

Sports mats —

Part 4: Specification for combat mats

ICS 97.220.30

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee SW/14, Gymnasium and sports equipment, to Subcommittee SW/14/3, Mats, upon which the following bodies were represented:

- British Amateur Gymnastics Association
- British Association of Advisers and Lecturers in Physical Education (BAALPE)
- British Athletic Federation (BAF)
- British Judo Association
- British Rubber Manufacturers Association Ltd
- British Textile Technology Group
- Department of Economic Development for Northern Ireland
- Institute of Leisure and Amenity Management (ILAM)
- Rapra Technology Ltd
- Sports Hall and Fitness Equipment Association

This British Standard was published under the Authority of the Standards Policy and Strategy Committee on 14 February 2003

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Amendments issued since publication

Amd. No.	Date	Comments

The following BSI references relate to the work on this British Standard:

Committee reference SW/14/3

ISBN 0 580 40964 3

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Dimensions	1
5 Fire safety requirements	2
6 Sampling and performance	2
7 Marking	2
Annex A (informative) Use and storage guidance	3
Annex B (normative) Method for measuring dimensions	4
Annex C (informative) Method of determination of peak deceleration	5
Annex D (informative) Method for determination of vertical deflection	6
Bibliography	9
Figure D.1 — Artificial athlete	7
Table 1 — Dimensions of combat mats	2
Table 2 — Tolerances	2
Table 3 — Properties of combat mats for sporting use	3

Foreword

This British Standard has been prepared by Technical Subcommittee SW/14/3.

This standard applies to floor mats for combat sporting use and is based on BS 1892-2.10:1990, which was withdrawn in 2001.

This document is readily identifiable with the above withdrawn British Standard but having all references to fire resistance and fire testing deleted. The specification for fire safety requirements for mats, mattresses and landing areas is now specified under BS 1892-3:2003.

In addition, all references which have been applied to the sport of judo in BS 1892-2.10:1990 are specifically excluded from this standard. The specifications for judo mats are now specified under the BS EN 12503 series (this series includes seven parts).

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 9 and a back cover.

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1 Scope

This British Standard specifies safety requirements, test procedures and performance levels for combat mats, other than those for judo, which are contained in the BS EN 12503 series (which includes seven parts).

NOTE Recommendations for the use and storage of combat mats is given in Annex A.

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 1892-3:2003, *Sports mats — Part 3: Specification for fire safety requirements for mats, mattresses and landing areas*.

BS 3379, *Specification for flexible polyurethane cellular materials for loadbearing applications*.

BS EN ISO 1923:1995, *Cellular plastics and rubbers — Determination of linear dimensions*.

3 Terms and definitions

For the purposes of this British Standard the following terms and definitions apply.

3.1

shock absorption

ability of a mat to reduce impact loads on an athlete's body by deforming to increase the deceleration distance

3.2

athlete stability

ability of a mat to provide a surface upon which controlled movements can be made

NOTE Athlete stability is only achieved within specific ranges of frictional and deformation properties.

3.3

combat mat

<in a test> any mat which is used for karate, jujitsu, aikido, taekwondo and other forms of martial arts

NOTE The term "combat mat" does not refer to judo mats, which are covered in BS EN 12503-3, BS EN 12503-4, BS EN 12503-5, BS EN 12503-6 and BS EN 12503-7.

3.4

upper surface

surface normally facing the user when the mat is in use

3.5

reverse surface

surface normally in contact with the floor when the mat is in use

4 Dimensions

When measured in accordance with Annex B, the dimensions of the combat mats shall be as given in Table 1, subject to the tolerances given in Table 2. The diagonals of combat mats to be used in a close-fitting array shall also conform to the tolerances shown in Table 2.

NOTE 1 It is essential that there is no gap between combat mats fitted in area. The tolerances specified in Table 2 will not necessarily guarantee this situation. It is therefore desirable that combat mats purchased are in one lot. The attention of the manufacturer should be drawn to the fact that such combat mats are intended to be fitted in this way.

NOTE 2 Thickness is not specified in Table 1 but will be fixed for particular constructs by the level of performance as shown in Table 3. Preferred thickness may be specified by the appropriate governing bodies for particular sports.