, matted texture due to the confluence of pile lying in normal and reverse directions

Note 1 to entry: This phenomenon has different names in different countries.

9.1.3.2**change in colour**

the types of change which can appear during the lifetime of a *textile floor covering* (3.1)

9.1.3.2.1**chalking**

whitening

lightening in colour of a *textile floor covering* (3.1) that becomes evident with use, which is not due to *fading* (9.1.3.2.2) or to orientation of the *pile* (5.1)

Note 1 to entry: This can be due, for example, to *fibrillation* (9.1.3.1.3), breakdown of fibre-impregnating or coating polymers or the migration of back-coating materials.

9.1.3.2.2**fading**

progressive irreversible diminution of colour intensity of a *textile floor covering* (3.1), either locally or throughout, resulting in lightening or change of hue, and resulting from the action of outside agencies, such as light, gas fumes, etc., on the dyestuffs or pigments

9.1.3.2.3**glossing**

progressive and irreversible increase or decrease in the reflectance of the *use-surface* (3.2) of a *textile floor covering* (3.1)

Note 1 to entry: This is due to deformation of the fibre cross-section resulting from mechanical action.

9.1.3.2.4

colour bleeding

transfer of dyestuff of a *textile floor covering* (3.1) from one area to another under the influence of liquids

9.1.3.2.5

crocking

rubbing fastness

transfer of colouring materials from a *textile floor covering* (3.1) to another article by wet or dry rubbing

9.1.3.2.6

staining

discoloration caused by non-deliberate transfer to a *textile floor covering* (3.1) of colourant (e.g. food or liquid) that resists removal by standard cleaning methods

9.1.3.2.7

change of pattern definition

change in the coloured appearance of *patterned* (7.3) *textile floor coverings* (3.1) resulting from mechanical action

Note 1 to entry: This can be caused by a change in the clarity of the contour lines of the pattern.

9.1.4

delamination

separation of the *use-surface* (3.2) and/or *primary backing* (6.15) of a *textile floor covering* (3.1) from the *secondary backing* (6.16) material

9.1.5

fraying

damage or loss of *pile* (5.1) or *substrate* (3.3) material of a *textile floor covering* (3.1) from a cut edge

9.1.6

laddering

shooting

loss of consecutive *loops* (5.2) of the same column from the *use-surface* (3.2) of a *textile floor covering* (3.1)

9.1.7

creasing

formation of folds, wrinkles or ridges prior to installation of a *textile floor covering* (3.1)

9.1.8

rucking

buckling

formation of folds, wrinkles or ridges after installation of a *textile floor covering* (3.1)

Note 1 to entry: Rucking can be due to lack of *dimensional stability* (9.2.9), or to poor installation or an uneven subfloor.

9.1.9

bowing

curvature of a *textile floor covering* (3.1) along or across the direction of manufacture

9.1.10

skewness

condition of a *textile floor covering* (3.1) in which the direction of manufacture and the cross-direction of manufacture, although straight, are not at right angles to each other

9.2 Other properties

9.2.1

reaction to fire

relative ease of ignition and relative ability to sustain combustion