

BS 8558:2015



BSI Standards Publication

**Guide to the design,  
installation, testing and  
maintenance of services  
supplying water for  
domestic use within  
buildings and their  
curtilages – Complementary  
guidance to BS EN 806**

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### Summary of pages

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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 30 September 2015. It was prepared by Sub-committee B/504/2, *Internal systems and components*, under the direction of Technical Committee B/504, *Water Supply*. A list of organizations represented on these committees can be obtained on request to their secretary.

### Supersession

This British Standard supersedes BS 8558:2011, which is withdrawn.

### Information about this document

The content of this British Standard was originally taken from BS 6700:2006+A1:2009, which was withdrawn on publication of BS EN 806 (all parts). This is a full revision of the standard to keep it up to date.

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### Presentational conventions

The guidance in this standard is presented in roman (i.e. upright) type. Any 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.*

### 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.

In particular, attention is drawn to the following statutory regulations which may be amended from time to time.

- The Water Industry Act 1981 [1];
- The Water and Sewerage Services (Northern Ireland) Order 2006, as amended [2];
- The Water (Scotland) Act 1980, as amended [3];
- The Workplace (Health, Safety and Welfare) Regulations 1992 [4];
- The Electricity Safety, Quality and Continuity Regulations 2002, as amended [5];
- The Electricity Safety, Quality and Continuity Regulations (Northern Ireland) 2012 [6];
- The Control of Asbestos at Work Regulations 2002 [7];
- The Control of Asbestos at Work Regulations (Northern Ireland) 2003 [8];

- The Water Industry Act 1999 [9];
- The Health and Safety at Work etc. Act 1974 [10];
- The “Water Quality Regulations”, which set out provisions for the quality of drinking water provided by a public water supplier (water undertaker):
  - The Water Supply (Water Quality) Regulations 2000, as amended, in England [11];
  - The Water Supply (Water Quality) Regulations 2010, as amended, in Wales [12];
  - The Water Supply (Water Quality) Regulations (Northern Ireland) 2007, as amended, in Northern Ireland [13];
  - The Public Supply Water Supplies (Scotland) Regulations 2014, in Scotland [14];
- The “Private Water Supplies Regulations”, which set out provisions for the quality of water from a private supply:
  - The Private Water Supplies Regulations 2009, as amended, in England [15];
  - The Private Water Supplies (Wales) Regulations 2009, as amended, in Wales [16];
  - The Private Water Supplies (Scotland) Regulations 2006, in Scotland [17];
  - The Private Water Supplies (Northern Ireland) Regulations 2009, as amended, in Northern Ireland [18];
- The “Water Fittings Regulations”, which set out provisions for plumbing systems in premises to which a supply of public mains water has been provided:
  - The Water Supply (Water Fittings) Regulations 1999, in England and Wales [19];
  - The Water Supply (Water Fittings) (Scotland) Byelaws 2014, in Scotland [20];
  - The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009, in Northern Ireland [21];
- The “Building Regulations”:
  - The Building Regulations 2010 [22];
  - The Building (Scotland) Regulations 2004, as amended [23];
  - The Building Regulations (Northern Ireland) 2012, as amended [24].

## 0 Introduction

Table 1 provides cross references to the BS EN 806 series and this British Standard.

Table 1 Cross references to the BS EN 806 series and this British Standard (1 of 3)

BS EN 806 part and clause	BS 8558 clause
<b>BS EN 806-1:2000+A1:2002</b>	
Scope, Clause 1	No additional guidance
Normative references, Clause 2	No additional guidance
Objectives, Clause 3	No additional guidance
Competence and duties for design, construction and operation, Clause 4	No additional guidance
Terms and definitions, Clause 5	
distributing pipe, 5.3.4	3.1.13
service pipe, 5.3.1	3.1.28
service stopvalve, 5.4.2	3.1.2
supply pipe, 5.3.2	3.1.5
supply stopvalve, 5.4.3	3.1.27
Graphic symbols and abbreviations, Clause 6	No additional guidance
Examples for the use of graphic symbols, Annex A	No additional guidance
<b>BS EN 806-2:2005</b>	
Scope, Clause 1	No additional guidance
Normative references, Clause 2	No additional guidance
General requirements, Clause 3	No additional guidance
Private water supplies, Clause 4	No additional guidance
Acceptable materials, Clause 5	4.2.1 and 4.2.3
Choice of material, 5.1	4.2.2
Components, Clause 6	No additional guidance
Pipework inside buildings, Clause 7	No additional guidance
Cold potable water services, Clause 8	No additional guidance
Hot water systems, Clause 9	No additional guidance
Prevention of bursting, Clause 10	
Discharge pipes, 10.2.5	4.2.3
Guidelines for water meter installations, Clause 11	No additional guidance
Water conditioning, Clause 12	No additional guidance
Acoustics, Clause 13	No additional guidance
Protection of systems against temperatures external to pipes, fittings and appliances, Clause 14	No additional guidance
Boosting, Clause 15	No additional guidance
Pressure reducing valves, Clause 16	No additional guidance
Combined drinking water and fire fighting services, Clause 17	No additional guidance
Prevention of corrosion damage, Clause 18	No additional guidance
Additional requirements for vented cold and hot water systems, Clause 19	No additional guidance
List of acceptable materials (non-exhaustive), Annex A	No additional guidance
Aspects for water conditioning, Annex B	No additional guidance
Supplementary guidance	4.3

Table 1 Cross references to the BS EN 806 series and this British Standard (2 of 3)

BS EN 806 part and clause	BS 8558 clause
<b>BS EN 806-3:2006</b>	
Scope, Clause 1	No additional guidance
Normative references, Clause 2	No additional guidance
Terms, symbols and units, Clause 3	No additional guidance
Principles of pipe sizing calculations, Clause 4	No additional guidance
Simplified method of pipe sizing, Clause 5	4.3.30 and Annex C
Special-installations, Clause 6	No additional guidance
Example for the determination of pipe sizes for standard installations, Annex A	No additional guidance
Design flow rates in relation to total flow rates, Annex B	No additional guidance
List of national pipe sizing methods, Annex C	No additional guidance
<b>BS EN 806-4:2010</b>	
Scope, Clause 1	No additional guidance
Normative references, Clause 2	No additional guidance
Terms and definitions, Clause 3	No additional guidance
Work on site, Clause 4	
General, 4.1	5.1.1
General, 4.4.1	5.1.2
Pipe materials and jointing methods, 4.4.2	5.1.3
Underground pipe laying, 4.6	5.2.1
Allowances for thermal movement and prevention of noise, 4.7	5.1.4
Fixings for insulated piping, 4.7.2.6	5.1.5
Piping passing through structures, 4.7.4	5.1.6
Valves and taps, 4.8	5.1.7
Record of installation, 4.9.3	5.1.8
Dissimilar metals, Clause 5	No additional guidance
Commissioning, Clause 6	
General, 6.1.1	5.1.9
Pipe system material specifications, jointing procedures and pipe installation for different types of materials, Annex A	No additional guidance
Calculation and compensation for thermal effects of pipes, Annex B	No additional guidance
Recommended maximum spacing of fixings for metal pipes, Annex C	No additional guidance
Supplementary guidance	5.2
<b>BS EN 806-5:2012</b>	
Scope, Clause 1	No additional guidance
Normative references, Clause 2	No additional guidance
Terms and definitions, Clause 3	No additional guidance
General, Clause 4	6.1.1 and 6.1.2
Documentation, Clause 5	No additional guidance
Operation, Clause 6	6.1.2 and 6.1.3
Interruptions to operation and disconnection, Clause 7	No additional guidance
Resumption of supply, Clause 8	No additional guidance
Damage and faults, Clause 9	
Change in water quality, 9.1	6.1.4
Alterations, extensions and refurbishment, Clause 10	No additional guidance
Accessibility of fittings, Clause 11	No additional guidance
Maintenance, Clause 12	No additional guidance

Table 1 Cross references to the BS EN 806 series and this British Standard (3 of 3)

BS EN 806 part and clause	BS 8558 clause
Additional requirements for vented systems, Clause 13	
Cisterns, 13.1	6.1.5
Inspection and maintenance, Clause 14	No additional guidance
Recommended frequencies for inspection and maintenance of components for drinking water installations, Annex A	No additional guidance
Inspection and maintenance procedures, Annex B	
Pipework, B.22	6.1.6
Specific inspection and maintenance procedures for water conditioning devices, Annex C	No additional guidance
Supplementary guidance	6.2

## 1 Scope

This British Standard provides complementary guidance to BS EN 806. It is a guide to the design, installation, alteration, testing, operation and maintenance of services supplying water for domestic use within buildings and their curtilages.

BS EN 806 does not cover underground pipework, but this British Standard gives guidance on underground pipework within the curtilage of a building.

This British Standard does not cover:

- a) the detailed methods of chemical treatment and maintenance of water distribution systems;
- b) workmanship; or
- c) space heating systems.

*NOTE* Annex A gives examples of pumped systems. Annex B provides guidance on the calculation of hot water storage systems, while Annex C provides calculations for pipe sizing.

## 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 2010-2, *Specification for draw-off taps and stopvalves for water services (screw-down pattern) – Part 2: Draw-off taps and above-ground stopvalves*<sup>1)</sup>

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

BS 2456, *Specification for floats (plastics) for float operated valves for cold water services*

BS 2580, *Specification for underground plug cocks for cold water services*<sup>1)</sup>

BS 3251, *Specification – Indicator plates for fire hydrants and emergency water supplies*

BS 4991, *Specification for propylene copolymer pressure pipe*

<sup>1)</sup> Withdrawn.