

Comparison of Plumbing, Heating & Drainage Licensing Schemes across the world

	New Zealand	USA	Australia	Singapore	Hong Kong
1. Who has overall responsibility for your licensing scheme?	The Plumbers, Gasfitters and Drainlayers Board is responsible for licensing. The Board is a statutory body. It is funded entirely from fees and levy's imposed on the industry.	There is no one entity that is responsible for licensing. It is up to each individual state or local municipality	Plumbing is regulated on a state by state basis. In Victoria the Victorian Building Authority (VBA) is the statutory authority regulating plumbing.	The Public Utilities Board Singapore's National Water Agency.	The Water Supplies Department (WSD) of HK Government is responsible for a Qualified Person licensing scheme.
2. Does it cover individuals and businesses?	The scheme is an individual licensing regime.	Yes	This scheme is to register and licence individuals.	From 1 April 2018, only PUB Licensed Plumbers (LPs) licensed under this revised scheme are allowed to carry out water service and sanitary works.	It covers both
3. What qualifications and experience are required for an individual installer and is ongoing training required (say every 5 years)?	A plumber, gasfitter or drainlayer must complete an apprenticeship. For a plumber this takes four years. After the four years they must pass an exam. They can then become registered. They must then licence on an annual basis. They have an obligation to complete continuing professional development each year to maintain their licence. To reach the highest certifying level of registration they must spend two more years in the trade and then pass a second exam.	Plumbing and HVAC requires at least 4 years of classroom and on the job training. At the end of their 4th year they must pass an exam. They must pay an annual licencing fee (average \$300 for journeyman, \$500 for a master's license). Continuing education credits vary from state to state. (average about 8 hours per year). United Association(UA) is 5-year apprenticeship.	The requirements for becoming licensed or registered in Victoria are set out in Plumbing Regulations 2008. https://tinyurl.com/yb7t9l6x In most cases this involves completing a four year apprenticeship and obtaining the relevant Cert 3. Once completed the apprentice is required to sit a journeyman's exam. When passed the apprenticeship applicant can seek registration. This enables a plumber to work under supervision. To take technical responsibility for work and be unsupervised they must become licensed. This involves further study at Cert 4 level and takes a year part time.	Plumbers are required to complete the Building and Construction Authority's (BCA) Builder Certificate course in Plumbing and Pipe-Fitting (or equivalent qualifications). In addition, plumbers will also have to attend PUB's sanitary and/or water service plumbing course and pass an assessment.	There are 3 ways to be recognised as a Licensed Plumber (LP) awarded by WSD i) IVE Craft Certificate in Plumbing (3 years part time evening course or 2 years full time course. ii) C & G Certificate in Plumbing (there is no examination for the certificate in Hong Kong) iii) CIPHE full membership. IVE offers a part time training course which takes place over three months, the lecturers work for the WSD.

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4. What is the scope of work covered i.e. plumbing, heating, drainage, rainwater etc?	Plumbing and drainlaying are separate qualifications in New Zealand. Once a plumber has attained their qualification they can undertake plumbing and heating installation.	Plumbing is all sanitary, waste, vent, water, medical gas, natural gas and storm systems in all buildings that include residential, commercial and industrial. HVAC is the same in all buildings.	<p>The Regulations set out the classes of plumbing covered.</p> <p>Once an activity is regulated only a licensed or registered plumber can do that work.</p> <p>Plumbing work is defined as:</p> <ul style="list-style-type: none"> (a) backflow prevention work; (b) drainage work; (c) fire protection work; (d) gasfitting work; (e) irrigation (non-agricultural); (f) mechanical services work; (g) refrigerated air con work; (h) roofing (stormwater) work; (i) sanitary work; (j) type A appliance conversion; (k) type A appliance servicing; (l) type B gasfitting work; (m) type B gasfitting advanced; (n) water supply work. 	It covers those working on water services.	It covers mainly water supplies and hot water supply systems. LP is a technician and is responsible for the application and supervising duties throughout the project. Plumbing installers are trained by CITA and attain a worker license. They also undertake drainage work.
5. Does it cover domestic (residential), industrial & commercial activities?	The qualification covers all three.	Yes	<p>There are certain specialised classes (more study required) but in the main there is no distinction between residential, commercial or industrial.</p> <p>Gasfitting is an exception where further qualification is required to work on the non-domestic (Type B) appliances and installations.</p>	All works are covered.	All works are covered.

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6. Must all relevant (prescribed) work be notified?	Certain work must be consented to and inspected by the local authority.	Yes. All work must file a plan with appropriate fees before any work begins.	Section 12A Building Act sets out the requirements for a Compliance Certificate. https://tinyurl.com/yd6coqbn See 12A Division 4. The VBA conducts random audits of work completed under a Compliance Certificate.	Under the Sewerage and Drainage Act, QPs (Qualified Persons) or PEs (Professional Engineers) are required to submit detailed building plans to PUB for clearance related to any building and structural works. Prior PUB approval for the water fittings is not required but suppliers, retailers and installers shall ensure that the water fittings comply with the standards and requirements stipulated by PUB and that their installation and use in potable water service installations conform to the Public Utilities (Water Supply) Regulations and Singapore Standard CP48 : Code of Practice for Water Services.	Yes.
7. Who carries out the enforcement?	The Board disciplines incompetent plumbers as well as taking enforcement action against unlicensed plumbers.	Each government authority has staff that inspects and certifies that the work has been installed by licensed crafts.	VBA For practitioners they have options to warn, fine, issue notices, suspend or remove registration or licence. Civilians are prosecuted through our Magistrates Court.	The Public Utilities Board Singapore's National Water Agency.	WSD is responsible for water supplies and Building Department is for drainage inside the house boundary

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8. What are the sanctions for non-compliance?	An individual undertaking unlicensed plumbing can be fined up to \$10,000. (Approx 2 NZ \$ to £1)	Fines are levied to the installers and the contractors. No work can be installed until the fines are paid. Licenses can be revoked.	There are a range of sanctions and fines that can be issued by the VBA. Fines can be up to \$20,000 per offence for a person or \$60,000 for Corporations.	Fines can be up to \$10,000 or 12 months imprisonment. (Approx £5,500)	Licenses can be disqualified.
9. What are the costs of registration?	\$86 per annum as well as a disciplinary levy of \$271. So the total annual fee to be a plumber is \$357.	Average is \$300 for a journeyman license, Apprentice is \$100, and Master is \$500. Plan fees are based on fixtures on the job.	Registration (3 years) \$348.38. License (1 year) \$308.79.	There is a \$20 examination fee for new applicants. Under the Central Provident Fund CPF Act, the CPF Board requires all self-employed persons to pay Medisave contributions as long as they earn a yearly net trade income of more than \$6,000.	The annual fee is HK\$75. (Approx 10 HK\$ to £1)
10. Can the public carry out 'DIY' on their own homes without engaging licensed plumbers?	No.	Yes, only minor projects' but the still must have an inspector called to make sure it is done according to code.	Not if it falls within the definition of regulated plumbing. Very little does not.	Homeowners need to ensure that they employ only PUB Licensed Plumbers for their regulated water service and sanitary plumbing works.	Very little DIY takes place and as drawings would not have been submitted such work is under the radar of the WSD.