

BRITISH STANDARD

Specification for resistance to ignition of mattresses, mattress pads, divans and bed bases

ICS 97.140



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Date	Description
31 March 2008	C1: Deletion of incorrect normative reference and correction of label dimension in Clause 6
31 July 2011	A1: Fabric specifications in Annexes A, B and C

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Foreword

Publishing information

This British Standard is published by BSI and came into effect on 31 January 2008. It was prepared by Technical Committee FW/6, *Flammability performance and fire tests for furniture*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

BS 7177:2008+A1:2011 supersedes BS 7177:2008, which is withdrawn.

Relationship with other publications

The requirements relate to mattresses, mattress pads, divans and bed bases used in different areas of risk, and are based on the methods of test given in BS EN 597-1, BS EN 597-2 and BS 6807. The Technical Committee has decided that ignitability performance requirements for defined end-use environments be produced by the selection of specific ignition sources related to the level of fire hazard envisaged for that environment.

It is important to note that the test report in BS 6807 contains the statement that the test results relate only to the ignitability of the combination of materials under the particular conditions of test and are not intended as a means of assessing the full potential fire hazard of the materials in use.

Information about this document

BS 7177:2008 was a full revision of the standard, and introduced references to mattress pads and changes arising from revisions to related standards. References to legislation were also updated.

The start and finish of text introduced or altered by Amendment No. 1:2011 is indicated in the text by tags **A1** **A1**. Minor editorial changes are not tagged. The principal changes introduced by Amendment A1 are to the wording of the fabric specifications in Annexes A, B and C. These changes are to make the fabric specification identical to that stated in the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 2010 [3a]. The technical specification of the fabric, and the results of any ignitability tests in which the fabric is used, are not affected by the changes.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Attention is drawn to the Furniture and Furnishings (Fire) (Safety) Regulations 1988 (SI No. 1324) [1], the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989 (SI No. 2358) [2], the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1993 (SI No. 207) [3] ^{A1} and the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 2010 (SI No. 2205) [3a], ^{A1} which place restrictions on the fire behaviour of materials used in mattresses, divans and bed bases ordinarily intended for private use in a dwelling.

1 Scope

This British Standard specifies requirements for the resistance to ignition of mattresses, mattress pads, divans and bed bases when tested in accordance with BS EN 597-1, BS EN 597-2 and BS 6807 including those used in areas vulnerable to arson. It does not apply to mattress protectors. The levels of ignition resistance have been set after careful consideration of the fire risk of the particular end-use environment involved. These levels do not necessarily reflect the behaviour of the mattress, mattress pad, divan or bed base in a fully developed fire.

NOTE Guidance on the applicability of hazard categories to particular premises is given in the notes to Table 1.

2 Normative references

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

BS 5852:2006, *Methods of test for assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources*

BS 5852-2:1982, *Fire tests for furniture – Part 2: Methods of test for the ignitability of upholstered composites for seating by flaming sources*¹⁾

BS 6807:2006, *Methods of test for assessment of ignitability of mattresses, upholstered divans and upholstered bed bases with flaming types of primary and secondary sources of ignition*

BS 6807:1986, *Methods of test for the ignitability of mattresses with primary and secondary sources of ignition*

BS EN 597-1:1995, *Furniture – Assessment of the ignitability of mattresses and upholstered bed bases – Part 1: Ignition source: smouldering cigarette*

BS EN 597-2:1995, *Furniture – Assessment of the ignitability of mattresses and upholstered bed bases – Part 2: Ignition source: match flame equivalent*

3 Terms and definitions

For the purposes of this British Standard the definitions given in BS 6807 apply, together with the following.

3.1 bed base

structure that supports a mattress (3.6)

3.2 divan

type of upholstered bed base

¹⁾ Referred to in the Furniture and Furnishings (Fire) (Safety) Regulations 1988 [1], Schedules 1 and 2.