

interval between the discharge events of the water reservoir shall be set to 6 hours or greater of cooler operation. Continuous discharge or continuous bleed systems shall be prohibited.

703.9.4 Discharge water reuse. Discharge water shall be reused where appropriate applications exist on site. Where a nonpotable water source system exists on site, evaporative cooler discharge water shall be collected and discharged to such collection system.

Exception: Where the reservoir water will adversely affect the quality of the nonpotable water supply making the nonpotable water unusable for its intended purposes.

703.9.5 Discharge water to drain. Where discharge water is not required to be recovered for reuse, the sump overflow pipe shall not directly connect to a drain. Where the discharge water is discharged into a sanitary drain, an air gap of not less than 6 inches (150 mm) shall be required between the termination of the discharge pipe and the drain opening. The discharge pipe shall terminate in a location that is readily visible to the building owners, tenants or maintenance personnel.

SECTION 704

WATER TREATMENT DEVICES AND EQUIPMENT

704.1 Water softeners. Water softeners shall comply with Sections 704.1.1 through 704.1.4.

704.1.1 Demand-initiated regeneration. Water softeners shall be equipped with demand-initiated regeneration control systems. Such control systems shall automatically initiate the regeneration cycle after determining the depletion, or impending depletion of softening capacity.

704.1.2 Water consumption. Water softeners shall have a maximum water consumption during regeneration of 5 gallons (18.9 L) per 1000 grains (17.1 g/L) of hardness removed as measured in accordance with NSF 44.

704.1.3 Waste connections. Waste water from water softener regeneration shall not discharge to reclaimed water collection systems and shall discharge in accordance with the *Plumbing Code*.

704.1.4 Efficiency and listing. Water softeners that regenerate in place, that are connected to the water system they serve by piping not exceeding 1 $\frac{1}{4}$ inches (31.8 mm) in diameter, or that have a volume of 3 cubic feet (0.085 m³) or more of cation exchange media shall have a rated salt efficiency of not less than 4,000 grains of total hardness exchange per pound of salt (571 g of total hardness exchange per kg of salt), based on sodium chloride equivalency and shall be listed and labeled in accordance with NSF 44. All other water softeners shall have a rated salt efficiency of not less than 3,000 grains of total hardness exchange per pound of salt (429 g of total hardness exchange per kg of salt), based on sodium chloride equivalency.

704.2 Reverse osmosis water treatment systems. Point-of-use reverse osmosis treatment systems shall be listed and labeled in accordance with NSF 58. Point-of-use reverse osmosis systems shall be equipped with an automatic shutoff valve that prevents the production of reject water when there is no demand for treated water.

704.3 Onsite reclaimed water treatment systems. Onsite reclaimed water treatment systems shall be listed and labeled to NSF 350. These systems shall include gray water, rainwater, and other nonpotable water reuse treatment systems and waste water treatment systems used to produce nonpotable water for water closet and urinal flushing, surface irrigation and similar applications.

SECTION 705 METERING

705.1 Metering. Water consumed from any source associated with the building or building site shall be metered. Each potable and reclaimed source of water, and each onsite nonpotable water source, shall be metered separately. Meters shall be installed in accordance with the requirements of the *Plumbing Code*. For the purposes of Section 705.1.1, each meter identified in Table 705.1.1 shall be capable of communicating water consumption data remotely and at a minimum, be capable of providing daily data with electronic data storage and reporting capability that can produce reports that show daily, monthly, and annual water consumption.

705.1.1 Metering. All potable and nonpotable water supplied to the applications listed in Table 705.1.1 shall be individually metered in accordance with the requirements indicated in Table 705.1.1. Similar appliances and equipment shall be permitted to be grouped and supplied from piping connected to a single meter.

SECTION 706 [RESERVED]

SECTION 707 [RESERVED]

SECTION 708 [RESERVED]

SECTION 709 [RESERVED]

SECTION 710 [RESERVED]

**TABLE 705.1.1
METERING REQUIREMENTS**

APPLICATION	REQUIREMENTS
Irrigation	Irrigation systems that are automatically controlled shall be metered.
Tenant spaces	Tenant spaces that are estimated to consume over 1000 gallons of water per day shall be metered individually.
Onsite water collection systems	The makeup water lines supplying onsite water collection systems shall be metered.
Ornamental water features	Ornamental water features with a permanently installed water supply shall be required to utilize a meter on makeup water supply lines.
Pools and in-ground spas	Indoor and outdoor pools and in-ground spas shall be required to utilize a meter on makeup water supply lines.
Cooling towers	Cooling towers of 100 tons capacity or greater or groups of towers shall be required to utilize a meter on makeup water and blow-down water supply lines.
Steam boilers	The makeup water supply line to steam boilers anticipated to draw more than 100,000 gallons annually or having a rating of 500,000 Btu/h or greater shall be metered.
Industrial processes	Industrial processes consuming more than 1,000 gallons per day on average shall be metered individually.
Evaporative coolers	Evaporative coolers supplying in excess of 0.6 gpm, on average, makeup water shall be metered.
Fluid coolers and chillers	Water-cooled fluid coolers and chillers that do not utilize closed-loop recirculation shall be metered.
Roof spray systems	Roof spray systems for irrigating vegetated roofs or thermal conditioning shall be metered.

For SI: 1 gallon = 3.8 L, 1 gallon per minute = 3.8 Lpm, 1 ton = 12,000 Btu, 1 British thermal unit per hour = 0.00029 kWh.

