

Combustion modified flexible polyurethane cellular materials for loadbearing applications — Specification

ICS 83.100; 83.140.01

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee PRI/71, upon which the following bodies were represented:

- British Plastics Federation
- Furniture Industry Research Association (FIRA)
- Furniture, Timber and Allied Trades Union
- MoD — UK Defence Standardization
- National Bed Federation Limited
- Society of Motor Manufacturers and Traders Limited

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Amendments issued since publication

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16373	July 2006	Change to Figure 1
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Foreword

This British Standard has been prepared by Technical Committee PRI/71. BS 3379:2005 superseded BS 3379:2003, which was withdrawn. However, it should be noted that BS 3379:1975 remains current because it is called up by the UK Furniture Regulations for defining the standard test foam for use in the flammability test for textiles.

BS 3379:2005+A1:2011 supersedes BS 3379:2005 which is withdrawn.

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.

NOTE BSI Customer Services will respond to purchase orders for BS 3379 by supplying copies of the 2005 edition. Copies of the 1975 edition can be obtained by quoting “BS 3379:1975”.

The 2005 revision of BS 3379 was undertaken as a result of the adoption of the technically similar International Standard ISO 5999 as BS EN ISO 5999:2004. BS EN ISO 5999:2004 classifies foam in the same manner as this standard but does not identify UK oriented flammability classes.

With effect from 1 March 1989 only “combustion modified” materials have been legally permitted under the Furniture and Furnishings (Fire) (Safety) Regulations 1988 [1], the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989 [2] **A1** and the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 2010 [3] **A1** for use in domestic upholstered furniture, mattresses and bed bases. BS EN ISO 5999 makes no reference to these UK National Requirements and therefore contains no criteria for the classification of the fillings required for such applications.

The main change incorporated in this new edition is the deletion of all requirements for foams that are not “combustion modified” as such materials are within the scope of BS EN ISO 5999:2004.

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.

In particular, attention is drawn to the following statutory regulations:

- a) the Furniture and Furnishings (Fire) (Safety) Regulations 1988 [1];
- b) the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989 [2];
- A1** c) the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 2010. [3]. **A1**

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 flexible loadbearing combustion modified, polyurethane cellular materials, manufactured in block, sheet and strip form, in moulded and fabricated shapes and as reconstituted material.

A1 Materials defined as combustion modified are those that meet the legal and technical requirements of the Furniture and Furnishings (Fire) (Safety) Regulations 1988 [1], the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989 [2] and the Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989 [3] for use in domestic upholstered furniture, mattresses and bed bases. **A1**

NOTE 1 Annex A reproduces the relevant test requirements.

In addition to the definitive requirements, this standard also requires the items detailed in Clause 3 to be documented. For compliance with this standard, both the definitive requirements and the documented items have to be satisfied.

NOTE 2 Recommended applications for the range of flexible polyurethane cellular materials specified in this standard are listed in Annex B.

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 4023:1975, *Specification for flexible cellular PVC sheeting*.

BS EN ISO 1798, *Flexible cellular polymeric materials — Determination of tensile strength and elongation at break*.

BS EN ISO 1856, *Flexible cellular polymeric materials — Determination of compression set*.

BS EN ISO 2439, *Flexible cellular polymeric materials — Determination of hardness (indentation technique)*.

BS EN ISO 2440, *Flexible and rigid cellular polymeric materials — Accelerated ageing tests*.

BS EN ISO 3385, *Flexible cellular polymeric materials — Determination of fatigue by constant-load pounding*.

BS ISO 13362, *Flexible cellular polymeric materials — Determination of compression set under humid conditions*.

3 Information and requirements to be agreed and documented

The following information to be supplied by the purchaser shall be fully documented. For compliance with the standard both the definitive requirements specified throughout the standard and the following documented items shall be satisfied:

- a) colour of the material (see Clause 5);
- b) surface condition (see Clause 7);
- c) component mass (see Clause 8);
- d) dimensions (see Clause 9);
- e) cleanliness of reconstituted foam (see 10.3).