



Hose Union Taps

The water fittings regulations in <u>England</u>, <u>Wales</u> and <u>Northern Ireland</u>, <u>byelaws in Scotland</u> are legal requirements which apply to all premises which have, or will have, a mains water supply, even it is only a backup supply.

An important item of public health legislation, their purpose is to protect drinking water supplies. Their objective is to prevent contamination, misuse, waste, undue consumption or erroneous measurement of water. They do this by setting legal requirements for the design, installation, operation and maintenance of water fittings, including water-using appliances.

The booklet provides information about the contamination by backflow risks associated with hose union taps and backflow arrangements which may be accepted.

For further information about these requirements please refer to the Water Reg UK website www.waterregsuk.co.uk. or contact the local water undertaker.

Index:

What is a hose union tap?

Hoses fitted with a flow control device

Backflow

Categorisation of backflow risk

Hose union taps supplying watering systems

Examples of backflow protection

Additional sources of information

Disclaimer:

What is a hose union tap?

A hose union tap is a tap to which a hose can be connected. Hoses attached to hose union taps are considered to be a high <u>contamination</u> <u>risk</u>. This is because <u>backflow</u> via a hosepipe submerged in a bucket, trough, puddle, drain or pond is a very real possibility.

Conversely a tap to which a hose cannot be connected is called a bib tap. Providing that a suitable gap between the tap outlet and the spill over level of whatever it is discharging water into is maintained at all times these taps are typically considered to be a lower risk than a hose union tap.





Hoses fitted with a flow control device

To help prevent waste handheld hoses should be fitted with a control device, such as a trigger with a self-closing mechanism.

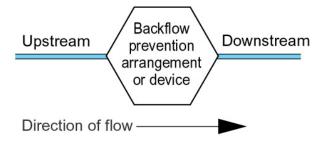
Please note: a control device is not a recognised form of backflow protection.

Backflow

All hose union taps must be supplied via an appropriate and adequate form of <u>backflow protection</u> rated equal to or higher than the highest contamination risk (<u>fluid category</u>) downstream for the type of backflow (back pressure or back siphonage) it is likely to be exposed to.

As some <u>backflow prevention</u> arrangements and devices have operational limitations you should always check with the <u>local water undertaker</u> to make sure they are suitable for the intended application.

Where the local water undertaker requires it zone or wholesite backflow protection should be installed.



Disclaimer:

Categorisation of backflow risk

The <u>backflow</u> risks associated with hose union taps will vary dependent upon their use (intended or otherwise) and the environment in which they are sited. Ultimately it is for the local water undertaker to <u>determine</u> whether anything other than fluid category 5 backflow protection would be acceptable.

To protect public health the overriding concerns are:

- Is there a route through which backflow can occur?
- The likelihood of the tap being exposed to the fluids which pose a risk to health (highest applicable <u>fluid</u> <u>category</u> present)



In order that the correct level of backflow protection is identified and provided, the following factors will be considered:

1. The environment in which the hose tap is situated

In assessing the appropriate level of backflow protection required, account must be taken of:

- The level of risk posed by potential contaminants. The highest level of fluid category
 to which the hose tap may or is likely to be exposed to will be the starting point in
 assessing the appropriate level of backflow protection required, regardless of
 whether a hose is or is not attached.
- The intended use of the hose tap, and regardless of whether a hose is or is not attached.

2. Intended and/or potential uses

Where the intended use of the tap necessitates the attachment of a hose (whether a hose is attached or not) the potential reach of hose required to facilitate the intended use must be taken into account. Things which will be considered include:

- Is a hose capable of being exposed to the highest fluid category identified in the vicinity?
- Is there potential for the hose tap to be misused/vandalised, if so, does this alter the risk?
- Is the use of a hose required?

If a hose is not required to facilitate the intended use, the tap could be changed to a bib tap (tap without the provision to connect a hose).

3. The highest applicable fluid category

Domestic or non-domestic classifications are irrelevant in determining the highest applicable fluid category present. The backflow protection provided must be adequate and appropriate to the identified risk, as determined by the local water undertaker, taking account of the above considerations.

Disclaimer:

Below are examples of some high and low risk usage, please note the local water undertaker retains absolute discretion in determining the level of risk on a case by case and site specific basis.

Low risk activities

Providing the hose is:

- Handheld (not left unattended)
- Fitted with a flow control device
- Disconnected from the hose union tap when not in use

Hoses used solely for watering a domestic garden or washing personal vehicles are typically categorised as a fluid category 3 risk which may be protected by the installation of a double check valve.

High risk activities

High risk activities include but are not limited to hose use:

- Washing down farmyards, stables, kennels, catteries or other bird, fish or animal structures
- Refilling and areas adjacent to ponds, swimming pools, spa baths or hot tubs
- At abattoirs and mortuaries
- · At factories, distilleries, engineering, plating and chemical works
- In catering facilities and public houses
- In communal bin store areas
- At allotments

Hose union taps used in these circumstances are classed as fluid category 5 risks unless an assessment by the local water undertaker <u>determines</u> otherwise.

For further information and advice, and to ensure first time compliance, please contact your local <u>water undertaker</u>.

Hose union taps supplying watering systems

The backflow risks associated with hose union taps will vary dependent upon their use (intended or otherwise) and the environment in which they are sited. Ultimately it is for the local water undertaker to <u>determine</u> whether fluid category 5 backflow protection is required.

Factors taken into account when assessing those supplying watering or irrigation systems included but are not limited to:

- The use of chemical additives. For example, fertilisers, herbicides, and insecticides.
- The irrigation system design. For example, pop-up sprinkler heads, seep hoses.



Disclaimer:

- How the system is installed. For example, what parts of the system are below ground or permanently fixed above ground.
- The size of the system and the environment in which it is installed.

The installation of an irrigation system must be notified, conditions are likely to apply

To avoid the risk of cross connection with other supplies irrigation system pipework should be clearly <u>marked</u> in accordance with BS 1710.

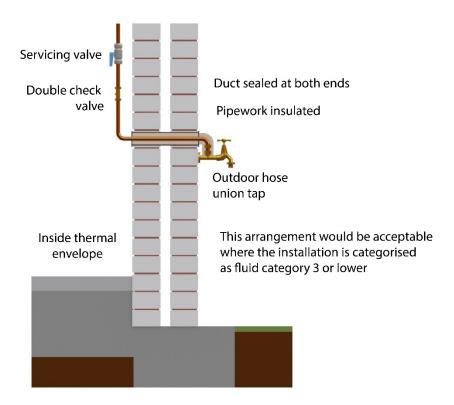




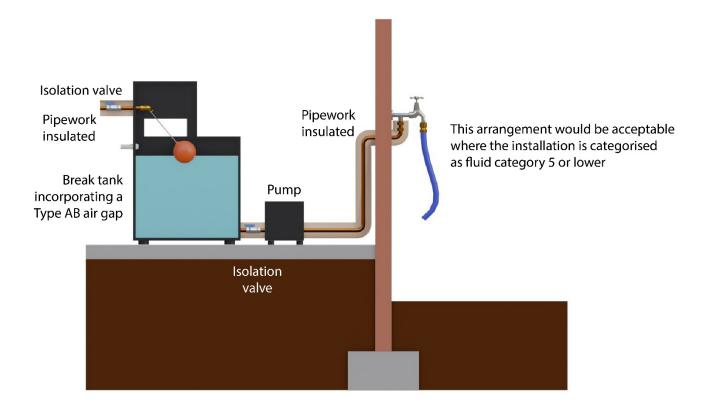


Examples of backflow protection

Hose union taps are typically categorised as a fluid category 3 or 5 risk. Below are some examples of backflow prevention which may be used where the hose union tap is categorised as either a fluid category 3 or 5 risk.



Disclaimer:



Additional sources of information

- Installation Guidance
- Backflow Protection Guidance
- Notification Guidance
- Checklists



Disclaimer: