BRITISH STANDARD

BS 5866 :
Part 3 : 1991

Blankets suitable for use in the public sector

Part 3. Specification for synthetic fibre cellular blankets

Couvertures utilisables dans les services publics
Partie 3. Couvertures en fibres synthétiques et cellular — Spécifications

Decken für die Verwendung im öffentlichen Bereich
Teil 3. Decken aus porösen synthetischen Fasern

BSI
STANDARDS

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Textiles and Clothing Standards Policy Committee (TCM/-) to Technical Committee TCM/1, upon which the following bodies were represented:

Blanket Manufacturers' Association
British Textile Confederation
Chemical Industries' Association
Confederation of British Wool Textiles Limited
Department of Health
International Wool Secretariat
Local Authority Organizations
Ministry of Defence
Textile Research Council (FCRA)

This British Standard, having been prepared under the direction of the Textiles and Clothing Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 30 August 1991

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Contents

Foreword

This revision of BS 5866 : Part 3 has been prepared under the direction of the Textiles and Clothing Standards Policy Committee and supersedes BS 5866: Part 3 : 1983 which is withdrawn. This edition introduces certain technical changes, necessary in view of the publication of Part 4 of this standard.

BS 5866 specifies requirements for a range of blanket types suitable for use in the public sector and is published in four Parts as follows:

Part 1. Specification for wool and wool/polyamide blankets
Part 2. Specification for cotton leno cellular blankets
Part 3. Specification for synthetic fibre cellular blankets
Part 4. Specification for flammability performance

In this Part, requirements are specified for synthetic fibre cellular blankets. The principal change introduced by this edition is that flammability performance, where required, now complies with Part 4 of BS 5866 which in turn has been based on the methods of test given in BS 7175, taking into account behaviour in both horizontal and vertical planes, reflecting the orientations which would be used in real life situations.

BS 5866 covers only the basic description of the products and their construction and performance requirements. Purchasing authorities therefore may need to include additional information.

Many properties cannot be specified objectively and cannot therefore be included in this standard. Examples of such properties include colour, handle, appearance and details of additional design features. Public sector purchasing authorities may be able to supply standard patterns which cover these properties and thereby serve to resolve any ambiguities of description.

Appendix A gives methods of test.

Compliance with a British Standard does not of itself confer immunity from legal obligations. In particular, attention is drawn to Statutory Instrument 1986 No. 26, the Textile Products (Indications of Fibre Content) Regulations 1986.

Specification

1 Scope

This Part of BS 5866 specifies requirements for synthetic fibre cellular blankets suitable for use in the public sector and particularly for areas that constitute a high life risk area. Requirements for adults', children's and infants' blankets are specified.

NOTE. The titles of the publications referred to in this Part of this British Standard are listed on the inside back cover.

2 Definitions

For the purposes of this Part of BS 5866, the definitions given in BS 6189 apply, together with the following.

high life risk area

An area in which persons may reside and are not all able to move unaided away from a fire, or undivided areas in which more than 40 persons normally congregate.

3 Materials

Blankets shall be made wholly from synthetic fibres.

4 Manufacture

4.1 Construction

The blankets shall be of a cellular construction.

NOTE. The cellular construction should be uniform.

4.2 Make-up

Edges and ends of the blankets shall be finished with 2 cm hems in accordance with seam type 6.03.08, as classified in BS 3870 : Part 2. Hems shall be sewn using stitch type 301, as classified in BS 3870 : Part 1, with a stitch length not greater than 0.32 cm. The sewing thread shall be spun polyester and of linear density 38 tex. For dyed blankets the thread shall be of equal colour fastness.

NOTE. The thread should match the colour of the blankets.

4.3 Woven cellular blanket tucking strip

Woven cellular blankets shall have a plain weave tucking strip, the width of which shall be as given in table 1, along each edge of the blanket.

4.4 Finish

Blankets shall be scoured and tumble-dried.

NOTE. Blankets should contain no size or filling.

5 Dimensions

The dimensions of the blankets shall be as given in table 1 when determined as described in BS 5129.

NOTE. BS 5129 gives a range of recommended dimensions for blankets not specifically intended for use in the public sector.

6 Physical properties

Blankets shall comply with table 2.

Table 1. Dimensions

Blanket category	Width	Length	Width of tucking strip (min.)
	cm	cm	cm
Adults' blanket	180 ± 3 %	230 ± 3 %	23
Children's blanket	145 ± 3 %	185 ± 3 %	3
Infants' blanket	75 ± 3 %	100 ± 3 %	3

Table 2. Physical properties

Property	Method of test	Requirements
Total mass (min.) adults' blanket children's blanket infants' blanket	A.1	 1.35 kg 0.85 kg 0.24 kg
Breaking strength (min.) for woven fabrics machine direction 20 threads cross direction 26 threads	A.2	 350 N 450 N
Bursting strength (min.) for knitted fabrics	BS 4768 (30 mm diameter orifice)	690 kPa
Thickness (min.) after three washes in accordance with 6.5.3 of BS 5651 : 1989	BS 2544 (at a pressure of 6.9 Pa)	4.6 mm
Dimensional change machine direction cross direction	A.3 or A.4	 ± 10 % ± 10 %

7 Colour fastness

Dyed blankets shall comply with table 3.

8 Flammability

Where flammability performance is specified, blankets shall comply with Part 4 of this British Standard.

9 Selection of test specimens

9.1 Inspection lot and test sample

A sampling scheme equivalent to at least one in every 3000 blankets shall be used.

9.2 Test specimens

The test specimens shall be taken at points as widely dispersed as possible throughout the available test samples and no two specimens used for the determination of a particular property shall contain the same threads in the machine or cross direction.

10 Marking

Blankets shall be supplied with the following information, e.g. on a label or swing ticket or on an accompanying invoice or other document:

(a) the manufacturer's name, trademark or other means of identification;

(b) the number and date of this British Standard, i.e. BS 5866: Part 3: 1991[1];

(c) any other marking as the contract or order may direct.

Where flammability requirements are specified, blankets shall be marked with details in accordance with BS 5866: Part 4.

Table 3. Colour fastness of dyed blankets

Agency	Minimum rating	Method of test
Light	5	BS 1006: section B02
Washing	change in colour 4; staining 3-4	BS 1006: section C04
Bleaching	change in colour 4	BS 1006: section N02: bath 3
Rubbing wet and dry	staining 4	BS 1006: section X12

[1] Marking BS 5866: Part 3: 1991 on or in relation to a product represents a manufacturer's declaration of conformity i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is therefore solely the responsibility of the person making the claim. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.

Appendix

Appendix A. Methods of test

A.1 Determination of mass of blanket

Condition the blanket by freely exposing it to the standard temperate atmosphere for testing as defined in BS 1051, i.e. at a relative humidity of 65 ± 2 % and a temperature of 20 ± 2 °C, for at least 5 h. Determine the mass to within ± 0.5 %.

A.2 Determination of breaking strength

Use the method described in BS 2576 but, owing to the nature of this particular fabric construction, fray down the specimen to 20 threads for tests in the machine direction and 26 threads for tests in the cross direction, regardless of the resultant specimen width.

A.3 Determination of dimensional change on washing

Take from the cellular portion a specimen in accordance with BS 4931 and overlock the edges to prevent fraying. Follow the hospital laundry procedure (normal) described in **6.5.3** of BS 5651 : 1989, then tumble dry using the tumble-drier specified in BS 4923 with a maximum drying temperature in the exhaust of the machine of 60 °C.

Determine the dimensions of the specimen as described in BS 4931. Repeat the above washing procedure for a total of 25 washing and drying cycles. Determine the total dimensional change occurring as a result of the 25 treatments.

A.4 Determination of dimensional change on commercial washing

NOTE. This procedure employs a commercial hospital laundry wash, which involves washing of whole blankets. It is recommended for use in cases of dispute.

A.4.1 *General*

Wash the blanket as described in appendix B of BS 6246 : Part 4 : 1983 and tumble dry by means of a tumble-drier with a maximum temperature in the exhaust of the machine of 60 °C. Measure the dimensions of the blanket as described in **A.4.2**. Repeat the washing and drying process for a total of 25 cycles. Determine the total dimensional change occurring as a result of the 25 cycles.

A.4.2 *Measurement of dimensions*

Measure the dimensions of the blanket at the following locations.

(a) *Lengthways*. On each of the two edges of the blanket, at both joins between the border and cellular regions, and at the centre of the cellular region.

(b) *Widthways*. At each of the two ends and at the centre of the blanket.

Determine the mean dimensional change in the machine and cross directions (lengthways and widthways respectively).