

**Kaua'i County Code**[Up](#)[Previous](#)[Next](#)[Main](#)[Collapse](#)[Search](#)[Print](#)[No Frames](#)[Title V BUILDING AND CONSTRUCTION REGULATIONS](#)**Chapter 14 PLUMBING CODE**

---

**Article 1. General Provisions**

---

**Sec. 14-1.1 Title and Purpose.**

---

- (a) Title. This Chapter shall be known as the “Plumbing Code,” may be cited as such, and will be referred to herein as “this Code.”
- (b) Purpose. The purpose of this Code is to provide for the protection of the public health and safety by establishing minimum regulations for the installation, alteration or repair of plumbing and drainage systems, and the inspection thereof. (Ord. No. 859, November 20, 2007; Ord. No. 951, October 14, 2013)

**Sec. 14-1.2 Scope.**

---

This Chapter sets forth minimum requirements for the design, installation, alteration, repair, and construction of plumbing and drainage systems, and shall apply to all new construction, relocation, alteration, repair, or reconstruction.

Exception: Plumbing work on building or premises owned by or under the direct control of the United States or the State of Hawai‘i.

Definitions. In this Chapter, unless the context otherwise requires:

“Chapter” means this Chapter.

“IAPMO” means the International Association of Plumbing and Mechanical Officials.

“Section” means a section of a Chapter of the Uniform Plumbing Code.

“UPC” means the Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials. (Ord. No. 859, November 20, 2007; Ord. No. 951, October 14, 2013; Ord. No. 1056, August 28, 219)

**Article 2. Adoption of the 2012 Uniform Plumbing Code and Amendments Thereto**

---

**Sec. 14-2.1 Adoption of the Uniform Plumbing Code.**

---

The “Uniform Plumbing Code, 2012 Edition,” including Appendices A, B, C, G, and I, and other portions of the Code only where specifically noted, as copyrighted and published by the International Association of Plumbing and Mechanical Officials, 4755 East Philadelphia Street, Ontario, CA 91761-2816, is incorporated by reference and made a part of this Chapter. This incorporation by reference includes all above-referenced parts of the Uniform Plumbing Code subject to the amendments hereinafter set forth.

The 2012 Uniform Plumbing Code Chapter 1, Administration, shall follow the provisions of Chapter 1 of the International Building Code, as amended, in Chapter 12 of the Kaua‘i County Code 1987, as amended, except for the following Sections:

**Section 105.2.1 Emergency Repairs.** Whenever it is necessary to make emergency repairs after normal working hours, on the weekend, or on holidays, the person doing the work shall apply for the proper permits at the Kaua'i County Building Division within two business days.

**Section 105.3.1.3 To Whom Plumbing Permits May Be Issued.** A plumbing permit is required to perform work covered by this Code and will be issued only to:

- (1) A Plumbing Contractor holding a valid unexpired license under HRS Chapter 444.
- (2) A firm, partnership, association, or corporation other than a plumbing contractor doing work that includes incidental and supplemental plumbing work as defined by HRS Chapter 444 and who has under its employment a plumber holding a valid unexpired license that complies with the provisions set forth in HRS Chapter 448E.
- (3) A Gas Utility Company for doing gas piping work.
- (4) County, Federal and State governments with agencies having under their employment a licensed plumber complying with the provisions set forth in HRS Chapter 448E.
- (5) An owner who performs plumbing work on his or her own building or structure in compliance with HRS Chapter 444 and provided such homeowner is holding a valid unexpired license under HRS Chapter 448E.
- (6) A person, firm, partnership, association or corporation holding a valid unexpired class "A" general engineering or class "C" specialty contractor license for work authorized by the provisions of HRS Chapter 444.

This does not preclude a homeowner who is licensed under HRS Chapter 448E to do plumbing maintenance work for buildings he or she owns.

Section 105.8 is amended by adding a second paragraph to read:

**Performance.** When required pursuant to HRS Chapter 448E, a licensed plumber holding a valid license in compliance with HRS Chapter 448E shall be at the site at all times during the performance, direction or supervision of any plumbing work that is authorized by a permit. The enforcement for compliance with HRS Chapter 444 and HRS Chapter 448E shall be the responsibility of the State of Hawai'i.

### Plumbing Permit Fees

For issuing each permit, an application fee of:	\$15.00
In addition:	
For each plumbing fixture or trap (including drainage and vent piping):	\$7.00
For installation, addition, alteration, demolition, removal and repair of each building sewer or building drainage system, including the first 50 feet of drain and sewer lines:	\$20.00
For each additional foot of drain and sewer lines thereof:	\$1.00
For each industrial waste, grease, sand or dirt interceptors and sewage ejector, including its trap and vent:	\$15.00
For installation, addition, alteration or repair of water piping and/or water treating equipment:	\$7.00
For vacuum breakers or backflow protective devices installed subsequent to the installation of the piping or equipment served:	\$15.00
For each vacuum breakers or backflow protective devices installed to hosebibbs:	\$7.00
For each lawn sprinkler system on any one valve including backflow protection devices therefor:	\$15.00

For each electric, oil, gas or solar water heater and/or vent:	\$7.00
For each new installation, addition, altering or repairing of gas piping system, house piping and/or exterior piping for lamps, luau torches and other misc. equipment:	\$15.00
For each gas appliance:	\$7.00
For medical gas piping first five inlet(s) or outlet(s):	
For a specific gas:	\$15.00
For each additional inlet or outlet:	\$2.00
For each swimming pool with drainage connection:	\$15.00
For any transferability of plumbing permit as herein provided, a transfer fee is required:	\$50.00
Reinspection fees assessed under provisions of Sec. 14-2.9:	\$50.00
For each foundation work only, the first:	
10 plumbing fixtures:	\$15.00
For each additional plumbing fixture:	\$2.00
For each gray water system:	\$15.00

The following paragraph of Section 203.0 is added after the definition of “Aspirator.”

“**Assistants** - Whenever the term “assistants” is used in this Code it shall be construed to mean the authorized representatives of the Administrative Authority.”

The following paragraph of Section 203.0 is added after the definition of “Authority Having Jurisdiction.”

“**Authorized Representatives** - When the term “Authorized Representatives” is used in this Code it shall be construed to mean all plumbing inspectors and their supervisors designated as subordinate officers to the Administrative Authority in the enforcement of this Code.”

The following paragraph is added before the definition of “Boiler Blowoff.”

“**Board** - The Board of Appeals as specified in Chapter 12, Building Code, Kaua‘i County Code 1987, as amended.”

The definition “Building Drain” is amended by deleting the words “two (2) feet (.6m)” and inserting in lieu thereof the words “five (5) feet (1.5m).”

Section 204.0 is amended to read as follows:

“**Building Drain** - That part of the lowest piping of a drainage system that receives the discharge from soil, waste, and other drainage pipes inside the walls of buildings and conveys it to the building sewer beginning five (5) feet (1,524 mm) outside the building wall.”

Section 205.0 is amended as follows:

“**County** - The County of Kaua‘i.”

Section 206.0 is amended as follows:

The following paragraph is added before the definition “Department Having Jurisdiction.”

“**Department** - The Department of Public Works of the County of Kaua‘i.”

The following paragraph is added following the definition of “Drainage System.”

“**Duly Licensed Plumber** - Any person licensed as a plumber under the provisions of Chapter 448E, Hawai‘i Revised Statutes.”

Section 210.0 is amended as follows:

The following paragraph is added after the definition of “Hangers.”

“**Health Officer** - Health Officer shall mean the Director of Health of the department of health, State of Hawai‘i, or the director’s authorized agent.”

Section 215.0 is amended as follows:

The following paragraph is added before the definition of “May.”

“**Maintenance Work** - The keeping in repair and operation of any plumbing installation, apparatus, fixtures, appliance or equipment.”

Section 218.0 is amended as follows:

The seventh paragraph of Section 218.0 is amended to read:

“**Person** - Any individual, firm, partnership, association, corporation or utility company including each and every owner of any whole or fractional interest in the property concerned, whether in fee, any lesser freehold or tenancy at will.”

The following paragraph is added before the definition of “Plumbing Fixture.”

“**Plumbing Contractor** - Any person that is licensed under the provisions of Chapter 444, Hawai‘i Revised Statutes, and possesses a valid unexpired and unrevoked license qualifying the contractor to perform plumbing work.”

The following paragraph is added after the definition of “Single-Family Dwelling.”

“**Single Stack Vent System** - A specially designed plumbing system wherein a common stack serves as a drainage pipe as well as a vent pipe.”

The following paragraph is added after the definition of “Standard.”

“**State** - The State of Hawai‘i.”

Section 310.4 is amended by deleting the last sentence: “Also, single-stack drainage and venting systems with unvented branch lines are prohibited.”

Section 312.2 is amended by changing the second sentence to read:

“No piping shall be directly embedded in concrete or masonry unless provisions are made to protect the piping from damage resulting from expansion, contraction and structural settlement.”

Section 312.3 is amended to read:

“**312.3** No building sewer or other drainage piping or part thereof, constructed of materials other than those approved for use under or within a building, shall be installed under or within five (5) feet (1.5m) of any building or structure, or less than one (1) foot (.3m) below the surface of the ground or as approved by the Administrative Authority.”

Section 313.8 is added to read:

“**313.8 Seismic Supports.** Where earthquake loads are applicable in accordance with the Building Code, plumbing piping supports shall be designed and installed for the seismic forces in accordance with the Building Code.”

Sections 403.1 through 403.4 Water-Conserving Fixtures and Fittings, and Section 408.2 (Showers) Water Consumption, are deleted in their entirety, and replaced with Section L 402 Water-Conserving Plumbing Fixtures and Fittings from Appendix L.

Section 403.5, Pre-Rinse Spray Valve, is amended to read:

“**403.5 Commercial Pre-Rinse Spray Valves.** The flow rate for a pre-rinse spray valve installed in a commercial kitchen to remove food waste from cookware and dishes prior to cleaning shall not be more than 1.3 gpm (0.08 L/s) at 60 psi (414 kPa). Where pre-rinse spray valves with maximum flow rates of 1.0 gpm (0.06L/s) or less are installed, the static pressure shall be not less than 30 psi (207 kPa). Commercial kitchen pre-rinse spray valves shall be equipped with an integral automatic shutoff.”

Sections 422.0 through 422.5, and Table 422.1 are deleted in their entirety, and replaced with Section 422.0 amended to read as follows:

“**422.0 Minimum Number of Required Fixtures.** Plumbing fixtures shall be provided for the type of building occupancy and in the minimum number required in Chapter 29 of the International Building Code.”

Section 604.11 is amended to read:

“**604.11 Lead Content.** The maximum allowable lead content in pipes, pipe fittings, plumbing fittings, and fixtures intended to convey or dispense water for human consumption shall be not more than a weighted average of 0.25 percent with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures. For solder and flux, the lead content shall be not more than 0.2 percent where used in piping systems that convey or dispense water for human consumption. Exceptions:

- (1) Pipes, pipe fittings, plumbing fittings, fixtures, or backflow preventers used for nonpotable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where the water is not used for human consumption.
- (2) Water closets, bidets, urinals, fill valves, flushometer valves, tub fillers, shower valves, service saddles, or water distribution main gate valves that are 2 inches (50 mm) in diameter or larger.”

Section 710.1 is amended to read as follows:

“**710.1** Multiple separate structures discharging building sewage into a public or private sewer or septic system which have flood level rims below the elevation of the next connecting structures’ flood rims; the drainage piping shall be protected from backflow by installing an approved backwater valve. Fixtures above such elevation shall not discharge through the backwater valve.”

Section 713.7, Installation, is amended to read as follows:

“**713.7 Permit Required.**

- (a) It shall be unlawful for any person to connect to or to aid another in connecting to, or to cause a connection to be made to, or to make use of, the public sewer system of the County of Kaua‘i without first having filed an application in writing and having obtained the written approval of the Division of Wastewater Management, Department of Public Works and the Administrative Authority.
- (b) Sewer Inspection. All installation of public sewer system connections, control devices or assemblies required by the Division of Wastewater Management shall receive all its certifications, tests, inspections and approvals from that division.”

Section 713.8 is added to read:

“**713.8** Building sewer construction shall conform to the requirements for main line sewers as set forth in the Sewer Ordinance, County of Kaua‘i, when either of the following conditions exist:

- (1) Where the Administrative Authority requires such construction because of the character or quantity of the sewage or industrial waste to be discharged.
- (2) Where the sewer construction is designed to be, or it is apparent that it may be dedicated to the County of Kaua‘i at this or any future time.”

Section 713.9 is added to read:

“**713.9** Sewer lateral connections shall be installed according to the Kaua‘i County Code-1987, Chapter 25, Sewers, Article 9, Laterals, Administration, Management and Construction.”

Section 715.1, Materials, is amended to read as follows:

“**715.1** The building sewer, beginning five (5) feet (1,524 mm) from any building or structure shall be of such materials as prescribed in this Code.”

Section 1101.11.1, Primary Roof Drainage, is amended to read as follows:

“**1101.11.1 Primary Roof Drainage.** Roof areas of a building shall be drained by roof drains or gutters. The location and sizing of drains and gutters shall be coordinated with the structural design and pitch of the roof. Unless otherwise required by the authority having jurisdiction, roof drains, gutters, vertical conductors or leaders, and horizontal storm drains for primary drainage shall be sized based on a storm of sixty (60) minutes duration and 100 year return period. Refer to the National Weather Service rainfall map for 100-year, 60-minute storms at various locations.”

Table 1401.1 is amended by adding the following three rows of information immediately after Standard Number SAE-J1670-2008, and immediately before TCNA A118.10-2011, as follows:

Standard Number	Standard Title	Application	Referenced Sections
State of Hawai‘i	State of Hawai‘i PUC Residential Solar Water Heating Systems Standards	Solar Water Heating Systems	Various
State of Hawai‘i – 2002	Water System Standards	Various	Various
State of Hawai‘i – Rev. Sept. 2000	Standard Details for Public Works Construction	Various	Various

(Ord. No. 951, October 14, 2013; Ord. No. 1056, August 28, 2019)

### **Article 3. Plumbing Work Within Special Flood Hazard Areas and Developments Adjacent to Drainage Facilities**

#### **Sec. 14-3.1 Applicability.**

- (a) General. The provisions contained herein are applicable to the construction of all new plumbing systems, renovations and major alterations, additions or reconstruction of existing plumbing systems within the special flood hazard area as delineated on the Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and any amendments by the Federal Emergency Management Agency, on file with the Department of Public Works, County of Kaua‘i. These provisions shall also apply to development drainage facilities outside the special flood hazard areas which are determined to be within a floodway area or a flood fringe area in accordance with Article 1, Chapter 15, of the Kaua‘i County Code 1987, as amended.
- (b) Existing Plumbing Systems, Any plumbing system thereof which was lawful before the effective date of the ordinance codified in this Article but which is not in conformity with the provisions of this Article may be continued subject to the provisions of Kaua‘i County Code 1987, as amended.
- (c) Exemptions. The provisions contained herein shall not apply:
- (1) To plumbing systems serving buildings and structures exempted from the special flood hazard area provisions under Article 1, Chapter 15, Kaua‘i County Code 1987, as amended.
  - (2) To plumbing systems serving building and structures which have been granted a Flood Hazard Variance under provisions of Article 1, Chapter 15, Kaua‘i County Code 1987, as amended. (Ord. No. 951, October 14, 2013)

#### **Sec. 14-3.2 Definitions.**

For the purpose of this Article, the following terms shall be as defined in Article 1, Chapter 15, Kaua‘i County Code 1987, as amended:

- (a) Base flood;
- (b) Base flood elevation;
- (c) Coastal high hazard area;
- (d) Flood or flooding;
- (e) Flood fringe area;
- (f) Floodway;
- (g) General flood plain area;

- (h) Lowest floor;
- (i) Special flood hazard area;
- (j) Tsunami. (Ord. No. 951, October 14, 2013)

### **Sec. 14-3.3 Drainage (Plumbing) Systems.**

---

- (a) Drainage systems that have openings below the base flood elevation shall be provided with an automatic backwater valve installed in each discharge line passing through a building exterior wall.
- (b) Drainage systems for emergency servicing facilities that are required to remain in operation during a flood shall be provided with a sealed holding tank and the necessary isolation and diversion piping and appurtenances to withhold or postpone sewage discharge to the sewer system during the flood. The holding tank shall be sized for storage of at least one hundred fifty percent (150%) of the anticipated demand for a twenty-four (24) hour period. Vents provided for such holding tank shall terminate at an elevation of at least one (1) foot above the base flood elevation.
- (c) All pipes in a plumbing vent system shall terminate at an elevation of at least one (1) foot above the base flood elevation.
- (d) All pipe openings through exterior walls below the base flood elevation shall be flood proofed to prevent infiltration of flood water through spaces between pipes and wall construction materials by use of imbedded collars, sleeves, water stops, or other means as may be approved by the administrative authority. (Ord. No. 951, October 14, 2013)

### **Sec. 14-3.4 Private Sewage Disposal/Treatment.**

---

Individual private sewage disposal systems or treatment facilities may be permitted in a special flood hazard area when design and location of such systems are approved by the Department of Health, State of Hawai'i. In addition to the Administrative Rules, Department of Health, State of Hawai'i, all such new and replacement sewage disposal systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters. (Ord. No. 951, October 14, 2013)

### **Sec. 14-3.5 Water Supply.**

---

Potable water supply systems that are located in a special flood hazard area or in other floodway or flood fringe area shall be designed and installed in such a manner as to prevent contamination from flood waters up to the base flood elevation. Location and construction of private water supply wells shall comply with rules and regulations of the Department of Water, County of Kaua'i.

- (a) Potable water supply tanks, filters, softeners, heaters, and all water-supplied appliances and fixtures shall be elevated above the base flood elevation. All vent pipes serving the water supply system shall terminate at an elevation of at least one (1) foot above the base flood elevation.
- (b) Backflow preventers or devices approved by the Department of Water shall be installed on water service lines as close to the property control valve as possible to protect the public water system from backflow or back siphonage of flood waters or other contaminants in the event of a line break. Devices shall be installed at accessible locations and shall be maintained in good working condition by the owner. The backflow preventers or devices shall be subject to periodic testing and inspection as prescribed in the Rules and Regulations of the Department of Water, County of Kaua'i.
- (c) An approved double check valve assembly shall be used in lieu of any vacuum breaker, permitted, or otherwise required under Article 4, when located below the base flood elevation.



- (d) Air relief valves are permitted on private pipelines only when installed at least one (1) foot above the base flood elevation. (Ord. No. 951, October 14, 2013)

### **Sec. 14-3.6 Plumbing Systems in Special Flood-Proofed Conditions.**

---

Plumbing piping under buildings constructed on stilts shall be securely anchored against lateral movement and flotation and protected against damage by flood water and debris. Protection shall be provided by the structural enclosure of such piping or by attaching such piping to the downstream side of structural members which are large enough to provide this protection. (Ord. No. 951, October 14, 2013)

## **Article 4. Energy Conservation**

---

### **Sec. 14-4.1 General Provisions.**

---

The purposes of this Article are to:

- (a) Set minimum requirements for the energy-efficient design of new buildings so that they may be constructed, operated, and maintained in a manner that minimizes the use of energy without constraining the building function or the comfort or productivity of the occupants; and
- (b) Provide criteria for energy-efficient design and provide methods for determining compliance with these criteria. (Ord. No. 951, October 14, 2013)

### **Sec. 14-4.2 Applicability.**

---

All plumbing requirements and criteria of Article 6, Chapter 12, Building Code, Kaua'i County Code 1987, as amended, relating to Energy Conservation, shall be part of this Code. These requirements shall be inspected and enforced as part of the Plumbing Code. (Ord. No. 951, October 14, 2013)

### **Sec. 14-4.3 Solar Energy System.**

---

- (a) Solar Energy Collectors. Collectors that function as plumbing components shall comply with the applicable provision of this Code and other pertinent ordinances.

Collectors located above or upon a roof and functioning as a building component shall not reduce the required fire-resistance or fire-retardancy classification of the roof covering materials as required in the Building Code.

- (b) Permit Required. No person shall install any solar energy system on any premises, building, or structure within the County, or cause the foregoing to be done, without first obtaining a solar energy permit, issued under the authority of this Section.
- (c) Plans and Specifications. Plans, specifications and other data shall be submitted as required in Sec. 103.2.2 of the Uniform Plumbing Code.
- (d) Permit Issuance. The issuance of the permit and fees shall be in accordance with the requirements set forth in Chapter 12, Building Code, Kaua'i County Code 1987, as amended, regarding solar energy system.

- (e) Definitions. The following definitions shall be used to provide ordinarily accepted meanings to the following terms which are not specifically defined in this Code:

Solar Energy Collectors. A collecting device or array panel used to absorb energy from the sun.

Solar Energy System. Any configuration of equipment and components used to collect, convey, store and convert the sun's energy for a purpose.

Solar Water Heating System. Any configuration of equipment and components assembled to collect, convey, store and convert the sun's energy primarily to supply hot water. (Ord. No. 951, October 14, 2013)

---

View the [mobile version](#).