

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

ICS 97.140

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee FW/6, Flammability performance and fire tests for furniture, upon which the following bodies were represented:

Association of British Health-Care Industries
 Association of Consulting Scientists
 Association of Public Analysts
 Baby Products Association
 Bolton Institute of Higher Education
 Branded Furniture Society
 British Apparel and Textile Confederation
 British Contract Furnishing Association
 British Furniture Manufacturers' Federation
 British Interior Textiles Association
 British Leather Confederation
 British Measurement and Testing Association
 British Plastics Federation
 British Rubber Manufacturers Association
 British Textile Technology Group
 Chemical Industries Association
 Chief and Assistant Chief Fire Officers' Association
 Consumer Policy Committee of BSI
 Department of Health
 Department of the Environment (Building and Research Establishment)
 Department of Trade and Industry (Consumer Safety Unit)
 Federation of the Electronics Industry
 Home Office
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 Leisure and Outdoor Furniture Association Ltd.
 Ministry of Defence
 National Bed Federation Limited
 National Fillings Trades Association
 Northern Furniture Manufacturers' Association
 RAPRA Technology Limited
 SATRA Footwear Technology Centre
 Textile Finishers' Association
 Warrington Fire Research Centre
 Wools of New Zealand

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Foreword

This British Standard has been prepared by Technical Committee FW/6 and is a revision of BS 7177:1991, which is withdrawn. The requirements relate to mattresses, 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.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to text carry the number of the amendment. For example, text altered by amendment no. 1 is indicated by **A1** **A1**.

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.

The major changes in the revision are:

- a) the replacement of ignition sources 0 and 1 with ignition sources smouldering cigarette and match flame equivalent from BS EN 597-1 and BS EN 597-2;
- b) the removal of ignition source O/NS from BS 6807, but its retention as a type test in this standard (see Annex B);
- c) the removal of the reference to The Crown Suppliers FTS 15 specification.

NOTE 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] and the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1993 (SI No. 207) [3] which place restrictions on the fire behaviour of materials used in mattresses, divans and bed bases ordinarily intended for private use in a dwelling.

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

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

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 11 and a back cover.

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1 Scope

This British Standard specifies requirements for the resistance to ignition of mattresses, 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. 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, 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 References

2.1 Normative references

This British Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are made at the appropriate places in the text and the cited publications are listed on page 11. For dated references, only the edition cited applies; any subsequent amendments to or revisions of the cited publication apply to this British Standard only when incorporated in the reference by amendment or revision. For undated references, the latest edition of the cited publication applies, together with any amendments.

2.2 Informative references

This British Standard refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on page 11, but reference should be made to the latest editions.

3 Terms and definitions

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

3.1

fire hazard

potential for loss of life (or injury) and/or damage to property, by fire

3.2

fire risk

probability of fire causing loss of life (or injury) and/or damage to property

3.3

ignition risk

probability that ignition will result if a source of heat is allowed into close proximity or contact with a combustible material

3.4

resistant to ignition

does not undergo progressive smouldering ignition or flaming ignition as defined in 1.4.1 or 1.4.2 of BS 6807:1996