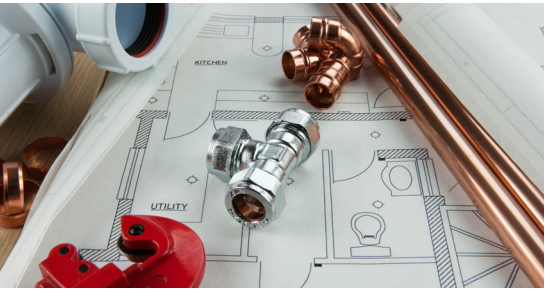
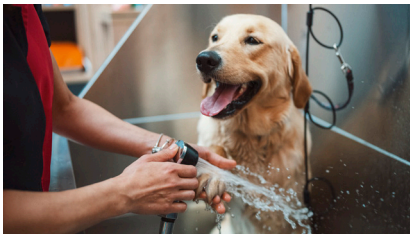
Scottish Water

Trusted to serve Scotland





Water Byelaws 2014

Scottish Water provides high quality drinking water to more than 2.5 million households and over 150,000 businesses across Scotland.

Through our network of water mains and pipes, we deliver over 1.5 billion litres of water every day, which our customers can use with confidence for their drinking, cooking and hygiene needs. We strive to ensure the quality of water is maintained to the highest standards.

The Water Byelaws form part of a suite of measures we use to maintain water quality. This document contains "The Water Supply (Water Fittings) (Scotland) Byelaws 2014".

Scottish Water has a legal obligation to enforce the Water Byelaws to ensure anything connected to the public network is safe, by regulating the plumbing systems, fittings and methods used to connect to the network.

Owners and occupiers of premises, and anyone who installs or maintains plumbing systems and water fittings, have a legal obligation to ensure that the systems and fittings used meet the requirements of the Water Byelaws.

Compliance with the Water Byelaws helps protect the health and wellbeing of everyone using the public supply in Scotland. Water is always worth saving, and compliance can also assist with reducing water usage, therefore using less energy and reducing your carbon footprint.

Water is essential for life and drinking water is a food product. The Water Byelaws help ensure our drinking water is maintained at the very highest quality. It is in everyone's interest that we look after it together, by ensuring that compliance with the requirements of The Water Supply (Water Fittings) (Scotland) Byelaws 2014 are met.

For more information please click the link below or scan the QR code to view our Byelaws web pages:

www.scottishwater.co.uk/byelaws

or email us at: **sw.byelaws@scottishwater.co.uk**

SCOTTISH BYELAWS

The Water Supply (Water Fittings) (Scotland) Byelaws 2014

Made 13th May 2014
Coming into force in accordance with byelaw 1(1)

Contents

Scottish Water makes the following Byelaws, in exercise of the powers conferred by sections 70(1) and 72(3) of the Water (Scotland) Act 1980**(a)**.

(a) 1980 c. 45; section 70(1) was amended by the Water Industry (Scotland) Act 2002 (asp 3), Schedule 6, paragraph 44(2) and the Local Government etc. (Scotland) Act 1994 (c.39), Schedule 13, paragraph 119(37)(a); and section 72(3) was amended by the Criminal Justice Act 1982 (c.48), Schedule 6 and the Water Industry (Scotland) Act 2002 (asp 3), section 65(2).

Citation, commencement and interpretation

1. (1) These Byelaws may be cited as the Water Supply (Water Fittings) (Scotland) Byelaws 2014 and, if confirmed with or without modification by the Scottish Ministers, come into force—

(a) if the date of coming into operation is fixed by the Scottish Ministers under paragraph 29 of Schedule 1 to the Water (Scotland) Act 1980, on that date; or

(b) if no date is so fixed, at the expiration of one month from the date of their confirmation.

(2) In these Byelaws—
"approved contractor" means a person who is—

(a) approved by Scottish Water for the area where a water fitting is installed or used;

(b) approved for the purposes of paragraph (a) of the definition of "approved contractor" in regulation 1 (2) of—

(i) the Water Supply (Water Fittings) Regulations 1999**(b)**; or

(ii) the Water Supply (Water Fittings) Regulations (Northern Ireland) 2009**(c)**; or

(c) certified as an approved contractor by an organisation specified pursuant to paragraph (b) of the definition of "approved contractor" in regulation 1(2) of the Water Supply (Water Fittings) Regulations 1999**(d)**;

"domestic purposes", in relation to the supply of water, is to be construed in accordance with section 7(1) and (2) (supply for domestic purposes) of the Water (Scotland) Act 1980;

"food production purposes" is to be construed in accordance with section 76L(1A) (interpretation etc.) of the Water (Scotland) Act 1980**(e)**;

"grey water" means waste water from baths, showers, wash basins and washing machines;

(b) S.I. 1999/1148, as amended by S.I. 1999/1506, S.I. 2005/2035 and S.I. 2013/1387.

(c) SR 2009/255.

(d) S.I. 1999/1148, as amended by S.I. 1999/1506, S.I. 2005/2035 and S.I. 2013/1387.

(e) Section 76L(1A) was inserted by the Food Safety Act 1990 (c.16), section 56(6).

"private water supply" has the same meaning as in regulation 2(1) of the Private Water Supply (Scotland) Regulations 2006**(f)**;

"reclaimed water" means grey water after treatment which can be used for non-wholesome applications;

"supply pipe" means so much of any service pipe as is not vested in Scottish Water; and

"WC" means water-closet.

Application

2. (1) Subject to paragraphs (2) to (4), these Byelaws apply to any water fitting installed or used, or to be installed or used, in premises to which water is, or is to be, supplied by Scottish Water.

(2) These Byelaws do not apply to a water fitting installed or used, or to be installed or used, in connection with water supplied for purposes other than domestic purposes or food production purposes, provided that—

(a) the water is metered;

(b) the supply of the water is for a period not exceeding—

(i) one month; or

(ii) with the written consent of Scottish Water, three months; and

(c) no water can return through the meter to any pipe vested in Scottish Water.

(3) Except for the purposes of—

(a) byelaw 5(1) in so far as it applies in relation to the installation (in premises to which water is supplied by Scottish Water) of a system incorporating a private water supply; and

(b) paragraph 14 (prevention of cross-connection to unwholesome water) of Schedule 2,

these Byelaws do not apply to water fittings which are not, and are not to be, installed or used in connection with water supplied by Scottish Water.

(f) S.S.I. 2006/209, to which there are amendments not relevant to these Byelaws.

(4) Nothing in these Byelaws requires any person to remove, replace, alter, disconnect or cease to use any water fitting which was lawfully—
  (a) installed before these Byelaws come into force, and is so installed;
  (b) in use; or
  (c) capable of being used (but has not been so used), immediately before these Byelaws come into force.

Restriction on installation etc. of water fittings

3. (1) No person may—
  (a) install a water fitting to convey or receive water supplied by Scottish Water, or alter, disconnect or use such a water fitting; or
  (b) cause or permit such a water fitting to be installed, altered, disconnected or used, in contravention of these Byelaws.

(2) No water fitting may be installed, connected, arranged or used in such a manner that it causes or is likely to cause—
  (a) waste, misuse, undue consumption or contamination of water supplied by Scottish Water; or
  (b) the erroneous measurement of water supplied by Scottish Water.

(3) No water fitting may be installed, connected, arranged or used which by reason of being damaged, worn or otherwise faulty, causes or is likely to cause—
  (a) waste, misuse, undue consumption or contamination of water supplied by Scottish Water; or
  (b) the erroneous measurement of water supplied by Scottish Water.

Requirements for water fittings etc.

4. (1) Every water fitting must be—
  (a) of an appropriate quality and standard; and
  (b) suitable for the circumstances in which it is used.

(2) A water fitting is of an appropriate quality or standard only if it—

(a) bears an appropriate CE marking in accordance with Regulation (EU) No 305/2011 of the European Parliament and of the Council laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC**(g)**;
(b) conforms to an appropriate British Standard or some other national specification of an EEA State which provides an equivalent level of protection and performance; or
(c) conforms to an appropriate specification approved pursuant to regulation 4(2)(d) of the Water Supply (Water Fittings) Regulations 1999.

(3) Without prejudice to paragraph (2), every water fitting must comply with the requirements of Schedule 2 as it applies to that fitting.

(4) Where any requirement of Schedule 2 relates to a water system, every water fitting which forms part of that system must be fitted or, as the case may be, altered or replaced so as to comply with that requirement.

(5) Every water fitting must be installed, connected, altered, repaired or disconnected so as to conform to—
(a) an appropriate British Standard, European Technical Assessment within the meaning of Regulation (EU) No 305/2011 (or European technical approval used as such in accordance with article 66(4) of that Regulation) or some other national specification of an EEA State which provides an equivalent level of protection and performance;
(b) an appropriate specification approved pursuant to regulation 4(6)(b) of the Water Supply (Water Fittings) Regulations 1999; or
(c) an appropriate method of installation approved by Scottish Water.

(6) Where Scottish Water approves a method of installation under paragraph (5)(c), it must—
(a) give notice of the approval to the Scottish Ministers; and
(b) publish the approval in such manner as Scottish Water considers appropriate.

(7) Paragraph (6) applies to the revocation or modification of an approval as it applies to the giving of that approval.

(8) In this byelaw, "EEA State" means a member State, Norway, Iceland or Leichtenstein.

(g) OJ L 88, 4.4.2011, p. 5.

Notification

5. (1) Subject to paragraph (2), any person who proposes to install a water fitting in connection with any of the operations listed in the following table must—

(a) give notice to Scottish Water that that person proposes to begin work;

(b) not begin that work without the consent of Scottish Water which must not be withheld unreasonably; and

(c) comply with any conditions to which Scottish Water's consent is subject.

1.	The erection of a building or other structure, not being a pond or swimming pool.
2.	The extension or alteration of a water system on any premises other than a house.
3.	A material change of use of any premises.
4.	The installation of— (a) a bath having a capacity, as measured to the centre line of overflow, of more than 230 litres; (b) a bidet or WC with an ascending spray or flexible hose; (c) a single shower unit (which may consist of one or more shower heads within the unit) of a type specified pursuant to paragraph 4(c) of the table in regulation 5(1) of the Water Supply (Water Fittings) Regulations 1999, not being a drench shower installed for reasons of safety or health, connected directly or indirectly to a supply pipe; (d) a pump or booster drawing more than 12 litres per minute, connected directly or indirectly to a supply pipe; (e) a unit which incorporates reverse osmosis; (f) a water treatment unit which produces a waste water discharge or which requires the use of water for regeneration or cleaning; (g) a backflow prevention device with a reduced pressure zone (RPZ valve) or other mechanical device for protection against a fluid which falls within fluid category 4 or fluid category 5; (h) a garden watering system unless designed to be operated by hand; (i) any water system laid outside a building and either less than 750 mm or more than 1350 mm below ground level;

	(j) grey water, recycled water, reclaimed water and rainwater harvesting systems; (k) water systems for fire fighting, including domestic sprinklers; (l) a flexible shower hose or other flexible outlet for use in conjunction with a WC pan for personal cleansing; (m) a shower-toilet or bidet-toilet where, either as part of the WC itself or as an addition or adaptation of it, a stream of water is provided from below the spillover level of the WC pan for personal cleansing; or (n) any system incorporating a private water supply.
5.	The construction of a pond or swimming pool with a capacity greater than 10,000 litres which is designed to be replenished by automatic means and is to be filled with water supplied by Scottish Water.

(2) Paragraph (1) does not apply to the installation by an approved contractor of a water fitting falling within the operations numbered 2, 4(b), 4(l) or 4(m) in the table in paragraph (1).

(3) The notice required by paragraph (1) must include or be accompanied by—
- (a) the name and address of the person giving the notice, and (if different) the name and address of the person on whom notice may be served under paragraph (4);
- (b) a description of the proposed work or material change of use;
- (c) particulars of the location of the premises to which the proposal relates, and the use or intended use of those premises;
- (d) except in the case of a fitting falling within the operations numbered 4(a), 4(c), 4(h) or 5 in the table above—
  - (i) a plan of those parts of the premises to which the proposal relates; and
  - (ii) a diagram showing the pipework and fitting to be installed; and
- (e) where the work is to be carried out by an approved contractor, the name of the contractor.

(4) Scottish Water may withhold consent required under paragraph (1), or grant it subject to conditions, by a notice given before the expiry of the period of 10 working days commencing with the day on which notice under that paragraph was given.

(5) If no notice is given by Scottish Water within the period mentioned in paragraph (4), the consent required under paragraph (1) is to be deemed to have been granted unconditionally.

(6) In this byelaw—
"fluid category 4" means the category of fluid in paragraph 4 of Schedule 1;
"fluid category 5" means the category of fluid in paragraph 5 of Schedule 1; and
"material change of use" means a change in the purpose for which, or the circumstances in which, premises are used, such that after that change the premises are used (where previously they were not so used)—
(a) as a dwelling;
(b) as an institution;
(c) as a public building; or
(d) for the purposes of the storage or use of substances which if mixed with water result in a fluid which falls within fluid category 4 or fluid category 5.

Contractor's certificate

6. (1) Where a water fitting is installed, altered, connected or disconnected by an approved contractor, the contractor must, on completion of the work, give to the person who commissioned that work a signed certificate stating whether the water fitting complies with the requirements of these Byelaws.

(2) In the case of a fitting for which notice is required under byelaw 5(1) (as read with byelaw 5(2)), the contractor must send a copy of the certificate to Scottish Water.

Offences

7. (1) Subject to paragraph (2), a person commits an offence if the person—
(a) contravenes byelaw 3(1), 3(2), 3(3), 6(1) or 6(2);
(b) commences an operation listed in the table in byelaw 5(1)—
(i) without giving notice as required by that byelaw; or
(ii) without the consent required by that byelaw; or
(c) carries out an operation listed in the table in byelaw 5(1) in breach of a condition imposed under byelaw 5(4).

(2) In any proceedings against an owner or occupier for an offence under paragraph (1) which is based on the installation, alteration, repair, connection or disconnection of a water fitting, it is a defence to prove—

(a) that the work in question was carried out by or under the direction of an approved contractor; and

(b) that the contractor certified to the person who commissioned that work that the water fitting complied with the requirements of these Byelaws.

(3) A person who commits an offence under paragraph (1) is liable on summary conviction to a fine not exceeding level 5 on the standard scale.

Offences by bodies corporate

8. (1) Where—

(a) an offence under these Byelaws has been committed by a body corporate or a Scottish partnership or other unincorporated association; and

(b) it is proved that the offence was committed with the consent or connivance of, or was attributable to any neglect on the part of—

(i) a relevant individual; or

(ii) an individual purporting to act in the capacity of a relevant individual, the individual as well as the body corporate, Scottish partnership or unincorporated association commits an offence and is liable to be proceeded against and punished accordingly.

(2) In paragraph (1), "relevant individual" means—

(a) in relation to a body corporate—

(i) a director, manager, secretary or other similar officer of the body;

(ii) where the affairs of the body are managed by its members, a member;

(b) in relation to a Scottish partnership, a partner; and

(c) in relation to an unincorporated association other than a Scottish partnership, a person who is concerned in the management or control of the association.

Revocation of the Scottish Water Byelaws 2004

9. The Scottish Water Byelaws 2004**(h)** are revoked.

GEOFFREY AITKENHEAD
Authorised to sign by Scottish Water

Castle House,
Dunfermline
13th May 2014

The Scottish Ministers confirm these Byelaws and fix 12th July 2014 as the date on which they come into operation.

R. N. IRVINE
A member of the staff of the Scottish Ministers

St Andrew's House,
Edinburgh
26th June 2014

(h) The Scottish Water Byelaws 2004, made by Scottish Water and signed by it on 13th July 2004.

SCHEDULE 1 – Byelaw 5(6)
Fluid Categories

Fluid category 1

1. Wholesome water supplied by Scottish Water and complying with the requirements of the Water Supply (Water Quality) (Scotland) Regulations 2001**(i)**.

Fluid category 2

2. Water described in paragraph 1 whose aesthetic quality is impaired owing to—

(a) a change in its temperature; or

(b) the presence of substances or organisms causing a change in its taste, odour or appearance,

including water in a hot water distribution system.

Fluid category 3

3. Fluid which represents a slight health hazard because of the concentration of substances of low toxicity, including any fluid which contains—

(a) ethylene glycol, copper sulphate solution or similar chemical additives; or

(b) sodium hypochlorite, other chloride-based disinfectants or other common disinfectants.

Fluid category 4

4. Fluid which represents a significant health hazard because of the concentration of toxic substances, including any fluid which contains—

(a) chemical, carcinogenic substances or pesticides (including insecticides and herbicides); or

(b) environmental organisms of potential health significance.

Fluid category 5

5. Fluid representing a serious health hazard because of the concentration of pathogenic organisms, radioactive or very toxic substances, including any fluid which contains—

(a) faecal material or other human waste;

(b) butchery or other animal waste; or

(c) pathogens from any other source.

(i) S.S.I. 2001/207, as amended by S.S.I. 2001/238, S.S.I. 2003/331, S.S.I. 2006/209, S.S.I. 2010/95, S.S.I. 2013/177 and S.I. 2013/1387.

SCHEDULE 2 – Byelaws 2(3), 4(3) and 4(4)
Requirements for water fittings

Interpretation

1. In this Schedule—

"backflow" means flow upstream, that is in a direction contrary to the intended normal direction of flow, within or from a water fitting;

"cistern" means a fixed container for holding water at atmospheric pressure;

"combined feed and expansion cistern" means a cistern for supplying cold water to a hot water system without a separate expansion cistern;

"combined temperature and pressure relief valve" means a valve capable of performing the function of both a temperature relief valve and a pressure relief valve;

"contamination" includes any reduction in chemical or biological quality of water due to a change in temperature or the introduction of polluting substances;

"distributing pipe" means any pipe (other than a warning, overflow or flushing pipe) conveying water from a storage cistern, or from hot water apparatus supplied from a cistern and under pressure from that cistern;

"expansion cistern" or "expansion vessel" means a cistern or vessel connected to a water heating system which accommodates the increase in volume of water in the system when the water is heated from cold;

"expansion valve" means a pressure-activated valve designed to release expansion water from an unvented water heating system;

"flushing cistern" means a cistern provided with valve or device for controlling the discharge of the stored water into a WC pan or urinal;

"overflow pipe" means a pipe from a cistern in which water flows only when the water level in the cistern exceeds a predetermined level;

"pressure relief valve" means a pressure-activated valve which opens automatically at a specified pressure to discharge fluid;

"primary circuit" means an assembly of water fittings in which water circulates between a boiler or other source of heat and a primary heat exchanger inside a hot water storage vessel, and includes any space heating system;

"secondary circuit" means an assembly of water fittings in which water circulates in supply pipes or distributing pipes of a hot water storage system;

"servicing valve" means a valve for shutting off for the purpose of maintenance or service the flow of water in a pipe connected to a water fitting;

"stop valve" means a valve, other than a servicing valve, used for shutting off the flow of water in a pipe;

"storage cistern" means a cistern for storing water for subsequent use, not being a flushing cistern;

"temperature relief valve" means a valve which opens automatically at a specified temperature to discharge fluid;

"terminal fitting" means a water outlet device; and

"vent pipe" means a pipe open to the atmosphere which exposes the system to atmospheric pressure at its boundary.

Materials and substances in contact with water

2. (1) No material or substance (either alone or in combination with any other material or substance or with the contents of any water fitting of which it forms a part) which causes or is likely to cause contamination of water is to be used in the construction, installation, renewal, repair or replacement of any water fitting which conveys or receives, or may convey or receive, water supplied for domestic purposes or food production purposes.

(2) Sub-paragraph (1) does not apply to a water fitting downstream of a terminal fitting supplying wholesome water where—

(a) the use to which the water downstream is put does not require wholesome water; and

(b) a suitable arrangement or device to prevent backflow is installed.

Requirements for water fittings

3. Every water fitting must be—

(a) immune to or protected from corrosion by galvanic action or by any other process which is likely to result in contamination or waste of water; and

(b) constructed of materials of such strength and thickness as to resist damage from any external load, vibration, stress or settlement, pressure surges, or temperature fluctuation to which it is likely to be subjected.

4. Every water fitting must be—

(a) watertight;

(b) constructed and installed so as to—

(i) prevent ingress by contaminants; and

(ii) inhibit damage by freezing or any other cause;

(c) installed so as to minimise the risk of permeation by, or deterioration from contact with, any substance which may cause contamination; and
(d) adequately supported.

5. Every water fitting must be capable of withstanding an internal water pressure not less than 1½ times the maximum pressure to which that fitting is designed to be subjected in operation.

6. No water fitting is to be installed, connected or used which is likely to have a detrimental effect on the quality or pressure of water in a water main or other pipe of Scottish Water.

7. (1) No water fitting is to be embedded in any wall or solid floor.

(2) No fitting which is designed to be operated or maintained, whether manually or electronically, or which consists of a joint, is to be a concealed water fitting.

(3) Any concealed water fitting or mechanical backflow prevention device, not being a terminal fitting, must be made of gunmetal, or another material resistant to dezincification.

(4) Any water fitting laid below ground level must have a depth of cover sufficient to prevent water freezing in the fitting.

(5) In sub-paragraphs (2) and (3), "concealed water fitting" means a water fitting which—
(a) is installed below ground;
(b) passes through or under any wall, footing or foundation;
(c) is enclosed in any chase or duct; or
(d) is in any other position which is inaccessible or renders access difficult.

Water system design and installation

8. No water fitting is to be installed in such a position, or pass through such surroundings, that it is likely to cause contamination or damage to the material of the fitting or the contamination of water supplied by Scottish Water.

9. Any pipe supplying cold water for domestic purposes to any tap must be so installed that, so far as is reasonably practicable, the water is not warmed above 20°C.

10. (1) Every supply pipe or distributing pipe providing water to separate premises must be fitted with a stop valve conveniently located to enable the supply to those premises to be shut off without shutting off the supply to any other premises.

(2) Where a supply pipe or distributing pipe provides water in common to two or more premises, it must be fitted with a stop valve to which each occupier of those premises has access.

11. (1) Water systems must be capable of being drained down and be fitted with an adequate number of servicing valves and drain taps so as to minimise the discharge of water when water fittings are maintained or replaced.

(2) A sufficient number of stop valves must be installed for isolating parts of the pipework.

12. (1) The water system must be capable of withstanding an internal water pressure ("the test pressure") not less than 1½ times the maximum pressure to which the installation or relevant part is designed to be subjected in operation.

(2) This requirement is to be deemed to be satisfied—

(a) in the case of a water system that does not include a pipe made of plastics, where—

(i) the whole system is subjected to the test pressure by pumping, after which the test continues for one hour without further pumping;

(ii) the pressure in the system is maintained for one hour; and

(iii) there is no visible leakage throughout the test; and

(b) in any other case, where either Test A or Test B is satisfied.

(3) For the purposes of sub-paragraph (2)(b)—

(a) "Test A" is satisfied if—

(i) the whole system is subjected to the test pressure by pumping for 30 minutes, after which the test continues for 90 minutes without further pumping;

(ii) the pressure is reduced to one third of the test pressure after 30 minutes;

(iii) the pressure does not drop below one third of the test pressure over the following 90 minutes; and

(iv) there is no visible leakage throughout the test; and

(b) "Test B" is satisfied if—

(i) the whole system is subjected to the test pressure by pumping for 30 minutes, after which the pressure is noted and the test continues for 150 minutes without further pumping;

(ii) the drop in pressure is less than 0.6 bar (60kPa) after the following 30 minutes, or 0.8 bar (80kPa) after the following 150 minutes; and

(iii) there is no visible leakage throughout the test.

13. Every water system must be tested, flushed and where necessary disinfected before it is first used.

Prevention of cross-connection to unwholesome water

14. (1) Any water fitting conveying—

(a) rain water, grey water, recycled water, reclaimed water, or any fluid other than water supplied by Scottish Water;

(b) water for the purposes of a private water supply; or

(c) any fluid that is not wholesome water, must be clearly identified so as to be easily distinguished from any supply pipe or distributing pipe.

(2) No supply pipe, distributing pipe or pump delivery pipe drawing water from a supply pipe or distributing pipe is to convey, or be connected so that it can convey, any fluid falling within sub-paragraph (1), unless a device for preventing backflow is installed in accordance with paragraph 15.

Backflow prevention

15. (1) Subject to sub-paragraphs (2) to (5), every water system must contain an adequate device or devices for preventing backflow of fluid from any appliance, fitting or process from occurring.

(2) Sub-paragraph (1) does not apply to—

(a) a water heater where the expanded water is permitted to flow back into a supply pipe; or

(b) a vented water storage vessel supplied from a storage cistern, where the temperature of the water in the supply pipe or the cistern does not exceed 20°C.

(3) The device used to prevent backflow must be appropriate to the highest applicable category of fluid in Schedule 1 to which the fitting is subject downstream before the next such device.

(4) Backflow prevention shall be provided on any supply pipe or distributing pipe—
  (a) where it is necessary to prevent backflow between separately occupied premises; or
  (b) where Scottish Water has given notice for the purposes of this Schedule that such prevention is needed for the whole or part of any premises.

(5) A backflow prevention device is adequate for the purposes of sub-paragraph (1) if it conforms to a specification approved for the purposes of paragraph 15(1) of Schedule 2 to the Water Supply (Water Fittings) Regulations 1999 (pursuant to sub-paragraph (5) of that paragraph).

Cold water services

16. (1) Every pipe supplying water connected to a storage cistern must be fitted with an effective adjustable valve capable of shutting off the inflow of water at a suitable level below the overflowing level of the cistern.

(2) Every inlet to a storage cistern, combined feed and expansion cistern, WC flushing cistern or urinal flushing cistern must be fitted with a servicing valve on the inlet pipe adjacent to the cistern.

(3) Every storage cistern, except one supplying water to the primary circuit of a heating system, must be fitted with a servicing valve on the outlet pipe.

(4) Every storage cistern must be fitted with—
  (a) an overflow pipe, with a suitable means of warning of an impending overflow, which excludes insects;
  (b) a cover positioned so as to exclude light and insects; and
  (c) thermal insulation to minimise freezing or undue warming.

(5) Every storage cistern must be so installed as to minimise the risk of contamination of stored water. The cistern must be of an appropriate size, and the pipe connections to the cistern must be so positioned, as to allow free circulation and to prevent areas of stagnant water from developing.

Hot water services

17. (1) Every unvented water heater, not being an instantaneous water heater with a capacity not greater than 15 litres, and every secondary coil contained in a primary system must—

(a) be fitted with a temperature control device and either a temperature relief valve or a combined temperature pressure and relief valve; or

(b) be capable of accommodating expansion within the secondary hot water system.

(2) An expansion valve must be fitted with provision to ensure that water is discharged in a correct manner in the event of a malfunction of the expansion vessel or system.

(3) Without prejudice to the general application of the requirements sub-paragraphs (1) and (2), those requirements are to be deemed to have been met if alternative safety devices are fitted—

(a) with at least an equivalent degree of safety in preventing the temperature of stored water exceeding 100°C; and

(b) which comply with the Building (Scotland) Regulations 2004**(j)** (including, in particular, paragraph 4.9 of Schedule 5 to those Regulations) and the associated guidance having effect in accordance with section 4(1) and (2) of the Building (Scotland) Act 2003**(k)**.

18. Appropriate vent pipes, temperature control devices and combined temperature pressure and relief valves must be provided to prevent the temperature of the water within a secondary hot water system from exceeding 100°C.

19. Discharges from temperature relief valves, combined temperature pressure and relief valves and expansion valves must be made in a safe and conspicuous manner.

(j) S.S.I. 2004/406, as amended by S.S.I. 2006/534, S.S.I. 2008/310, S.S.I. 2009/119, S.S.I. 2010/32, S.S.I. 2011/120, S.S.I. 2011/211, S.S.I. 2012/209 and S.S.I. 2013/143.

(k) 2003 asp 8, as amended by the Housing (Scotland) Act 2006 (asp 1), schedule 6(1), paragraphs 21 and 22, the Public Services Reform (Scotland) Act 2010 (asp 8), section 6(2) and S.S.I. 2006/475 and S.S.I 2009/248; the associated guidance includes, in particular, the Technical Handbooks (for both domestic and non-domestic premises) published on the Scottish Government's website – the most recent editions of which were published in 2013.

20. (1) No vent pipe from a primary circuit is to terminate over a storage cistern containing wholesome water for supply for domestic purposes or for supplying water to a secondary system.

(2) No vent pipe from a secondary circuit is to terminate over any combined feed and expansion cistern connected to a primary circuit.

(3) In sub-paragraph (1) "secondary system" means an assembly of water fittings comprising the cold feed pipe, any hot water storage vessel, water heater and pipework from which hot water is conveyed to all points of draw-off.

21. Every expansion cistern or expansion vessel, and every cold water combined feed and expansion cistern connected to a primary circuit, must be such as to accommodate any expansion water from that circuit during normal operation.

22. (1) Every expansion valve, temperature relief valve or combined temperature and pressure relief valve connected to any fitting or appliance must close automatically after a discharge of water.

(2) Every expansion valve must—
- (a) be fitted on the supply pipe close to the hot water vessel and without any intervening valves; and
- (b) only discharge water when subjected to a water pressure of not less than 0.5 bar (50 kPa) above the pressure to which the hot water vessel is, or is likely to be, subjected in normal operation.

23. (1) A temperature relief valve or combined temperature and pressure relief valve must be provided on every unvented hot water storage vessel with a capacity greater than 15 litres.

(2) The valve must—
- (a) be located directly on the vessel in an appropriate location, and have a sufficient discharge capacity, to ensure that the temperature of the stored water does not exceed 100°C; and
- (b) only discharge water at below its operating temperature when subjected to a pressure of not less than 0.5 bar (50 kPa) in excess of the greater of the following—
  - (i) the maximum working pressure in the vessel in which it is fitted; or
  - (ii) the operating pressure of the expansion valve.

(3) In sub-paragraph (1) "unvented hot water storage vessel" means a hot water storage vessel that does not have a vent pipe to the atmosphere.

(4) Without prejudice to the general application of the requirements of sub-paragraphs (1) and (2), those requirements are to be deemed to have been met if alternative safety devices are fitted—

(a) with at least an equivalent degree of safety in preventing the temperature of stored water exceeding 100°C; and

(b) which comply with the Building (Scotland) Regulations 2004 (including, in particular, paragraph 4.9 of Schedule 5 to those Regulations) and the associated guidance having effect in accordance with section 4(1) and (2) of the Building (Scotland) Act 2003.

24. No supply pipe or secondary circuit is to be permanently connected to a closed circuit for filling a heating system unless it incorporates a backflow prevention device which conforms to a specification approved for the purposes of, and pursuant to, paragraph 24 of Schedule 2 to the Water Supply (Water Fittings) Regulations 1999.

WCs, flushing devices and urinals

25. (1) Subject to sub-paragraphs (2) to (5)—

(a) every WC pan must be supplied with water from a flushing cistern, pressure flushing cistern or pressure flushing valve, and must be so made and installed that after normal use its contents can be cleared effectively by a single flush of water, or, where the installation is designed to receive flushes of different volumes, by the largest of those flushes;

(b) no pressure flushing valve is to be installed—

(i) in a house; or

(ii) in any building not being a house where a minimum flow rate of 1.2 litres per second cannot be achieved at the appliance;

(c) where a pressure flushing valve is connected to a supply pipe or distributing pipe, the flushing arrangement must incorporate a backflow prevention device consisting of a permanently vented pipe interrupter located not less than 150 mm above the spillover level of the WC pan or urinal;

(d) no flushing device installed for use with a WC pan is to give a single flush exceeding 6 litres;

(e) notwithstanding head (d), a flushing cistern installed before these Byelaws come into force may be replaced by a cistern which delivers a similar volume and which may be either single flush or dual flush, but a single flush cistern may not be so replaced by a dual flush cistern;

(f) no flushing device designed to give flushes of different volumes shall have a lesser flush exceeding two-thirds of the largest flush volume;

(g) every flushing cistern, other than a pressure flushing cistern, must be clearly marked internally with an indelible line to show the intended volume of flush, together with an indication of that volume;

(h) a flushing device designed to give flushes of different volumes must have—

(i) a readily discernible method of actuating the flush at different volumes; and

(ii) instructions, clearly and permanently marked on the cistern or displayed nearby, for operating it to obtain the different volumes of flush;

(i) every flushing cistern, not being a pressure flushing cistern or a urinal cistern, must be fitted with a warning pipe or with a no less effective device;

(j) every urinal that is cleared by water after use must be supplied with water from a flushing device which—

(i) in the case of a flushing cistern, is filled at a rate suitable for the installation;

(ii) in all cases, is designed or adapted to supply no more water than is necessary for effective flow over the internal surface of the urinal and for replacement of the fluid in the trap; and

(k) except in the case of a urinal which is flushed manually, or which is flushed automatically by electronic means after use, every pipe which supplies water to a flushing cistern or trough used for flushing a urinal must be fitted with an isolating valve controlled by a time switch and a lockable isolating valve, or with some other equally effective automatic device for regulating the periods during which the cistern may fill.

(2) Every WC, and every flushing device designed for use with a WC, must conform to a specification approved for the purposes of, and pursuant to, paragraph 25(2) of Schedule 2 to the Water Supply (Water Fittings) Regulations 1999.

(3) The requirements of sub-paragraphs (1) and (2) do not apply where faeces or urine are disposed of through an appliance that does not solely use fluid to remove the contents.

(4) The requirement in sub-paragraph (1)(j) is to be deemed to be satisfied—

(a) in the case of an automatically operated flushing cistern servicing urinals, where it is filled with water at a rate not exceeding—

(i) 10 litres per hour, for a cistern serving a single urinal; or

(ii) 7.5 litres per hour per urinal bowl or stall, or, as the case may be, for each 700 mm width of urinal slab, for a cistern serving two or more urinals; and

(b) in the case of a manually or automatically operated pressure flushing valve used for flushing urinals, where it delivers not more than 1.5 litres per bowl or position each time the device is operated.

(5) In this paragraph—

"pressure flushing cistern" means a WC flushing device that utilises the pressure of water within the cistern supply pipe to compress air and increase the pressure of water available for flushing a WC pan;

"pressure flushing valve" means a self-closing valve supplied with water directly from a supply pipe or a distributing pipe which when activated will discharge a pre-determined flush volume;

"trap" means a pipe fitting, or part of a sanitary appliance, that retains liquid to prevent the passage of foul air; and

"warning pipe" means an overflow pipe whose outlet is located in a position where the discharge of water can readily be seen.

Baths, sinks, showers and taps

26. All premises supplied with water for domestic purposes must have at least one tap conveniently situated for the drawing of drinking water.

27. A drinking water tap must be supplied with water from—

(a) a supply pipe;

(b) a pump delivery pipe drawing water from a supply pipe; or

(c) a distributing pipe drawing water exclusively from a storage cistern supplying wholesome water.

28. (1) Every bath, wash basin, sink or similar appliance must be provided with a watertight and readily accessible plug or other device capable of closing the waste outlet.

(2) Sub-paragraph (1) does not apply to—

(a) an appliance where the only taps provided are spray taps;

(b) a washing trough or wash basin whose waste outlet is incapable of accepting a plug and to which water is delivered at a rate not exceeding 0.06 litres per second exclusively from a fitting designed or adapted for that purpose;

(c) a wash basin or washing trough fitted with self-closing taps;
(d) a shower bath or shower tray;
(e) a drinking water fountain or similar facility; or
(f) an appliance which is used in medical, dental or veterinary premises and is designed or adapted for use with an unplugged outlet.

Washing machines, dishwashers and other appliances

29. (1) Clothes washing machines, clothes washer-driers and dishwashers must be economical in the use of water.

(2) Sub-paragraph (1) is to be deemed to be satisfied in the case of machines having a water consumption per cycle of not greater than—
(a) for horizontal axis washing machines supplied with water for domestic purposes, 27 litres per kilogram of washload for a standard 60°C cotton cycle;
(b) for washer-driers supplied with water for domestic purposes, 48 litres per kilogram of washload for a standard 60°C cotton cycle; and
(c) for dishwashers supplied with water for domestic purposes, 4.5 litres per place setting.

Water for outside use

30. Every pipe which conveys water to a drinking vessel for animals or poultry must be fitted with—
(a) a float-operated valve, or some other no less effective device to control the inflow of water, which is—
(i) protected from damage and contamination; and
(ii) prevents contamination of the water supply; and
(b) a stop valve or servicing valve as appropriate.

31. Every pond, fountain or pool (which uses, or is to use, water supplied by Scottish Water) must have an impervious lining or membrane to prevent the leakage or seepage of water.

EXPLANATORY NOTE

(This note is not part of the Byelaws)

These Byelaws make provision for the purposes of preventing waste, undue consumption, misuse, erroneous measurement or contamination of water supplied by Scottish Water. The Byelaws have effect only if they are confirmed (with or without modification) by the Scottish Ministers. If confirmed, the Byelaws come into operation on a date fixed by the Scottish Ministers, and if no date is fixed by the Ministers, they come into operation one month after the date on which they were confirmed.

Byelaw 1 makes provision as regards citation, commencement and interpretation.

Byelaw 2 makes provision as regards the application of the Byelaws.

Byelaw 3 provides, among other things, that water fittings must not be installed, connected, arranged or used such that they cause, or are likely to cause, waste, misuse, undue consumption or contamination, or erroneous measurement, of water supplied by Scottish Water.

Byelaw 4 requires that the water fittings must be of an appropriate quality or standard, and be suitable for the circumstances in which they are used. In addition, the fittings must be installed, connected or disconnected in a way that conforms to certain specifications.

Byelaw 5 requires a person who proposes to install a water fitting (in connection with certain operations) to notify Scottish Water that the person proposes to begin work, not to begin that work without Scottish Water's consent, and comply within any associated consent conditions. These requirements do not apply to the installation by an approved contractor of some fittings.

Byelaw 6 provides that, where an approved contractor installs, alters, connects or disconnects a water fitting, the contractor must certify that the fitting complies with the Byelaws.

Byelaws 7 and 8 make provision in relation to offences and provide that a person who commits an offence is liable on summary conviction to a fine not exceeding level 5 on the standard scale.

Scottish Water may (in accordance with section 38(1)(b) to (d) and (2) of the Water (Scotland) Act 1980 ("the Act")) enter any premises to ascertain whether there has been a contravention of the Byelaws and to ascertain any action it may take, and for the purposes of taking such action.

If a person contravenes a provision of the Byelaws, Scottish Water may (in accordance with section 70(2) of the Act and whether or not separate proceedings are taken for an offence) alter, repair or replace any non-compliant water fitting belonging to or used by that person. Scottish Water may also recover from that person the expenses reasonably incurred by it in doing so.

If Scottish Water considers that a requirement of the Byelaws should not operate in a particular case or class of cases it may (in accordance with section 70(4) of the Act and with the consent of the Scottish Ministers) relax the requirement or dispense with the need to comply with it.

These Byelaws contain provisions which constitute a "technical regulation" within the meaning of Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services**(I)**. They have been notified in draft to the European Commission in accordance with that Directive.

(I) OJ L 204, 21.7.1998, p. 37, as amended by OJ L 217, 5.8.1998, p. 18, OJ L 363, 20.12.2006, p. 81, OJ L 316, 14.11.2012, p. 12 and OJ L 236, 23.9.2003, p. 33.

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If you have a disability, medical condition or other reason why you may need additional assistance from Scottish Water then please contact us and we can add your name, address and requirements to our confidential Priority Services Register.

We record all calls for quality and training purposes.

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