

Certified Installer Exam Blueprint

The Certified Installer (CI) Exam consists of 100 multiple choice questions related to the tasks needed to correctly add point-of-use and point-of-entry water treatment equipment to residential distribution systems and ensure the installations comply with any governing codes from the Authority Having Jurisdiction.

The tasks reflect the following domains:

Plumbing	31% of exam
Equipment	44% of exam
Regulatory	10% of exam
Safety	9% of exam
Water Problems	6% of exam

Exam Eligibility & Registration

Refer to the eligibility criteria listed for the CI title through instructor-led training paths and the Accelerated paths to certification on WQA's Professional Certification webpage, wqa.org/profcert. All paths include registration for one exam session.

Study Materials

The exam assumes a level of proficiency that draws on both field experience and basic knowledge of point-of-use/point-of-entry water treatment equipment installation. Use of the recommended study materials or completion of WQA's training courses does not guarantee success on the exam.

1. [WQA Online Knowledge Base](#)

The following WQA Online Knowledge Base articles and subsections and articles within them are recommended.



Installing Water Treatment Devices section
(all articles)

Understanding Water subsection (both
articles within)

Hydraulic Principles for Water Distribution
Systems

Water Distribution Systems and Pressure

Loss Considerations

Measuring Dynamic (Actual) Pressure

Hydraulic Principles for Water Distribution
Systems

Static vs. Dynamic Pressure

WQA members have complimentary access to the online [Knowledge Base](#) and may use that resource as study material for the exam.

2. WQA Instructor-Led Certified Installer Training course

The Certified Installer Training course is provided as a combination of live training over zoom, elearning homework, and field practice assignments. Refer to [WQA's Training page](#) and the [CI training path](#) for information about the course.

Personnel who have completed the Certified Installer Training course in full may request a one-time 90-day complimentary access to their learning path after registering for the exam. Access to the online Knowledge Base is included with the course. Please contact us at education@wqa.org to request the access extension.

3. Self-study Materials

The elearning content from the WQA Certified Installer course is available as a stand-alone purchase in the [Water Treatment Learning Center](#). Elearning activities serve as quizzes to highlight and reinforce learning of content in the Knowledge Base.

4. Certified Installer Proficiency Checklist

Use the checklist below to verify proficiency in the specified areas. Certification candidates with proficiency in these areas typically have greater success on the exam.



Certified Installer Candidate - Experiential Proficiency Checklist

How to use this checklist:

Below is the list of tasks a WQA Certified Installer is expected to be proficient in accomplishing. Use the 4 steps below to verify proficiency and, where needed, to develop and execute a training plan to ensure proficiency.

1. When determining the certification's candidate's eligibility for the exam, the candidate's employer or colleague holding a WQA CI title should review the checklist below and verify that the candidate is proficient in these tasks.
2. A training plan must be submitted for any tasks not marked "Proficient" with an estimate of how much practice will be needed and how proficiency will be judged
3. WQA recommends that the action plan for each task include the following three steps, as a minimum:
 - a) 3 ride alongs to watch the task be performed and explained, followed by
 - b) 7 supervised instances of the task being performed with the candidate explaining why the task is performed in the specific manner, and
 - c) 7 instances of independent performance of the task, each instance followed by a brief conversation with the supervisor to reflect on what went well, what could be improved, and how any problems were addressed

The hands-on activities in the MEP may be used to facilitate this process

Proficiency Level

<i>Proficient</i>	<i>Needs training</i>	<i>Hasn't done</i>	Task
			Knows local plumbing code regulations related to water treatment installations
			Knows local plumbing code regulations related to materials contacting potable water
			Proficient in leak-free pipe joining, proper pipe supports, and installation of treatment equipment in correct direction of flow
			Avoids excessive use of fittings
			Understands and implements appropriate cross-connection controls, backflow prevention & proper air gap design
			Uses appropriate drain line materials
			Correctly positions and secures drain line
			Knows the requirements in local regulations for draining to sanitary sewer vs. diverting waste
			Correctly identifies cold and hot water lines at an installation site
			Successfully installs water treatment equipment in the proper order
			Follows appropriate, company-established procedures if work order is incorrect
			Installs equipment in such a way as to alleviate any potential hazards from the installation process
			Insures onsite conditions are within equipment manufacturer's operating parameters

			Employs appropriate procedures to protect customer's property while on-site
			Maintains truck inventory appropriately to avoid lost time in having to return to the office to restock
			Correctly uses and maintains tools and test kits, including those requiring periodic calibration and adjustment
			Recognizes problems caused by reducing pipe size from distribution piping to treatment unit and fittings
			Recognizes if available sustained flow rate is sufficient for backwash operation
			Recognizes various water treatment equipment on sight and verifies against the work order
			Successfully completes field tests to verify installed equipment is performing correctly (to spec?)
			Correctly and accurately sets variables when programing equipment controls
			Properly trains customer on use and maintenance of treatment equipment
			Leaves the customer's site better/cleaner than when they found it
			Follows best practices for on-the-job safety
			Follows appropriate sanitary procedures