

BS 9990:2015



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Non-automatic fire-fighting systems in buildings – Code of practice

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 January 2015. It was prepared by Technical Committee FSH/14, *Fire precautions in buildings*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 9990:2006, which is withdrawn.

Information about this document

This is a full revision of the standard. The principal changes are to update the recommendations for:

- flow tests and pressures;
- rising and falling mains;
- pumps;
- maintenance;
- shut-off pressures.

It is important for the fire protection of a building to be considered as a whole. The provision of fire mains is an essential element of the fire protection systems in large and complex buildings due to the difficulties in providing water supplies at the point of use for fire-fighting and search and rescue. It is essential that these systems be carefully maintained to ensure instant readiness when required.

Use of this document

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.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions in this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. "organization" rather than "organisation").

Contractual and legal considerations

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.

Particular attention is drawn to the Water Supply (Water Fittings) Regulations 1999 [1], the Water Supply (Water Fittings) (Scotland) Byelaws 2014 [2] and the Water Supply (Water Fittings) Regulations (Northern Ireland) 2009 [3] in respect of requirements for any fire suppression system which conveys, or is likely to convey, water supplied by a water undertaker or licensed water supplier.

Attention is also drawn to legal requirements in respect of planning and approval, and to the need to consult with the appropriate bodies, which might include the building control body, the water undertaker and the local fire and rescue service.

1 Scope

This British Standard gives recommendations for non-automatic fire-fighting systems in buildings. It covers good practice in matters affecting the design, installation, testing and maintenance of such systems including wet and dry fire-fighting mains.

This British Standard does not cover hose reels, foam inlets, automatic foam systems and portable fire-fighting equipment. These systems are covered in BS EN 671-1, BS 5306-1, BS 5306-3, BS 5306-8 and BS EN 3-7.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 750, *Specification for underground fire hydrants and surface box frames and covers*

BS 1710, *Specification for identification of pipelines and services*

BS 5041 (all parts), *Fire hydrant systems equipment*

BS 6391, *Specification for non-percolating layflat delivery hoses and hose assemblies for fire fighting purposes*

BS 7430, *Code of practice for protective earthing of electrical installations*

BS 7671, *Requirements for electrical installations – IET Wiring Regulations – Seventeenth edition*

BS 8519, *Selection and installation of fire-resistant power and control cable systems for life safety and fire-fighting applications – Code of practice*

BS 9991, *Fire safety in the design, management and use of residential buildings – Code of practice*

BS 9999, *Code of practice for fire safety in the design, management and use of buildings*

BS EN 1092 (all parts), *Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories, PN designated*

BS EN 1515 (all parts), *Flanges and their joints – Bolting*

BS EN 14339, *Underground fire hydrants*

BS EN 14384, *Pillar fire hydrants*

BS EN ISO 7010, *Graphical symbols – Safety colours and safety signs – Registered safety signs*

BS ISO 3864-1, *Graphical symbols – Safety colours and safety signs – Part 1: Design principles for safety signs and safety markings*

3 Terms and definitions

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

3.1 authority having jurisdiction (AHJ)

organization, office or individual responsible for enforcing the requirements of legislation or standards, or for approving equipment, materials, an installation, or a procedure