

Regulations for Irrigation Installers



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Disclaimer

This report is believed to be correct at the date of publication regarding the general conditions that apply to the connection and installation of irrigation systems to mains or potable water supplies. Since these conditions can change at any time no individual or company should rely solely on this information for making decisions about the qualifications required for certain work. Individual business decisions are the responsibility of the business owner or practitioner, and conditions should always be checked and confirmed with the relevant local authority.

Summary of installer regulations

The ACT, New South Wales, Queensland, and Victoria are the jurisdictions in Australia with regulations for the installation of irrigation systems using potable water, regardless of whether the water is derived from a network operated by a water service provider or is from some other water source such as a dam, tank or river (see Table 1).

There is no irrigation installer licence in the Northern Territory, South Australia, Tasmania or Western Australia.

All connections to the water supply must comply the conditions set out in AS/NZS3500.1 Plumbing Code in all states and territories.

Jurisdiction	ACT	NSW	Qld	Vic
Licensing authority	Access Canberra	Office of Fair Trading	Queensland Building and Construction Commission	Victorian Building Authority
Scope of licence <ul style="list-style-type: none"> Irrigation system type Water supply Point at which licence required 	“Water supply plumber” can connect downstream isolation valve. Need backflow to connect directly to mains	“Water plumbing – urban irrigation” Install types A, B, C and D ¹ but connection only if backflow qualified	“Water plumbing irrigation licence” Install types A, B, C and D but connection only if backflow qualified	Plumbing licence irrigation (non-agricultural) All work downstream from the point of connection
Qualifications required	No longer specified	Cert III in Plumbing Or Cert III in Irrigation AHC32410 or AHCIRG32416 incl “connect to a drinking water supply and AHCIRG306 Troubleshoot irrigation systems	Cert III in plumbing Or Cert III in Irrigation Management (AHCIRG32419) Backflow prevention upgrade to full Plumber’s licence only	Cert III in Plumbing including specified units or “ <i>equivalent knowledge and specified experience</i> ”.
Licence process (how licence can be acquired)	N.A.	Complete form	Complete documents and submit	Complete form and supply documents
Licence fees (if applicable) ²		\$154 for 3 yrs.	On application	Fees updated on VBA website.

Table 1 Summary of regulations by state

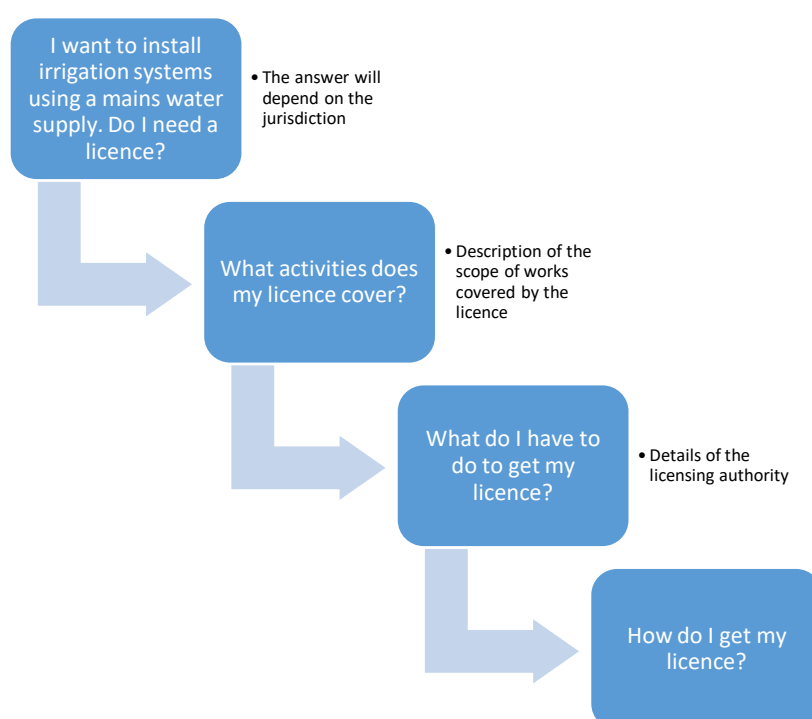
¹ Irrigation system types A, B, C, and D are defined in section 7.2 of AS/NZS3500.1 and reproduced in the appendix of this report.

² All licence fees quoted are for a tradesperson plumber. Higher fees apply to contractors who can supervise tradespeople

Introduction

This report is the second edition of a report initially commissioned by Irrigation Australia Limited (IAL) to clarify and define the conditions that apply to the installation of irrigation systems that are connected to a potable or drinking water supply. It details the qualifications and experience required by an individual and the scope of work that the individual is permitted to complete with respect to the installation. This detail has been collected for all states and territories in Australia.

Different requirements exist for each jurisdiction, and it is difficult to confirm the precise details of the regulations covering qualifications, experience, and the scope of work. This report describes the regulations that apply in each jurisdiction and answers the following questions from the perspective of an irrigation installer.



Someone who is already an irrigation installer or anyone who wishes to become an installer is advised to read the key sections of two national documents that are referred to in all state and territory regulations. These are the Australian and New Zealand standard for plumbing; “AS/NZS 3500.1_2015 Plumbing and drainage”³, in particular “Part 1, Water Services” and Volume Three of the “National Construction Code; Plumbing Code of Australia”, updated in 2019. Readers are strongly advised to check for the latest version of these documents because they are regularly updated.

The two documents are not only referenced by each jurisdiction but are the source of important definitions that are common to all jurisdictions.

³ This is the second edition of the Standard which was originally published in 2003. It supersedes the standard AS3500.1 which applied to Australia only.

Introduction

These definitions are for point of connection and backflow.

Point of connection. The definition for point of connection is as follows:

For a water service the point of connection means the point where the service pipe within the premises connects to the network utility operator's property service or to an alternative water supply system. (Standards Australia, 2015)

The "alternative water supply" in the definition refers to any potential water supply such as an artificial lake, a dam, a rainwater tank or a river. There are usually no restrictions on using these water sources for irrigation systems, but because the definition is part of a plumbing code there may be requirements for plumbing work to be inspected and certified, particularly if the water supply is also used to provide drinking water. Irrigation installers must be aware of the potential risks relating to backflow from the irrigation system to the water source because this will be covered by regulation and has consequences for who can complete the work.

Backflow. The second important issue that the National Plumbing Code deals with and which irrigation installers should understand is backflow.

Section 7 of AS/NZS3500.1_2015 deals with irrigation and lawn watering systems and describes all the irrigation system types is reproduced in Appendix 1. The section *"sets out requirements for and defines the types of irrigation systems for the purposes of backflow prevention."*

Irrigation installers should understand these definitions because they help to define the scope of work that they can complete. In general terms, there are no restrictions or regulations applying to work downstream from an isolation valve, which may or may not be a backflow prevention device. In all jurisdictions there is no requirement for this work to be carried out by a qualified person.

In all jurisdictions only qualified people can install backflow prevention devices and other devices which form the "point of connection", as defined above. The major variation between regulations in each jurisdiction is the detail of the qualifications required to install these devices and the exemptions that apply in some states.

In all states the licensing requirements are different for an individual to act as a tradesperson and for an individual to act as a contractor or supervisor. These requirements vary from jurisdiction to jurisdiction but generally require the person to demonstrate additional years of experience and meet some business and financial criteria. In some states it is also necessary to undertake additional training in business management to obtain a contractor's licence.

In states and territories where there is no irrigation licence that covers the work of irrigation system installation using mains water or any other water supply for residential use, plumbing regulations and licences apply.

New South Wales

Licensing authority

The Office of Fair Trading is the licensing authority in NSW. A licence is required to connect an irrigation system to a drinking water supply and where an alternative water supply is used to supply water to a residential dwelling.

The scope of work for the licence “water plumbing – urban irrigation” is defined as:

“Work of irrigation including the construction, alteration, extension, disconnection, removal, maintenance, repair, renewal or clearing of any pipes, fittings or equipment of any irrigation system communicating or intending to communicate directly or indirectly with any water main, and the connection of the system to a water main.”

This licence enables a licensed person to install irrigation systems of Types A, B, C and D⁴ as described in AS/NZS3500.1 but a licensed irrigation plumber cannot install a backflow prevention device unless they have completed an additional qualification. This is a Statement of Attainment in Backflow Prevention and Cross Connection awarded by a registered training organisation.

Current qualifications requirements

The current qualifications are detailed below. It should be noted that option 4 is based on an old training package that has now been superseded. It is not recommended to anyone who wishes to be qualified for this licence.

“To be eligible for a tradesperson certificate, applicants must possess one of the following four qualifications:

- Certificate III in Plumbing CPC32413/ CPC32412/ CPC32411/ CPC32408/ BCP30103 and all these units of competency:
 - CPCPIG2021A/ CPCPIG2011A/ CPCPIG2001A/ BCPIG2001A Design domestic urban irrigation systems; **and**
 - CPCPIG3021A/ CPCPIG3011A/ CPCPIG3001A/ BCPIG3001A Set out, install, and commission irrigation systems; **and**
 - CPCPIG3022A/ CPCPIG3012A/ CPCPIG3002A/ BCPIG3002A Install and commission domestic irrigation pumps; **and**
 - CPCPWT3027A/ CPCPWT3017A/ CPCPWT3007A/ BCPWT3007A Connect irrigation systems from drinking water supply

- Certificate II in Urban Irrigation CPC20912/ CPC20911/ CPC20908/ BCP20303

OR

- Certificate III in Irrigation RTE31303 and all these units of competency:

⁴ These irrigation system types are detailed in Appendix 1

New South Wales

- Either CPCPWT3017A/ CPCPWT3007A/ BCPWT3007A Connect irrigation systems from drinking water supply or BCS3050A Connect irrigation system from drinkable water (potable); **and**
- RTE3601A Install irrigation systems; **and**
- RTE3605A Troubleshoot irrigation systems.

OR

- Certificate III in Irrigation AHC32410 and all these units of competency:
 - CPCPWT3027A/ CPCPWT3017A/ CPCPWT3007A/ BCPWT3007A Connect irrigation systems from drinking water supply; **and**
 - AHCIRG302A Install irrigation systems; **and**
 - AHCIRG306A Troubleshoot irrigation systems.

OR

- Certificate III in Irrigation AHC32416/ AHC32412 including these units of competency:
 - CPCPWT3027A/ CPCPWT3017A/ CPCPWT3007A/ CPWT3007A Connect irrigation systems from drinking water supply; **and**
 - AHCIRG306A Troubleshoot irrigation systems.

In addition to one of the above, you must:

- Show evidence of completing an apprenticeship and at least two years' combined industry experience in the work covered by the units set out in relation to the Certificate III qualification completed above
OR
- Have at least two years combined industry experience in the work covered by the units set out in relation to the Certificate III qualification completed above and show that you got this experience after completing a Certificate III in Plumbing or Certification III Irrigation.⁵ Office of Fair Trading.

Contractor licence or supervisor certificate:

To be eligible for an endorsed contractor licence or supervisor certificate, applicants must complete one of the qualifications listed above, and in addition must have at least 2 years relevant industry experience."

Applying for the licence

Applicants for the licence must complete the appropriate form on the Office of Fair Trading [website](#).

A fee is charged for the licence as detailed in Table 1. The fee varies with the licence. An irrigation tradesperson licence, which would be required to install irrigation systems, costs \$235 for three years plus an \$92 processing fee, a total of \$327.

⁵ <https://www.fairtrading.nsw.gov.au/trades-and-businesses/licensing-and-qualifications/plumbing,-draining-and-gasfitting>

New South Wales

Grant a licence	1 year fee (\$)	3 year fee (\$)	5 year fee (\$)	Processing fee (\$)
Building contractor licence	714	1337	2337	309
Trade or specialist contractor licence	326	649	999	158
Building qualified supervisor certificate	147	260	443	92
Trade or specialist work qualified supervisor certificate	140	235	406	92
Tradesperson certificate	115	154	266	96

Table 2 Licence fees applying in New South Wales

Queensland

Licensing authority

The [Queensland Building and Construction Commission](#) is the licensing body in Queensland.

The scope of work for the licence “water plumbing – irrigation licence” is defined as:

“Licence class Irrigation.

Scope of work

(1) Assess, select, and install irrigation equipment for various landscaping situations, including, for example, overhead, mini-sprinkle, dripper and pop-up sprinklers, irrigation systems, filters, timers, injectors, pressure pumps and pipe installations.

(2) Installing and commissioning solar heating systems for swimming pools.

(3) Incidental work of another class.

(4) However, the scope of work does not include personally carrying out any building work for which an occupational licence is required, unless the licensee holds an occupational licence.

Example. The installation, testing or commissioning of a non-return valve to a potable water supply cannot be carried out unless the licensee holds an occupational licence authorising the holder of the licence to carry out the work.”

Qualifications

Technical qualifications. The technical qualifications stated in the technical qualifications document for the licence class applied for. This is described in the Plumbing and Drainage Regulation 2003, current as of 1 July 2016, as:

- *“Water plumber—irrigation: qualifications: successful completion of a course approved by the QBCC commissioner*
- *practical experience: for each of the competencies in a course approved by the QBCC commissioner*
- *scope of work: water plumbing work restricted to irrigation”*

The details are published in the “Technical qualifications for licensing” publication by the Queensland Building and Construction Commission. It states for a restricted plumbing license for irrigation:

“Part 21 – Irrigation licence

Any one of the following—

(a) possession of a restricted water plumber—irrigation licence issued by the commissioner under the Plumbing and Drainage Act 2018.

(b) a recognition certificate as a qualified plumber and drainer.

(c) successful completion of Certificate III in Irrigation Technology AHC32419.

(d) successful completion of a course the commission considers is at least equivalent to a course mentioned in paragraphs (a) and (c).

(e) a qualification or statement of attainment of required competency for the class of licence.

Queensland

Applying for the licence

Applicants must complete the appropriate documentation and provide evidence of their qualifications and experience. Applicants must complete the QBCC application form: “RESTRICTED – WATER PLUMBER OCCUPATIONAL LICENCE APPLICATION”⁶

The following fees apply.

Application Fees

INCLUDING ADMINISTRATION FEE	1 Year	2 Years	3 Years	4 Years	5 Years
Plumber	\$219.55	\$297.75	\$375.90	\$454.05	\$532.20
Drainer	\$219.55	\$297.75	\$375.90	\$454.05	\$532.20
Combined Plumber AND Drainer	\$367.70	\$445.85	\$524.00	\$602.15	\$680.35
Restricted Licence	\$163.05	\$241.20	\$319.35	\$397.50	\$475.65
Provisional Plumber OR Provisional Drainer (1 year)	\$140.10	N/A	N/A	N/A	N/A
Combined Provisional Plumber AND Provisional Drainer (1 year)	\$208.80	N/A	N/A	N/A	N/A
Provisional Plumber AND Full Drainer (1 year)	\$288.20	N/A	N/A	N/A	N/A
NOT INCLUDING ADMINISTRATION FEE					
Plumber	\$148.15	\$226.35	\$304.50	\$382.65	\$460.80
Drainer	\$148.15	\$226.35	\$304.50	\$382.65	\$460.80
Combined Plumber AND Drainer	\$296.30	\$374.45	\$452.60	\$530.75	\$608.95
Restricted Licence	\$91.65	\$169.80	\$247.95	\$326.10	\$404.25
Provisional Plumber OR Provisional Drainer (1 year)	\$68.70	N/A	N/A	N/A	N/A
Combined Provisional Plumber AND Provisional Drainer	\$137.40	N/A	N/A	N/A	N/A
Provisional Plumber AND Full Drainer (1 year)	\$216.80	N/A	N/A	N/A	N/A

Renewal Fees

INCLUDING ADMINISTRATION FEE	1 Year	2 Years	3 Years	4 Years	5 Years
Licensees	\$149.55	\$227.70	\$305.85	\$384.05	\$462.25
Retired or employee of Registered Training Organisation	\$94.35	\$117.25	\$140.20	\$163.15	\$186.05
NOT INCLUDING ADMINISTRATION FEE					
Licensees	\$78.15	\$156.30	\$234.45	\$312.65	\$390.85
Retired or employee of Registered Training Organisation	\$22.95	\$45.85	\$68.80	\$91.75	\$114.65

Restoration Fees

INCLUDING ADMINISTRATION FEE	1 Year	2 Years	3 Years	4 Years	5 Years
Licensees	\$227.70	\$305.85	\$384.00	\$462.20	\$540.40
Retired or employee of Registered Training Organisation	\$172.50	\$195.40	\$218.35	\$241.30	\$264.20
NOT INCLUDING ADMINISTRATION FEE					
Licensees	\$156.30	\$234.45	\$312.60	\$390.80	\$469.00
Retired or employee of Registered Training Organisation	\$99.40	\$121.95	\$144.50	\$167.05	\$189.60

⁶ https://www.qbcc.qld.gov.au/sites/default/files/Occupational_Licence_Application_Restricted_-_Water_Plumber.pdf

Victoria

Licensing authority:

The [Victorian Building Authority](#) (VBA) is the authority which manages licences for “irrigation (non-agricultural) in Victoria.

To do plumbing work in Victoria, you must be one of the following:

1. licensed by the VBA
2. registered by the VBA (or have provisional registration) and working under the supervision of a licensed plumbing practitioner
3. in training under the supervision of a licensed plumbing practitioner.

The following information was taken from the VBA [website](#):

“A licensed plumber has a higher standard of knowledge and experience than a plumber who is registered or in training. They can issue a [compliance certificate](#) to consumers, to certify that their work complies with the relevant plumbing standards, codes, and regulations. And they hold insurance that protects the consumer in the case of defective plumbing work.

If you are not registered or licensed, then you face significant penalties for doing plumbing work.

You need to be registered or licensed in every class of plumbing work that you intend to do.

Victoria's Plumbing Regulations 2008 define eight main classes of plumbing work:

1. Drainage
2. Fire Protection
3. Gas fitting
4. Irrigation (Non-agricultural)
5. Mechanical Service
6. Roofing (Stormwater)
7. Sanitary
8. Water Supply (Victorian Building Authority, 2016)

The scope of work

Under Part 4 of the Plumbing Regulations 2018, Irrigation (non-agricultural) work is:

- a) the construction, installation, replacement, repair, alteration, maintenance, relining, testing or commissioning of any part of an irrigation system on a property from the connection point to the last valve controlling any pressurised zone in the system
- b) any design work that is incidental to, or associated with, any work described in the paragraph above.

Irrigation (non-agricultural) work does not include the construction, installation, replacement, repair, alteration, maintenance, relining, testing or commissioning of an irrigation system used for the purposes of agriculture.

Typical Irrigation (Non-agricultural) work

Non-agricultural irrigation plumbing involves installing irrigation systems that provide an artificial supply of water to parks, private and public gardens, and sporting grounds such as ovals and bowling greens. Experienced Irrigation plumbers typically do the following work (and more):

- Designing domestic irrigation systems
- Installing and commissioning irrigation systems
- Installing and commissioning domestic irrigation pumps
- Connecting irrigation systems from water supply connections.

What do Irrigation (non-agricultural) plumbers need to know and do?

Irrigation plumbers need critical knowledge and skills to ensure the reliable supply of water to land, without disrupting or contaminating other water sources. What does this mean for you?

As a registered practitioner, you must be able to understand and apply the compliance requirements of Irrigation (non-agricultural) plumbing work.

These requirements include:

- AS/NZS 3500.1 Plumbing and drainage Part 1: Water services
- AS/NZS 2845 Water supply backflow prevention devices – registered air gaps and registered break tanks.

To undertake Irrigation (non-agricultural) work to a safe and competent standard, you must also be able to:

- install trench support
- understand backflow prevention to ensure no cross-contamination or connection with water supply pipes
- understand key elements of design when designing domestic irrigation systems, including the range of sprinkler heads and systems
- test water pressure and flow rates, and the impact of different readings on irrigation system design
- read a site or building plan
- demonstrate you understand different classes of water that can be used for irrigation
- understand and identify the appropriate use of alternative water supplies for irrigation
- carry out oxy-acetylene welding, and know how to weld safely.

What competencies and experience do you need?

The VBA publishes a set of units of competency for each class of plumbing work. Each unit of competency describes a work outcome, all the knowledge and skills needed to do the work to the expected standard, and how they should be assessed.

The VBA uses the units of competency to assess your skills and experience if you apply to register in a class of plumbing work.

To be eligible to register in the Irrigation (non-agricultural) class, you must be able to show:

- you have the relevant competencies plus recent and relevant experience in work related to the Irrigation (non-agricultural) class of plumbing, or

- you have knowledge equal to the competencies for Irrigation (non-agricultural) work of Certificate II or higher, plus at least two years of experience while working under the supervision of a plumber who is licensed in Irrigation (non-agricultural) work.”

Before applying for registration or licensing, please read the current approved units of competency for Irrigation (non-agricultural) detailed in Tables 3 and 4. The Certificate III in Plumbing must include certain competencies, which are split between core and elective units. These are detailed in Table 3.

Common units - registration

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

Table 3 Core competencies required for restricted plumbing licence, Victoria

Class specific units - registration

Units are listed by unit group, then alphabetically by unit code.

Unit code	Unit name	Unit group
CPCPCM2054	Carry out simple concreting and rendering	Core
CPCPCM3023	Fabricate and install non-ferrous pressure piping	Core
CPCPCM3025	Install trench support	Core
CPCPWT3020	Connect and install storage tanks to a domestic water supply	Core
CPCPIG2021	Design domestic urban irrigation systems	Elective – group A
CPCPIG3021	Set out, install and commission irrigation systems	Elective – group A
CPCPIG3022	Install and commission domestic irrigation pumps	Elective – group A

Table 4 Class specific units of registration, Victoria

Applying for the license

Before applying for a licence applicants must meet the following conditions:

- You already hold VBA registration in that class.
- You meet the following work experience requirements:
 - Main classes: you meet the minimum work experience requirements for registration and have an additional two years of practical experience
 - Specialised classes: you hold a licence in the relevant parent class
 - Restricted classes: you have been registered in the restricted class for at least 12 months.
- You have successfully completed the following prescribed common licence Units of Competency:
 - BSBSMB401A Establish legal and risk management requirements of small business
 - CPCPCM4011A Carry out work based risk control processes
 - CPCPCM4012A Estimate and cost work

Victoria

- For each class you intend to apply for, you have successfully completed the applicable prescribed units.
- You feel confident that you would pass a VBA licence exam.
- You hold, or are eligible, to hold the required insurance.

The fees to apply for and maintain the licence are detailed on the VBA website (<https://www.vba.vic.gov.au/plumbing/fees>). The fees include an application fee, a registration fee, licence fees, renewal fees and examination fees. Applicants are advised to check for the current fees at the time of application.

South Australia

Licensing authority

The licensing authority for plumbing is the [Office of Consumer and Business Affairs](#).

South Australia no longer requires a restricted plumbing licence for irrigation work associated with drinking water supplies. However, all connections to mains water supplies must be done by a licensed plumber.

There is one exemption from the Plumbers, Gas Fitters and Electricians regulations which states:

“...plumbing consisting of the installation, alteration, repair, maintenance or disconnection of a cold-water pipe not exceeding 25 mm in diameter except where the pipe is in or on a building.”

It is important to note that this work can only be done downstream from the point of connection or isolation valve on the property. All other pipework is subject to the person performing work having the appropriate plumber's licence.

The Office of the Technical Regulator has issued Guidelines for Non-Drinking Water in South Australia and these Guidelines are in three parts:

Part 0: [Glossary of Terms, Abbreviations and References](#)

Part 1: [Infrastructure](#)

Part 2: [On-site Plumbing](#)

ACT

ACT

Licensing authority

The minister responsible is the Minister for Land and Environment and all licence applications are handled through the ACT [Department of Planning](#).

The scope of work for the licence “water plumbing irrigation”

The ACT has a licence category defined as an “irrigation plumber” who is a person who authorised for the “installation of irrigation networks and related equipment.”

The ACT Water and Sewerage Act 2000, the current applying legislation, defines irrigation as:

“irrigation means the supplying of water for—

- (a) growth, cooling, treating, humidifying and frost protection of vegetation; and
- (b) water replenishment of the soil.”

And an irrigation system as:

“irrigation system—

- (a) means the part of water supply pipework from a water network to outlets for irrigation; but
- (b) does not include part of a water network.”

Any irrigation system that is connected to the water supply network must comply with the backflow prevention clauses of the national plumbing code. The irrigation licence does not include in its scope direct connection to the “water network” unless the person has the appropriate qualifications and licence to install backflow prevention devices. There are six plumber licence (Figure 1).

In the ACT, plumbers, drainers and gasfitters must be licensed under the Construction Occupations (Licensing) Act 2004 and meet all the eligibility requirements.

Plumber licence classes

Each licence class has different scopes of work and may be subject to conditions. You need to know your class before applying.

Sanitary plumber

- Perform sanitary plumbing work without supervision.
- Not automatically authorised to perform backflow prevention testing. Find out how to apply for a backflow prevention testing endorsement.

Water supply plumber

- Perform water supply plumbing work without supervision.
- Includes work on fire sprinkler networks for class one and two buildings (residential buildings) only if the pipe work of the system is less than 25 mm in diameter.
- Not automatically authorised to perform backflow prevention testing. Find out how to apply for a backflow prevention testing endorsement.

Irrigation plumber

- Perform installation work on irrigation networks and related equipment.
- Not automatically authorised to perform backflow prevention testing. Find out how to apply for a backflow prevention testing endorsement.

Journey person plumber

- Perform sanitary plumbing work and water supply work under supervision of an individual with a sanitary plumber licence or water supply plumber licence (dependant on the class).
- Not automatically authorised to perform backflow prevention testing. Find out how to apply for a backflow prevention testing endorsement.

Fire sprinkler fitter

- Perform fire sprinkler work on a fire hydrant or fire hose connection point.
- Not automatically authorised to perform backflow prevention testing. Find out how to apply for a backflow prevention testing endorsement.

Journey person fire sprinkler fitter

- Perform fire sprinkler work on a fire hydrant or fire hose connection point under the supervision of an individual with a fire sprinkler fitter licence.
- Not automatically authorised to perform backflow prevention testing. Find out how to apply for a backflow prevention testing endorsement.

Figure 1 Plumber licence classes ACT.

The current qualifications requirements

The Construction, Environment and Workplace Protection Division of the ACT Government advised that an irrigation plumber is required to obtain the same qualifications as a “water supply plumber”. There are two methods which applicants can use to become qualified.

Method 1

Existing licence

The applicant holds:

- (or have previously held within 12 months prior to application) a Journey person Plumber licence or an interstate equivalent application if that licence was not, or is not, subject to a suspension or cancellation; and

Educational Qualification

The applicant holds:

- the following units of competency from the Certificate IV in *Plumbing and Services* within five (5) years prior to making the application:
 - CPCPWT4011B - *Design and size heated and cold water services and systems*; and
 - CPCBC4012B - *Read and interpret plans and specifications*; and

Plumbing Work Experience

The applicant has undertaken and can demonstrate:

ACT

c) not less than **1-year full time relevant practical plumbing work experience** in water supply plumbing carried out by the applicant while licensed as a Journeyman Plumber or interstate equivalent under the direct supervision of a licensed Water Supply Plumber or interstate equivalent.

Method 2

Formerly held licence

The applicants held:

a) a Water Supply Plumber Licence in the ACT within a 5-year period from the date of application that was not, or is not, the subject of cancellation or suspension.

A plumber who holds the class of water supply plumber licence allows the individual to carry out water supply plumbing work including fire sprinkler work for class 1 and 2 buildings in relation to pipework of 25mm diameter or less but does not include backflow prevention device test work within the meaning of section 3. This scope of work is outlined in the *Construction Occupations (Licensing) Regulation 2004* (Part 1.8)

Applying for the licence

All occupational licences issued in the ACT can be applied for on-line or in person through the Department of Planning [website](#).

To lodge the application over the counter the fee is \$250, or if submitted online \$228. If the application is successful the applicant will be sent a letter of offer and be asked to pay a term fee for either 1 year or 3 years.

Assessments of a licence application for an individual, company or partnership will take a minimum of four weeks for processing if the application is complete. If an application is incomplete, or a delegate requires more information or verification of experience, the assessment of an application can take considerably longer. More information requests will be sent to an applicant by email in the first instance.

Northern Territory, Tasmania, and Western Australia

The situation in these three jurisdictions is the same in that no irrigation licence exists within their respective plumbing regulations. The situation in all three is detailed in a Technical Note distributed by the WA Plumbers Licensing Board in July 2014. The relevant section of the note reads:

“Reticulation cut-ins (compliance certificates)

Licensed plumbing contractors are reminded that the installation of types B, C and D irrigation systems as set out in AS/NZS 3500.1:2003, section 7, currently require backflow protection on all occasions. Type B irrigation systems for domestic or residential buildings are considered a low hazard, Type C irrigation systems for commercial buildings a medium hazard and Type D irrigation systems for either domestic or residential and commercial buildings a high hazard. This means that the cutting in of a tee piece, installation of an isolating valve and required backflow prevention device requires the submission of a notice of intention to commence major plumbing work at least 24 hours before the work is done. The completed certificate of compliance for major plumbing work must be submitted within five working days after the major plumbing work is completed.

The garden reticulation installation referred to on the minor plumbing work compliance certificate (code 15) relates to Type A systems only where all permanently open outlets and piping are more than 150mm above finished ground level. No backflow prevention device is required in this situation and the work is considered minor plumbing work. Type A systems where all permanently open outlets are subject to ponding or backpressure, or which contain injection systems shall have the appropriate backflow device fitted and a major compliance certificate submitted. AS/NZS 3500.1:2003, Clause 4.6.2.1(d) does not allow backflow prevention devices to be buried in the ground. This means that those non-testable devices that are not required to be installed above the surrounding surface level (dual check valves) may be situated in a box below the surrounding surface. It should be noted that Clause 4.6.2(f) requires all inline devices to be installed with connections to permit the removal and replacement of the device.”

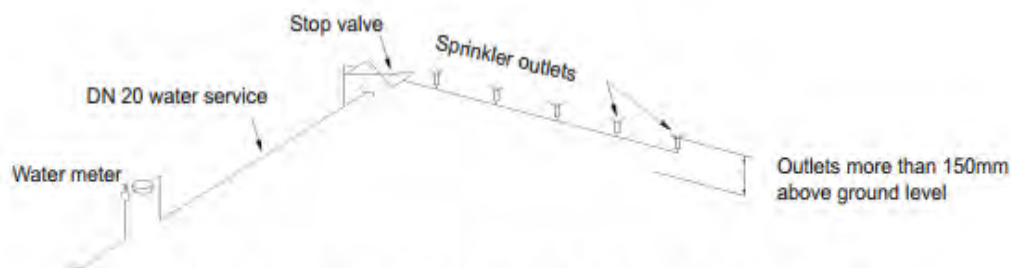


Diagram: Type A system domestic. No backflow device is required.

(WA Plumbers licensing Board, 2014)

In all situations in these jurisdictions where an irrigation system is installed that uses water supplied by an urban, residential water service provider the cut in and installation of the isolation valve, whether it is a backflow prevention device or not, can only be done by a licensed plumber. All work downstream from this point can be done by an irrigation installer.

Appendix 1 Irrigation systems as defined by AS/NZS3500.1

Section 7.2 System types

Irrigation systems including hose tap connected systems shall be categorised as one of the following types:

- a) *Type A systems - All permanently open outlets and piping more than 150 mm above finished ground level, not subject to ponding or back pressure and not involving injection systems. No backflow prevention required. (see figure 7.2A)*

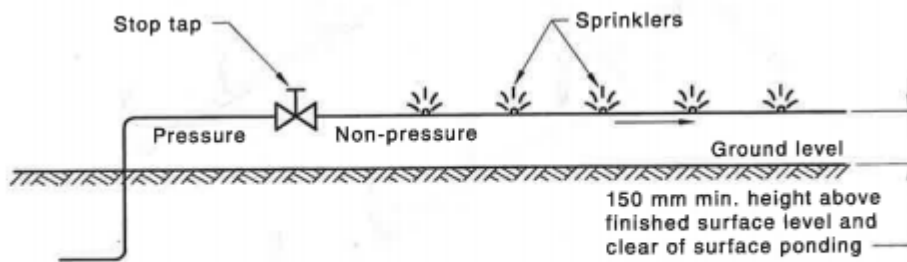
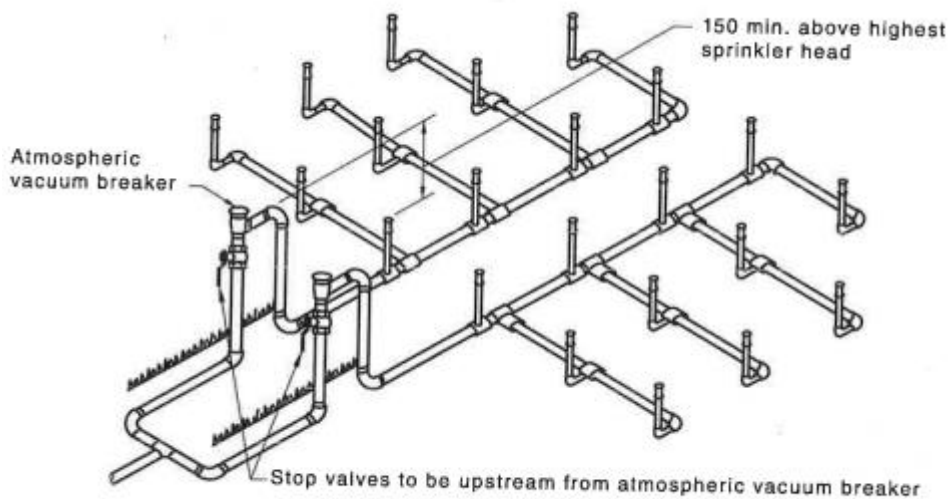
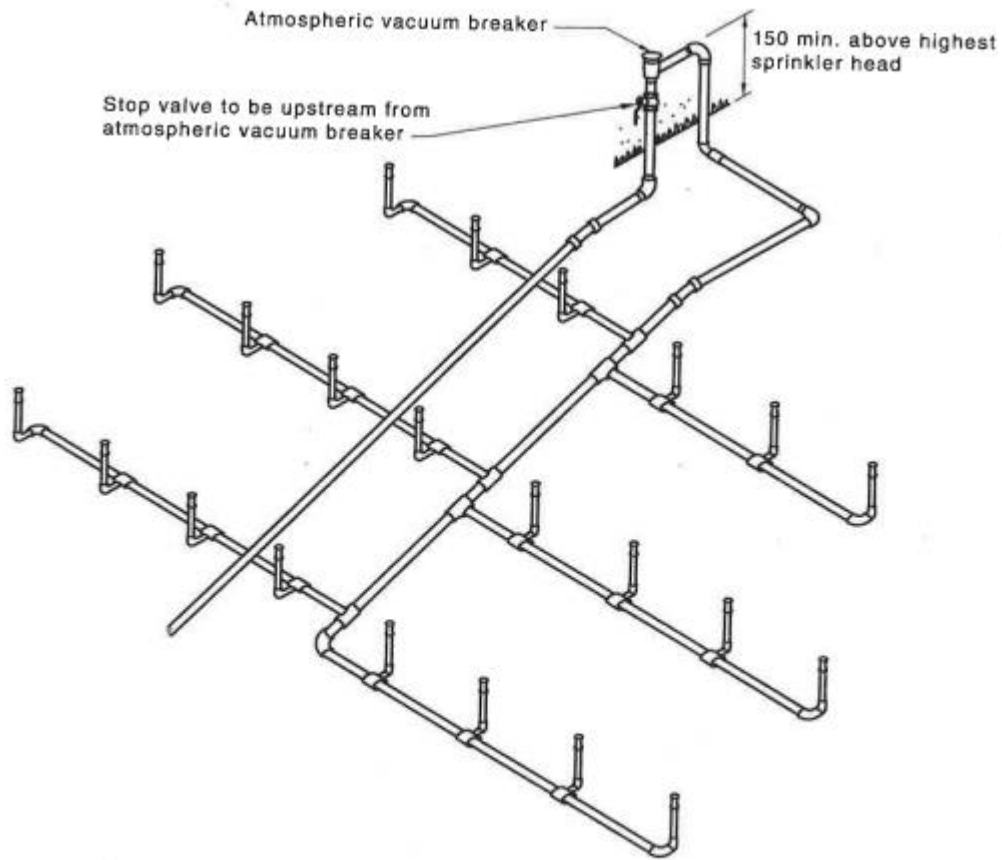


FIGURE 7.2(A) TYPE A SYSTEM—NO BACKFLOW PREVENTION REQUIRED

- b) *Type B systems – Irrigation systems in domestic or residential buildings with piping or outlets installed less than 150 mm above finished surface level and not involving injection systems (see figures 7.2B and 7.2C)*



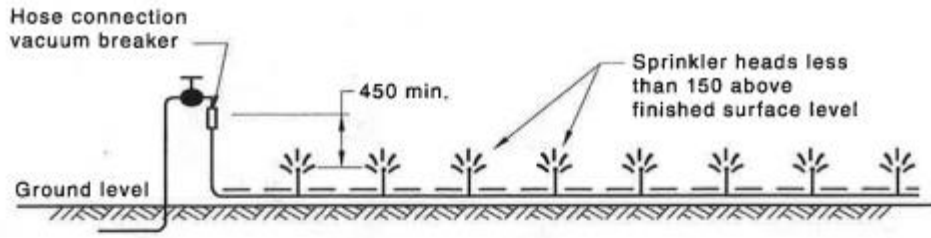
(i) Level terrain—Multi-zone system using atmospheric vacuum breaker



(ii) Hillside system using atmospheric vacuum breaker

DIMENSIONS IN MILLIMETRES

FIGURE 7.2(B) (in part) TYPE B SYSTEM—NON-TESTABLE DEVICES—NO BACK-PRESSURE



(iii) System using hose connection vacuum breaker

DIMENSIONS IN MILLIMETRES

FIGURE 7.2(B) (in part) TYPE B SYSTEM—NON-TESTABLE DEVICES—NO BACK-PRESSURE

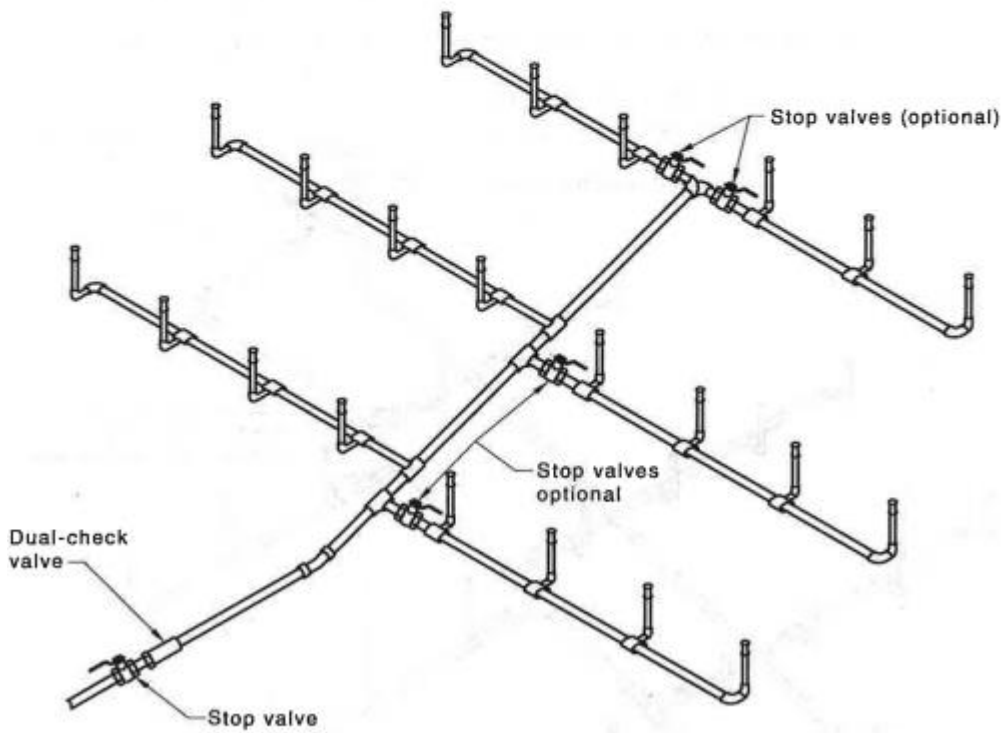


FIGURE 7.2(C) TYPE B SYSTEM—NON-TESTABLE DEVICES—SUITABLE FOR BACK-PRESSURE

c) *Type C systems – Irrigation systems in other than domestic or residential buildings with piping or outlets less than 150 mm above finished surface level and not involving injection systems (see figure 7.2D and F)*

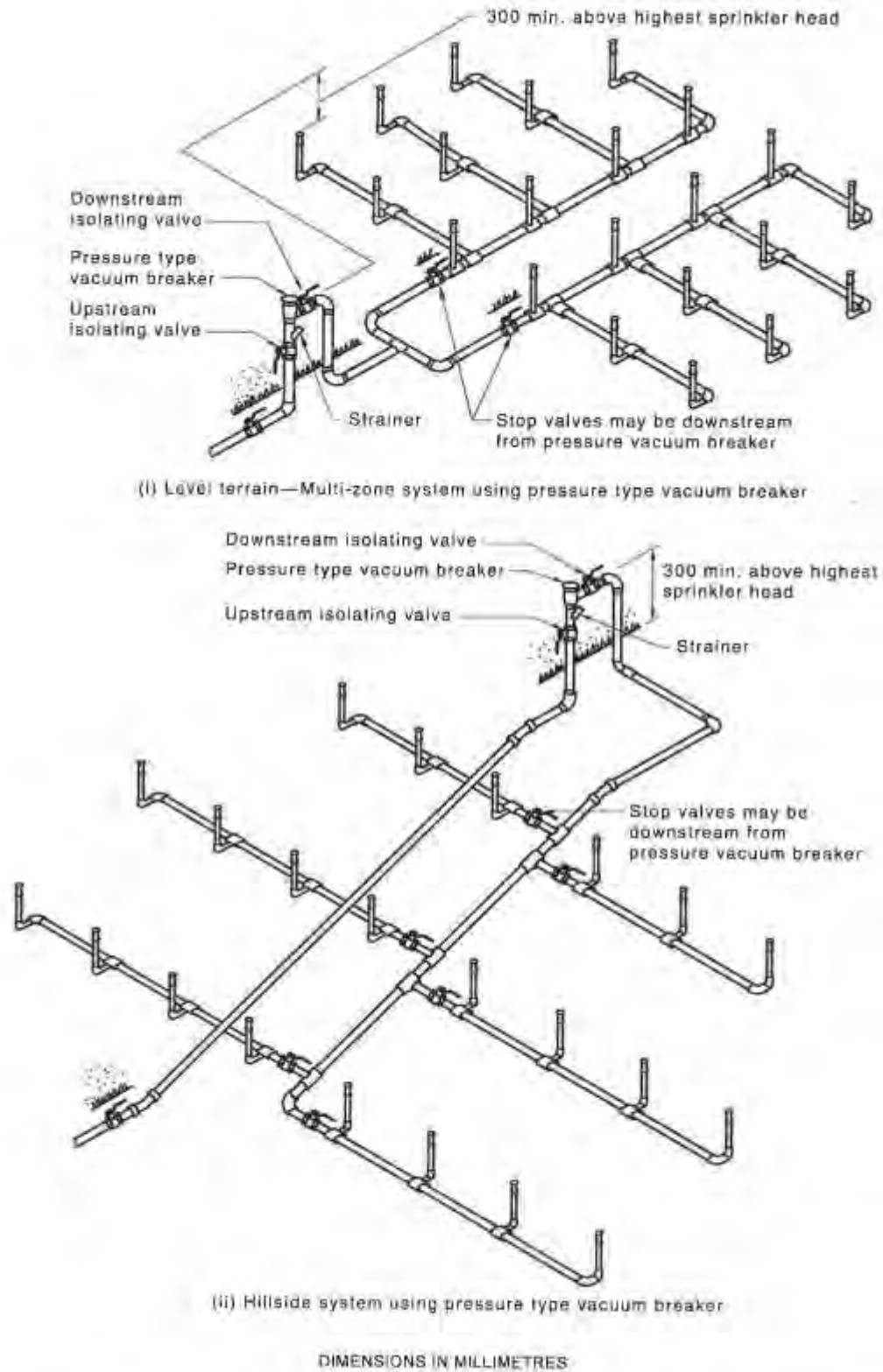


FIGURE 7.2(D) TYPE C SYSTEM—TESTABLE DEVICES—NO BACK-PRESSURE

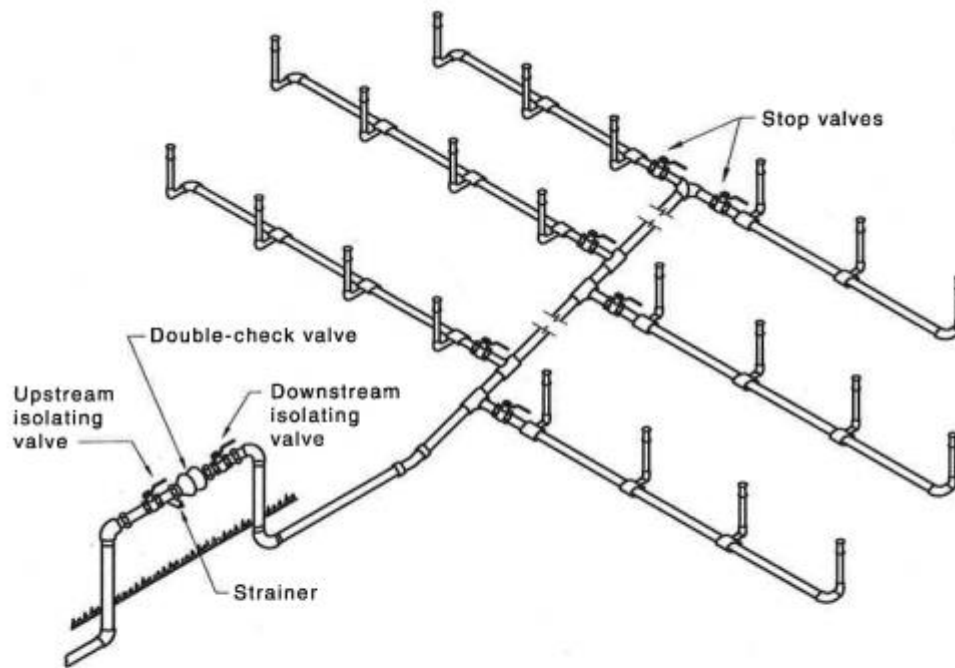


FIGURE 7.2(E) TYPE C SYSTEM—TESTABLE DEVICES SUBJECT TO BACK-PRESSURE OR NO BACK-PRESSURE FOR HILLSIDE OR MULTI-ZONE SYSTEM—DOUBLE CHECK VALVE ASSEMBLY

- d) *Type D systems - Irrigation systems where fertilizers, herbicides, nematicides or the like are injected or siphoned into the system (see figures 7.2 F and G)*

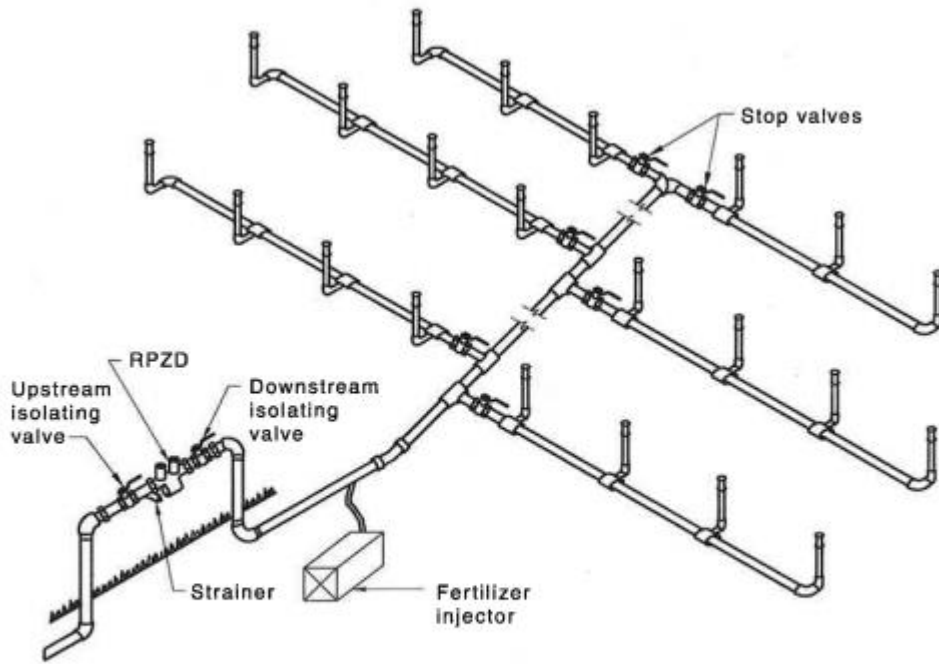


FIGURE 7.2(F) TYPE D SYSTEM—TESTABLE DEVICES SUBJECT TO BACK-PRESSURE OR NO BACK-PRESSURE FOR APPLICATIONS WITH CHEMICAL ADDITIVES—REDUCED PRESSURE ZONE DEVICE

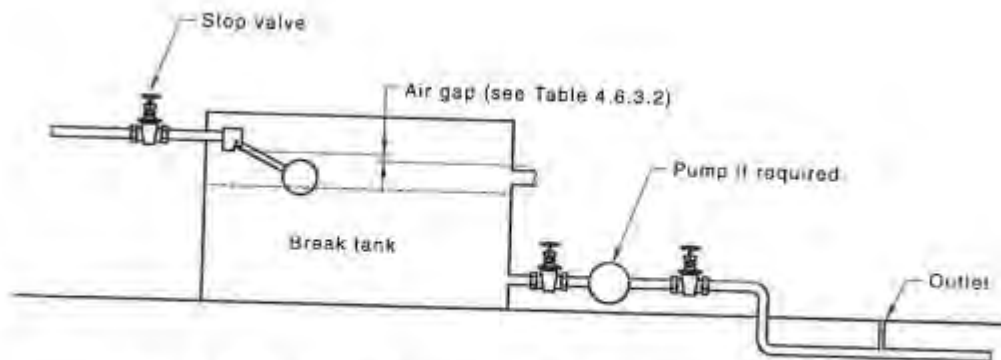


FIGURE 7.2(G) TYPE D SYSTEM—TYPICAL IRRIGATION SUPPLY THROUGH A REGISTERED BREAK TANK