

## CHAPTER 7

# WATER RESOURCE CONSERVATION, QUALITY AND EFFICIENCY

### SECTION 701 GENERAL

**701.1 Scope.** The provisions of this chapter shall establish the means of conserving water, protecting water quality and providing for safe water consumption.

### SECTION 702 FIXTURES, FITTINGS, EQUIPMENT AND APPLIANCES

**702.1 Fitting and fixture consumption.** Fixtures shall comply with Table 702.1.

**TABLE 702.1  
MAXIMUM FIXTURE AND FITTING FLOW RATES  
FOR REDUCED WATER CONSUMPTION**

FIXTURE OR FIXTURE FITTING TYPE	MAXIMUM FLOW RATE
Showerhead <sup>a</sup>	2.0 gpm and WaterSense labeled
Lavatory faucet and bar sink—private	1.5 gpm and WaterSense labeled
Lavatory faucet—public (metered)	0.25 gpc <sup>b</sup>
Lavatory faucet—public (nonmetered)	0.5 gpm
Kitchen faucet—private	1.8 gpm
Kitchen and bar sink faucets in other than dwelling units and guestrooms	1.8 gpm
Urinal	0.5 gpf and WaterSense labeled or nonwater urinal
Water closet—public	1.28 gpf average <sup>c</sup>
Water closet—tank type, private	1.28 gpf and WaterSense labeled <sup>c</sup>
Water closet—flushometer type, private	1.28 gpf
Prerinse spray valves	1.3 gpm and WaterSense labeled
Drinking fountains (manual)	0.7 gpm
Drinking fountains (metered)	0.25 gpc <sup>b</sup>

For SI: 1 foot = 304.8 mm, 1 gallon per cycle (gpc) = 3.8 Lpc, 1 gallon per flush (gpf) = 3.8 Lpf, 1 gallon per minute (gpm) = 3.8 Lpm.

- Includes hand showers, body sprays, rainfall panels and jets. Showerheads shall be supplied by automatic compensating valves that comply with ASSE 1016 or ASME A112.18.1/CSA B125.1 and that are specifically designed to function at the flow rate of the showerheads being used.
- Gallons per cycle of water volume discharged from each activation of a metered faucet.
- The effective flush volume for a dual-flush water closet is defined as the composite, average flush volume of two reduced flushes and one full flush.

**702.2 Combination tub and shower valves.** Tub spout leakage from combination tub and shower valves that occurs when the outlet flow is diverted to the shower shall not exceed 0.1 gpm, measured in accordance with the requirements of ASME A112.18.1/CSA B125.1.

**702.3 Food establishment prerinse spray valves.** Food establishment prerinse spray valves shall have a maximum flow rate in accordance with Table 702.1 and shall shut off automatically when released.

**702.4 Drinking fountain controls.** Drinking fountains equipped with manually controlled valves shall shut off automatically upon the release of the valve. Metered drinking fountains shall comply with the flow volume specified in Table 702.1.

**702.5 Nonwater urinal connection.** The fixture drain for nonwater urinals shall connect to a branch drain that serves one or more lavatories, water closets or water-using urinals that discharge upstream of such urinals.

**702.6 Appliances.** Sections 702.6.1 through 702.6.4 shall regulate appliances that are not related to space conditioning.

**702.6.1 Clothes washers.** Clothes washers of the type in the ENERGY STAR program as defined in “ENERGY STAR® Program Requirements, Product Specification for Clothes Washers, Eligibility Criteria,” shall have a water factor (WF) not exceeding 6.0 and a *modified energy factor* (MEF) of not less than 2.0.

**702.6.2 Ice makers.** Ice makers producing cubed-type ice shall be ENERGY STAR qualified as commercial ice machines. Ice makers of a type not currently ENERGY STAR qualified, such as flake, nugget or continuous-type ice makers, shall not exceed the total water use of 25 gallons per 100 pounds (208 L per 100 kg) of ice produced.

**Exception:** Under counter ice makers.

**702.6.3 Steam cookers.** Steam cookers with drain connections shall consume no more than 5 gal (18.9 L)/hour/pan, and those without drain connections shall consume no more than 2 gal (7.6 L)/hour/pan.

**702.6.4 Dishwashers.** Dishwashers shall be ENERGY STAR qualified where an ENERGY STAR category exists for the specific dishwasher type. Where an ENERGY STAR category does not exist, the dishwasher shall be in accordance with Table 702.6.4.

**TABLE 702.6.4  
MAXIMUM WATER CONSUMPTION  
FOR COMMERCIAL DISHWASHERS**

DISHWASHER TYPE	MAXIMUM WATER CONSUMPTION
Rackless conveyor	2.2 gallons per minute
Utensil washer	2.2 gallons per rack

For SI: 1 gallon per minute = 3.785 Lpm.

**702.7 [Reserved]**

**702.8 Efficient hot and tempered water distribution.** Hot and tempered water distribution shall comply with either the maximum pipe length or maximum pipe volume limits in this section. Hot and tempered water shall be delivered to the outlets of individual showers, combination tub-showers, sinks,