

Type 1 heavy duty fire blankets and type 2 heavy duty heat protective blankets

ICS 13.220.10

Confirmed December 2011

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee FSH/2, Fire extinguishers, to Subcommittee FSH/2/13, Fire blankets, upon which the following bodies were represented:

- British Fire Consortium
- British Leather Confederation
- Buying Agency
- Consumer Policy Committee of BSI
- Fire Extinguishing Trades Association
- Home Office
- Institute of Petroleum
- International Wool Secretariat
- Loss Prevention Council
- Maritime and Coastguard Agency
- Ministry of Defence

This British Standard, having been prepared under the direction of the Health and Environment Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 October 1999

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Amendments issued since publication

Amd. No.	Date	Comments

The following BSI references relate to the work on this standard:
Committee reference FSH/2/13
Draft for comment 98/541115 DC

ISBN 0 580 33016 8

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Foreword

This British Standard has been prepared under the direction of the Fire Standards Committee. It supersedes BS 6575:1985 which is withdrawn.

This British Standard gives practical performance tests of the effectiveness of protective blankets in the two principal applications, extinction of small fires and resistance to heat transmission and penetration by hot objects or sparks. BS 6575 contained requirements for blankets suitable for domestic use, as well as a single type for heavy duty applications. In January 1997 the domestic blanket type was incorporated into EN 1869 which was adopted nationally as BS EN 1869 in April 1997. CEN did not agree to standardize heavy duty blankets, and so this British Standard was produced to retain national requirements for the heavy duty products.

This British Standard classifies heavy duty blankets into two types. The first is a fire blanket that is able to smother two types of fire and provide heat protection. The second is a heat protective blanket that can prevent injury or damage by heat and molten metal splashes. The specified sizes of the blankets are modified and some changes are made in the fire tests. This edition has also been updated to take into account changes in the other standards referred to.

Heat protective blankets conforming to the thermal performance requirements are suitable for industrial use to prevent damage or injury to equipment or persons by resisting penetration of molten metal or sparks. These blankets perform a fire prevention function but may not be equally effective at extinguishing a fire. Fire blankets conforming to both types of performance test are considered suitable for industrial or fire service use to provide protection from sparks, molten metal or plastics droplets during emergency cutting operations, etc. These blankets can also be used in kitchens or wherever there may be a requirement to extinguish fires in small containers or in clothing worn by persons.

The fire blankets covered by this British Standard are intended to be used by a single person in fighting fire, and so the size of blanket that can be handled depends on human size. This size restriction also limits the size of fire that can be smothered by the blanket. If the fire is too large to allow a considerable overlap of the blanket onto a sealed surface, then other methods of fire fighting (e.g. portable extinguishers, hose reels, sprinkler systems, other automatic extinguishing systems) should be provided. Extinguishers for cooking fires will be specified in a forthcoming British Standard.

Materials for heat protective blankets should be recognized as non-toxic to humans in storage and use. Many fire blankets have previously been made from asbestos. Asbestos blankets are not covered by this British Standard as they can represent a health hazard to users.

In addition to the performance requirements in this standard, it is recommended that blankets are treated, if necessary, to resist attack by micro-organisms and insects throughout the design life. For reusable fire blankets this treatment should be able to withstand the recommended washing or cleaning processes.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

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1 Scope

This British Standard specifies requirements for protective blankets intended for use by one person in industrial or fire service applications. Two types are specified:

- type 1: heavy duty fire blankets to protect against the effects of heat and to extinguish small or moderate sized fires;
- type 2: heavy duty heat protective blankets.

This standard does not apply to fire or heat protective blankets that:

- a) are made from asbestos;
- b) have sides of differing appearance, finish or colour;
- c) differ in performance depending on which side is used;
- d) are of metallic sandwich construction.

2 Normative references

The following normative documents contain provisions that, through reference in this text, constitute provisions of this British Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references, the latest edition of the publication referred to applies.

BS 970-1:1996, *Specification for wrought steels for mechanical and allied engineering purposes — Part 1: General inspection and testing procedures and specific requirements for carbon, carbon manganese, alloy and stainless steels.*

BS 970-3:1991, *Specification for wrought steels for mechanical and allied engineering purposes — Part 3: Bright bars for general engineering purposes.*

BS 3692:1967, *ISO metric precision hexagon bolts, screws and nuts — Metric units.*

BS EN 373:1993, *Protective clothing — Assessment of resistance of materials to molten metal splash.*

BS EN 532:1995, *Protective clothing — Protection against heat and flame — Test method for limited flame spread.*

3 Definitions

For the purposes of this British Standard, the following definitions apply.

3.1

type 1 heavy duty fire blanket

heat protective blanket for industrial or fire service applications, able to extinguish fires with a burning area of 0.16 m² and combusting up to 5 l of liquid fuel

3.2

type 2 heavy duty heat protective blanket

heat protective blanket for industrial or fire service applications that can resist penetration by molten metals ejected from cutting and similar processes and delay any conducted or radiant heat transfer if used for insulation

4 Type requirements

Type 1 heavy duty fire and type 2 heavy duty heat protective blankets shall conform to the subclauses specified in Table 1.

5 Physical requirements

5.1 Size and shape

Type 1 heavy duty fire blankets and type 2 heavy duty heat protective blankets shall be rectangular or square, with no edge less than 1.5 m or more than 2 m in length.

Table 1 — Type requirements for type 1 and type 2 blankets

Characteristic	Subclause of this British Standard	
	Type 1 blankets	Type 2 blankets
Size and shape	5.1	5.1
Mass	5.2	5.2
Hand holding devices	5.3	5.3
Appearance and bi-lateral use	5.4	5.4
Resistance to fraying	5.5	5.5
Flexibility	5.6	5.6
Ease of removal and unpacking	5.7	5.7
Durability of container	5.8	5.8
Thermal insulation	6.2.1	6.2.1
Resistance to hot cutting	6.2.2	6.2.2
Electrical insulation	6.3	6.3
Volatile liquid fire	6.4.1	—
Cooking oil fire	6.4.2	—
Reusability	—	6.5

