

Water Regulations Tutorial # 1 Introduction

Updated October 2022

FOREWORD

Arrow Valves have produced a series of Water Regulations tutorials to assist designers and installers comply with the Water Regulations. We have taken an application, and compiled the relevant Regulations. We also suggest practical solutions.

The third edition of the Water Regulations Guide was published in December 2021. Our Water Regulations Tutorials have been updated to reflect the changes made in the latest publication.

TUTORIAL 1

The Water Regulations were introduced on 1st July 1999 in England and Wales. In Scotland, the “Water Byelaws 2000” became lawful on 4th April 2000. With the formation of Scottish Water a revised set of technically similar byelaws were released on the 30th August 2004, known as the Scottish Water Byelaws 2004. A new, up-to-date version of the Water Byelaws came into force on 12th July 2014 titled The Water Supply (Water Fittings) (Scotland) Byelaws 2014.

In Northern Ireland, the “Water Regulations Supply (Water Fittings) Regulations (Northern Ireland) 2009” came into operation on the 3rd of August 2009. The third edition of the Water Regulations Guide includes the Northern Ireland Regulations.

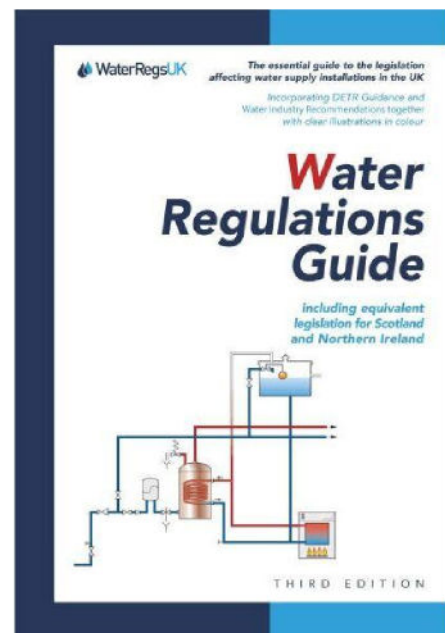
The Scottish Byelaws and Northern Ireland Regulations are technically identical to the Water Regulations.

The Water Regulations Guide was originally published in December 2000 – after which all water companies have actively enforced the regulations. The regulations are the property of the government and are **law**. One well-known contractor was taken to court by a water company and lost!

The Water Regulations Guide consist of –

- The “Water Supply (Water Fittings) Regulations 1999” (England and Wales), The Water Supply (Water Fittings) (Scotland) Byelaws 2014, The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009
- Schedule 1 - Fluid Categories
- Schedule 2 - Government Guidance (G-Clauses)
- Schedule 2 - Water Industry Recommendations (R-Clauses)

The first three are available free of charge. For example, you can download from the Water Regs UK (previously WRAS) website. To obtain all four, together with clear colour illustrations you need to buy the Water Regulations Guide.



KEY POINTS

Backflow Protection – Mechanical backflow prevention devices, commonly known as Reduced Pressure Zone Valves (RPZ or “BA Device”) are acceptable in place of a Break Tank for Fluid Categories up to 4. Fluid Category 5, the most serious risk, requires a suitable air gap (e.g. Type AB).

Point-of-use protection – Schedule 2, paragraph 15 states, “....every water system shall contain an adequate device or devices for preventing backflow of fluid from any appliance, fitting or process from occurring”. This means every appliance must have its own backflow prevention according to the potential contamination risk. Most appliances have an integral air gap such as basin taps and WC cisterns and generally need no further protection.

Water Conservation – Toilet cisterns are now 6 litres and dual flush volumes are permitted – see Schedule 2, paragraph 25. Urinals can be flushed direct from a supply pipe provided a DC Pipe Interrupter and suitable controls are used.

Risk Assessment – Hose union taps, washing machines and dishwashers are three examples where the water company can determine the Fluid Category and therefore the type of backflow prevention to be used. For a number of applications such as non-domestic hose union taps, the risk is deemed to be Fluid Category 5 by default, unless risk assessed and downgraded by the local water company.

Approved Fittings – It is a legal requirement that every water fitting shall “*be of an appropriate quality and standard*”. The easiest way to prove that a water fitting is of an appropriate quality and standard is to use a Water Regulations Approved fitting. The choice of acceptable approvals are -

- WRAS
- Kiwa UK Reg 4
- NSF Reg 4

Notification – New buildings, alterations and extensions to a building other than a house requires the drawings to be sent to, and approved by, the local water company, before work starts. It is the responsibility of the building owner to notify the water company, but often the design consultant is the most suitable person to do this. If an Approved Contractor is to be used for the works, the water company does not need to be notified before the works.

The changes listed above are expanded in future tutorials and specific problems and solutions are highlighted. Remember, you can download PDF datasheets, copy specification clauses etc. on our website www.arrowvalves.co.uk.

Thank you for your interest