



### **Quick Guide** Helping you comply with Water Byelaws



Scottish Water provides good, clean, safe and high quality drinking water to homes and business premises throughout Scotland. At Scottish Water we use many measures to maintain and protect water quality and, among these, are Water Byelaws. Water Byelaws are created to help ensure the safety of the water supply, with the main aim being the prevention of contamination of the public water supply.

This guide will help to provide advice on some of the installation requirements in place to help ensure everyone complies with Water Byelaws.

More detailed information is available at www.scottishwater.co.uk/byelaws

#### Byelaw 5 — Notification

Anyone intending to install or alter water fittings or systems must give notice to Scottish Water that they intend to do so. This is particularly important where high risk systems such as rainwater harvesting systems, alternative supplies such as boreholes, or other systems with fluid category 4 or 5 fluids present are planned.

Full details of notification requirements can be found on our website at www.scottishwater.co.uk/byelaws

#### **Licensed Plumbers and Contractors**

Scottish Water advises the use of professional plumbers and plumbing contractors who are members of recognised national licensing schemes. There are a number of benefits in using members of such schemes.

These include:

- Their work is certified as complying with Water Byelaws.
- Properly trained and qualified personnel are available.
- Members are audited/inspected on a regular basis.
- They hold public liability insurance.
- They must submit Financial Integrity Statements annually.

Scottish Water supports and promotes the WaterSafe scheme. WaterSafe is a dedicated online search facility to help customers to find the nearest qualified plumbing and heating professionals in their area. To find a licensed plumber in your area, visit the WaterSafe website at **www.watersafe.org.uk**.

#### **Underground pipes**

To help prevent pipes from freezing and being damaged, pipes should be laid to minimum depth of 750mm up to a maximum depth of 1350mm. If your pipes are laid to a depth less than this, they will need protected from damage and freezing and you will need written permission from Scottish Water.

The diagram below shows a typical example of the requirements for pipes entering buildings.

## Typical example of the requirements for pipes entering buildings



#### Identification of pipes

To avoid confusion over pipework contents and to avoid cross connections and potential contamination, pipework within buildings, including those underground, must be readily identifiable. This is particularly important where numerous services and water sources are present.

Pipes should be identified using the requirements of the current version of British Standard BS 1710. Examples are shown below.

### Examples of identification colours as per BS 1710:2014



- A. Central Heating pipework
- B. Firefighting pipework fed from a public main
- C. Drinking fed from a public main

#### Stored water — Domestic

Water storage cisterns supplying water for domestic purposes must be insulated to strict standards which protect the water quality.

Cisterns should be insulated against heat and frost, lids should be securely fixed with overflows screened to protect against insects entering.

Backflow protection at the inlet is also required, usually via a type AG air gap. See domestic AG air gap cistern below.

### Typical example of domestic AG air gap cistern



#### Stored water – Industrial and commercial

Where storage cisterns provide water for industrial or commercial use, the supply to the inlet of these must have suitable protection against backflow or back syphonage.

Protection is usually via an appropriate air gap (Type AA or AB) which provide adequate protection against possible contamination by fluid category 4 and 5 fluids.

Please see typical examples below of an AA and AB air gap.



#### Hose union taps

Backflow protection must be installed on all hose union taps. In houses a "double check valve" is suitable in most cases.

The use of hose union taps within business premises is likely to require a higher level of protection depending on the usage.

Some of these uses may be classed as high as a fluid category 5 risk and require a break cistern with a type AA or AB air gap arrangement. Please see typical example below of a domestic hose union tap.

# Typical example of a domestic hose union tap



#### **Alternative supplies**

Water supplies not sourced from Scottish Water can be considered up to a fluid category 5 risk. These supplies should never be directly connected to the public mains supply due to the water quality risk.

Backflow protection for a mains fed backup can be achieved via a break cistern typically with a type AA or AB air gap.

Please see typical example below of an alternative supply storage cistern with a mains fed back up, protected via a type AA air gap.

# Typical example of an alternative supply storage cistern with a mains back up



#### **Animal Troughs**

All troughs and drinking bowls supplied direct from mains should have a suitable air gap for a fluid category 5 risk. A typical example of this is a type AA air gap as detailed below. Not having an appropriate air gap on a trough or feeding bowl could allow the water within to be syphoned back to the public supply.

Please see typical example below of a compliant animal drinking trough.

## Typical example of a compliant animal trough



# For further information and guidance on Water Byelaws:

### Visit





