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Underground fire hydrants — Surface box frames and covers — Specification

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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 July 2023. It was prepared by Technical Committee FSH/17, *Fire and rescue service equipment*. A list of organizations represented on this committee can be obtained on request to the committee manager.

Supersession

This British Standard supersedes [BS 750:2012](#), which is withdrawn.

Information about this document

This is a full revision of the document, and introduces the following principal changes:

- new figures for integral and through-bore hydrant types;
- updated requirements for stem seals, drive and termination;
- revision of pressure units for consistency to SI units, for example, converting bar to MPa;
- inclusion of non-metallic materials used for the manufacture of surface boxes installed in areas subject to non-vehicular traffic; and
- new annex containing requirements for alignment and depth of the fire hydrant in the chamber.

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Presentational conventions

The provisions of this document are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

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”).

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Introduction

A fire hydrant is installed primarily for use by the Fire and Rescue Service (FRS) to quickly secure a supply of water to extinguish a fire in the vicinity. A fire hydrant may also be installed for other purposes that allow a water supplier access to the pressurized water network.

NOTE A fire hydrant installed for non-fire fighting purposes is commonly known as a washout.

The water supplier is responsible for installing and maintaining fire hydrants for both purposes.

It is advisable to consult the FRS and the water supplier during the development of products in accordance with this standard. In general terms, the FRS requires quick access to a supply of water from a fire hydrant using an operating key/bar and a standpipe. The water supplier does not require such quick access but carries a wider range of tools and equipment for operation and maintenance.

Surface boxes manufactured in non-metallic materials are now included for use in low abrasion environments not subject to vehicular traffic.

1 Scope

This British Standard specifies the operational and health and safety requirements for underground fire hydrants conforming to the dimensional, material and performance requirements of [BS EN 14339](#) and [BS EN 1074-6](#). It also includes specific national requirements not included in [BS EN 14339](#) and [BS EN 1074-6](#).

This British Standard applies to underground fire hydrants:

- a) to be installed in a water supply system;
- b) of size DN80;
- c) suitable for a maximum allowable operating pressure (PFA) of 1.6 MPa or 2.5 MPa;
- d) with operating valves; and
- e) with one outlet.

It also specifies requirements for their surface box frames and covers.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions, or limits the application, of this document¹⁾. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Standards publications

[BS 336](#), *Specification for fire hose couplings and ancillary equipment*

[BS 5163-1](#), *Valves for waterworks purposes – Part 1: Predominantly key-operated cast iron gate valves – Code of practice*

[BS 5163-2](#), *Valves for waterworks purposes – Part 2: Stem caps for use on isolating valves and associated water control apparatus – Specification*

[BS 5834-2:2011](#), *Surface boxes, guards and underground chambers for the purposes of utilities – Part 2: Specification for surface boxes*

¹⁾ Documents that are referred to solely in an informative manner are listed in the Bibliography.