

Fire extinguishing installations and equipment on premises —

**Part 3: Code of practice for the
inspection and maintenance of
portable fire extinguishers**

ICS 13.220.10

Committees responsible for this British Standard

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

Association of British Fire Trades
Association of Metropolitan Authorities
British Aerosol Manufacturers Association
British Fire Consortium
Building Research Establishment
Building Research Establishment (LPC Laboratories)
Chief and Assistant Chief Fire Officers Association
Civil Aviation Authority
Consumer Policy Committee of British Standards Institution
Consumer's Association
Energy Institute
Eurosmart
Fire Extinguishing Trades Association
Health and Safety Executive
Home Office
Independent Fire Engineering and Distributors Association
Institution of Fire Engineers
London Fire and Emergency Planning Authority
Ministry of Defence — UK Defence Standardization
Society of Motor Manufacturers and Traders Limited
Co-opted members

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Foreword

This part of BS 5306 has been prepared by Technical Committee FSH/2. It supersedes BS 5306-3:2000, which is withdrawn.

The other parts of BS 5306 published are as follows:

- *Part 0: Guide for selection of installed systems and other fire extinguishing equipment;*
- *Part 1: Hydrant systems, hose reels and foam inlets;*
- *Part 2: Specification for sprinkler systems;*
- *Part 4: Specification for carbon dioxide systems;*
- *Part 5: Halon systems:*
 - *Section 5.1: Specification for Halon 1301 total flooding systems;*
 - *Section 5.2: Specification for Halon 1211 total flooding systems;*
- *Part 6: Foam systems:*
 - *Section 6.1: Foam systems — Specification for low expansion foam systems;*
 - *Section 6.2: Foam systems — Specification for medium and high expansion foam systems;*
- *Part 7: Extinguishing powder systems;*
- *Part 8: Selection and installation of portable fire extinguishers.*

Recommendations cover the reporting procedures for the inspection and maintenance of portable fire extinguishers, since it is important not only that extinguishers are, but are also known to be, serviced. The advice as to the action to be taken when a portable fire extinguisher is found to be defective has been augmented in this revision.

The advice given on the maintenance of halon extinguishers in this revision of BS 5306-3 has been updated to take account of the implementation of EC Regulation No. 2037/2000 [1], which was introduced following amendments to the Montreal Protocol during the 1990s. This Regulation prohibits possession of a halon portable fire extinguisher after 31 December 2003, unless it is for a “critical use” as defined in the Regulation.

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification, and particular care should be taken to ensure that claims of compliance are not misleading.

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 does not of itself confer immunity from legal obligations.

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

- The Fire Precautions (Workplace) Regulations 1997, as amended [2].
- The Fire Precautions (Workplace) Regulations (Northern Ireland) 2001 [3].
- The Pressure Systems Safety Regulations 2000 [4].
- The Transportable Pressure Vessels Regulations 2001 [5].
- The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2002 [6].
- The Environmental Protection (Controls on Ozone-Depleting Substances) (Northern Ireland) Regulations 2003 [7].
- The Health and Safety at Work Act etc. 1974 [8].
- The Management of Health and Safety at Work Regulations 1999 [9].

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 15 and a back cover.

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1 Scope

This part of BS 5306 provides schedules for the maintenance of portable fire extinguishers installed in all locations. It also includes recommendations for handling certain obsolescent types of extinguishers, for which no maintenance schedules are provided.

Additionally, the standard recommends the detailed actions for three levels of maintenance: basic service, extended service and overhaul procedures.

The standard is not applicable to halon 1301 extinguishers.

NOTE Maintenance schedules are given in Annex A, Annex B, Annex C and Annex D. Annex E gives recommendations for the training of competent persons. An account of the law relating to the possession and use of halon fire extinguishers is given in Annex F. Annex G gives information about extinguishers manufactured in accordance with British Standards which have been withdrawn.

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 5306-8:2000, *Fire extinguishing installations and equipment on premises — Part 8: Selection and installation of portable fire extinguishers — Code of practice.*

BS 6643-1, *Recharging fire extinguishers (manufactured to BS 5423, 'Specification for portable fire extinguishers' — Part 1: Specification for procedure and materials.*

BS 7863:1996, *Recommendations for colour coding to indicate the extinguishing media contained in portable fire extinguishers.*

BS EN 3 (all parts), *Portable fire extinguishers.*

BS EN 1802, *Transportable gas cylinders — Periodic inspection and testing of seamless aluminium alloy gas cylinders.*

BS EN 1803, *Transportable gas cylinders — Periodic inspection and testing of welded carbon steel gas cylinders.*

BS EN 1968, *Transportable gas cylinders — Periodic inspection and testing of seamless steel gas cylinders.*

BS EN 25923, *Fire protection — Fire extinguishing media — Carbon dioxide.*

BS EN 27201-1, *Fire protection — Fire extinguishing media — Halogenated hydrocarbons — Part 1: Specifications for halon 1211 and halon 1301.*

3 Terms and definitions

For the purposes of this part of BS 5306 the terms and definitions given in BS EN 3 and the following apply.

3.1

additive

chemical added to an extinguishing medium for such purposes as corrosion inhibition, freezing point depression, penetration, enhanced wetting and film or coating formation

3.2

body

shell of an extinguisher or gas cartridge, excluding its accessories but including its welded parts

3.3

body fittings

those parts of an extinguisher that, under normal working conditions, are permanently attached to the body shell and are subjected to the working pressure

3.4

body shell

outer case of an extinguisher

NOTE The body shell usually comprises a cylindrical case with dished ends, and apertures which are fitted with components such as nozzles, pressure gauges and closures.

3.5

charge

mass or volume of extinguishing medium contained in an extinguisher

NOTE The charge of a water-based medium is expressed as a volume in litres. Charges for other media are expressed as a mass in kilograms.

3.6

chemical foam extinguisher

extinguisher from which foam is expelled when chemical solutions stored separately within the body of the extinguisher are allowed to mix and react on the actuation of the operating mechanism

NOTE Chemical foam extinguishers are obsolescent and are distinguished from the water-based foam fire extinguishers covered by the maintenance schedules in this standard.

3.7

competent person

person with the necessary training and experience, with access to the relevant tools, equipment and information, manuals and knowledge of any special procedures recommended by the manufacturer of the extinguisher, to carry out the relevant maintenance procedures

3.8

extinguishing medium

substance contained in an extinguisher which causes extinction of a fire

3.9

gas cartridge

pressure container that fits into, or is attached to, an extinguisher and that contains an expellant gas that, on operation of the extinguisher, expels the extinguishing medium

3.10

gas cartridge extinguisher

extinguisher from which the extinguishing medium is expelled, on the actuation of the operating mechanism, by pressure released from a gas cartridge

3.11

portable fire extinguisher

extinguisher which is designed to be carried and operated by hand and which, in working order, has a mass of not more than 20 kg

NOTE Hereinafter referred to as an “extinguisher”.

3.12

primary sealed stored pressure extinguisher

stored pressure extinguisher in which the operating head and the valves controlling the flow of extinguishing medium during discharge can be detached from the body of the extinguisher without releasing propellant or medium, which are retained in the body by a closure that is ruptured on operation

3.13

recharging

maintenance procedure carried out after complete or partial discharge of an extinguisher, or as part of a scheduled maintenance procedure, to restore the extinguisher to its full operational condition