

Blankets suitable for use in the public sector —

Part 4: Specification for flammability performance

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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The following BSI references relate to the work on this standard:
 Committee reference TCM/1
 Draft for comment 90/40223 DC

ISBN 0 580 19671 2

Amendments issued since publication

Amd. No.	Date	Comments
7065	May 1992	Indicated by a sideline in the margin

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Foreword

This Part of BS 5866 has been prepared under the direction of the Textiles and Clothing Standards Policy Committee. 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 woollpolyamide 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, the flammability performance is specified, where required, for the range of blankets covered in Parts 1 to 3 of BS 5866. The requirements are based on the methods of test given in section 3 of BS 7175:1989. The Technical Committee responsible for the publication of BS 7175 has recommended that the assessment of flammability of individual items of bedcovers be carried out in the orientations that would be used in real-life situations, i.e. in both horizontal and vertical planes.

It is important to note that test results relate only to the performance of the blankets under the particular condition of test and are not intended as a means of assessing the full potential fire hazard of a bed assembly.

Attention is also drawn to the labelling requirements of clause 6.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 and 2, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This Part of BS 5866 specifies requirements for the flammability performance of the blankets specified in Parts 1, 2 and 3 of BS 5866, when tested in both horizontal and vertical positions in accordance with section 3 of BS 7175:1989.

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 7175 and BS 6373 apply.

3 Sampling

3.1 Bulk sample

Sampling shall be carried out in such a manner that samples taken are representative of the manufacturing, processing, or finishing batch from which they are drawn.

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

3.2 Test specimens

3.2.1 Smouldering cigarette test: ignition source 0

Where the smouldering cigarette test is to be performed, cut two test specimens from one finished blanket, such that the longer edge of each test specimen is the finished edge of the blanket, each test specimen being 1 350 mm × 450 mm.

NOTE This procedure ensures that, in the case of a cotton leno cellular blanket, at least one-third of each specimen, over its full length, will be of leno construction as opposed to plain weave.

3.2.2 Flaming ignition test: ignition source 5

Where the flaming ignition test is to be performed, cut four specimens each 650 mm × 650 mm. In the case of cellular blankets cut one specimen from each of the four corners of the blanket except that in the case of smaller blankets more than one blanket will be required to produce four specimens.

Ensure that one finished edge of each specimen is in cellular weave and an adjacent finished edge is primarily in plain weave and partially in cellular weave.

4 Laundry procedure prior to testing

Before conditioning and prior to testing in accordance with BS 7175, blankets shall be laundered using the appropriate procedure given in Table 1.

NOTE The flammability of a blanket may be affected by washing as a result of shrinkage, removal of finish (flame retardant or other), and by raising or compression of the surface pile. The washing procedures specified are appropriate for the type of blanket. It is assumed that the wool and synthetic blankets will not be adversely affected by repeated washing and the number of wash cycles is therefore limited. Flame retardant cotton blankets are treated with a flame retardant finish and the large number of wash cycles specified ensures that the flammability performance will be retained for the normal wash life of the blanket.

5 Performance

After laundering in accordance with clause 4, test blankets in both horizontal and vertical positions in accordance with section 3 of BS 7175:1989 using ignition sources 0 and 5 respectively. The test results shall be non-ignition in order to claim compliance with this Part of BS 5866.

In addition, the maximum span across any hole formed through the full thickness of the specimen shall not exceed 220 mm.

NOTE The size of any hole formed is acceptable if it can be completely covered by a circular disc of diameter 220 mm.

6 Marking

In addition to the marking details specified in Parts 1, 2 and 3 of BS 5866, each blanket also claiming compliance with Part 4 shall bear at least the following information on a durable label¹⁾:

“Flammability complies with BS 5866-4:1991”.

NOTE 1 Blankets which comply with this Part of BS 5866 have been commonly referred to as fire retardant blankets or flame retardant blankets.

The BSI committee, on harmonization of fire and flammability policy has however stressed that such terminology, which may give a misleading impression of performance and/or implies a judgement of performance in the event of a real fire, should be avoided.

NOTE 2 Interested parties may agree on additional labelling and identification details.

¹⁾ Marking BS 5866-4:1991 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.

Table 1 — Laundry procedures prior to ignition testing

Blanket type	Laundry procedure	Drying procedure after specified number of laundry cycles
Wool and wool/polyamide (see BS 5866-1)	Domestic washing procedure 40 (see 5.5.1 of BS 5651:1989) except that there shall be three cycles only	Line drying in accordance with procedure A of BS 4923:1991
Cotton cellular (see BS 5866-2)	Hospital laundry procedure (normal) (see 6.5.3 of BS 5651:1989) except that there shall be 200 cycles	Tumble drying in accordance with procedure E of BS 4923:1991
Synthetic fibre cellular (see BS 5866-3)	Hospital laundry procedure (normal) (see 6.5.3 of BS 5651:1989) except that there shall be three cycles only	

Publication(s) referred to

BS 4923, *Methods for individual domestic washing and drying for use in textile testing.*

BS 5651, *Method for cleansing and wetting procedures for use in the assessment of the effect of cleansing and wetting on the flammability of textile fabrics and fabric assemblies.*

BS 5866, *Blankets suitable for use in the public sector.*

BS 5866-1, *Specification for wool and woollpolyamide blankets.*

BS 5866-2, *Specification for cotton leno cellular blankets.*

BS 5866-3, *Specification for synthetic fibre cellular blankets.*

BS 6373, *Glossary of terms relating to burning behaviour of textiles and textile products.*

BS 7175, *Methods of test for the ignitability of bedcovers and pillows by smouldering and flaming ignition sources.*

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