



SECTION 31

WATER EFFICIENCY REQUIREMENTS

These regulations identify the types of water efficiency requirements for water service and the procedure for notification to Applicants that water efficiency measures are required.

A. DETERMINATION OF FEASIBILITY OF WATER EFFICIENCY MEASURES

The District will review applications for new standard services and determine the applicability of, and compliance with, water-efficiency requirements. Applicants for expanded service may be required to retrofit existing water service facilities or uses to comply with these requirements. Applicant shall maintain design documents and construction and installation records and furnish a copy of said documents and records to the District upon request. The District may inspect the installation of water efficiency measures to verify that the items are installed and performing to the required water use levels. The Applicant or their representative may be present during any District inspection.

B. WATER EFFICIENCY REQUIREMENTS FOR NEW DEVELOPMENT OR EXPANDED SERVICE

Water service shall not be furnished to any Applicant for new or expanded service unless all the applicable water-efficiency measures hereinafter described in this Section 31 are installed at Applicant expense.

C. RESIDENTIAL SERVICE

1. Indoor Water Use (All Applicants)

- a. Toilets shall be high-efficiency or dual flush models rated and (third party) tested at a maximum average flush volume of 1.28 gallons per flush (gpf), and be certified as passing a 350 gram or higher flush test as established by the Uniform North American Requirements or other District-accepted third party testing entity. No flush or conversion devices of any other kind shall be accepted.
- b. Showerheads shall be individually plumbed and have a maximum rated flow of 2.5 gallons per minute or less and be limited to one showerhead per shower stall of 2,500 sq. inches in area or less. Installation of flow restrictors in existing showerheads does not satisfy this requirement.
- c. Lavatory faucets shall have aerators or laminar flow control devices (i.e. orifices) with a maximum rated flow of 1.5 gallons per minute or less.
- d. Kitchen faucets shall have aerators or laminar flow control devices (i.e. orifices) with a maximum rated flow of 2.2 gallons per minute or less.



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- e. Clothes washing machines shall be front loading horizontal axis or top loading models with both: (1) a water factor rating of 7.5; and (2) a maximum average water use of 7.5 gallons per cubic foot of laundry or less.

2. Outdoor Water Use (All Applicants, except as noted below.)

a. Landscaping.

- i. Plans shall be submitted to the District for review and approval by District for compliance with these Regulations prior to planting. Landscaping shall be designed to be irrigated at no more than 80% of the reference evapotranspiration (the amount of water required to maintain a healthy landscape accounting for the evaporation of water from the soil surface and the transpiration of water through the plant foliage) for the irrigated area. Applicants with less than three residential units shall be required to complete a check list in lieu of a detailed landscaping plan.
- ii. Turf areas shall be limited to no more than 25% of the total irrigated area. Exceptions may be granted in the sole discretion of the District when using drought tolerant grasses and for approved recreational areas. Turf is not permitted in areas or medians less than eight feet in width. These provisions do not apply to applicants with less than three residential units.
- iii. Non-turf areas. At least 80% of the plant selection shall be native or climate-appropriate low water use species and require minimal water once established. Up to 20% of the plants may be of a non-drought tolerant variety as long as they are appropriately grouped together and irrigated separately and efficiently.

b. Irrigation.

- i. Irrigation Efficiency. Irrigation systems shall be designed and installed to avoid overspray and runoff and be operated at no more than 80% of the reference evapotranspiration (the amount of water required to maintain a healthy landscape accounting for the evaporation of water from the soil surface and the transpiration of water through the plant foliage) for the irrigated area. These provisions do not apply to applicants with less than three residential units.

Automatic, self-adjusting irrigation controllers shall be required on all irrigation systems and shall automatically activate and deactivate the irrigation system based on changes in the climate and soil moisture. All automatic irrigation systems shall be equipped with a rain sensor shutoff(s). Applicants with less than three residential units are not required to install weather-based controllers.



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- ii. Overhead sprinklers and spray heads shall not be permitted in areas less than eight feet wide. All sprinklers shall have matched precipitation rates within each control valve and circuit. Landscape design best practices shall include distribution uniformity, head-to-head spacing and setbacks from walkways and pavement.
 - iii. Valves and circuits shall be separated (individual hydrozones) based on plant material and water need.
 - iv. Dedicated Irrigation Meter shall be required for irrigated landscaping of 5,000 square feet or more.
- c. Swimming Pools and Spas.
- i. Covers shall be required for all pool and spa water features.

D. NONRESIDENTIAL SERVICE (including Residential Common Area)

1. Indoor Plumbing

- a. Toilets shall be high-efficiency or dual flush models rated and (third-party) tested at a maximum average flush volume of 1.28 gallons per flush (gpf), and be certified as passing a 350 gram or higher flush test as established by the Uniform North American Requirements or other District-accepted third party testing entity. Pressure-assisted type toilets shall be high-efficiency rated at a maximum 1.0 gpf. No flush or conversion devices of any other kind shall be accepted.
- b. Urinals shall have a maximum rated flow of 0.5 gpf or less, or be zero water consumption urinals.
- c. Showerheads shall be individually plumbed and have a maximum rated flow of 2.5 gallons per minute or less, and be limited to one showerhead per shower stall of 2,500 sq. inches in area or less. Installation of flow restrictors in existing showerheads does not satisfy this requirement.
- d. Lavatory faucets shall have aerators or laminar flow control devices (i.e. orifices) with a maximum rated flow of 1.5 gallons per minute or less.
- e. Kitchen faucets shall have aerators or laminar flow control devices (i.e. orifices) with a maximum rated flow of 2.2 gallons per minute or less.



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- f. Laundry washing machines shall be front loading horizontal axis or top loading models with both: (1) a water factor rating of 7.5; and (2) a maximum average water use of 7.5 gallons per cubic foot of laundry or less.
- g. Cooling towers not utilizing recycled water shall be equipped with recirculating systems and operate at a minimum of five (5) cycles of concentration. Newly constructed cooling towers shall be operated with conductivity controllers, as well as make up and blowdown meters.
- h. Food steamers in all food service facilities shall be boiler less or self-contained models where applicable.
- i. Ice machines shall be air-cooled or use no more than 25 gallons of water per 100 pounds of ice and shall be equipped with a recirculating cooling unit.
- j. Commercial refrigeration shall be air-cooled or if water-cooled, must have a closed looped system. No once through, single pass systems are permitted.
- k. Pre-Rinse Dishwashing Spray Valves shall have a maximum rated flow of 1.6 gpm or less.
- l. Vehicle wash facilities shall reuse a minimum of 50% of water from previous vehicle rinses in subsequent washes.

2. Outdoor Water Use

- a. Landscaping.
 - i. Plans shall be submitted to the District for review and approval by District for compliance with these Regulations prior to planting. Landscaping shall be designed to be irrigated at no more than 80% of the reference evapotranspiration (the amount of water required to maintain a healthy landscape accounting for the evaporation of water from the soil surface and the transpiration of water through the plant foliage) for the irrigated area.
 - ii. Turf areas shall be limited to no more than 25% of the total irrigated area. Exceptions may be granted in the sole discretion of the District when using drought tolerant grasses and for approved recreational areas such as sports fields, parks and picnic grounds. Turf is not permitted in areas or medians less than eight feet in width.



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- iii. Non turf areas. At least 80% of the plant selection shall be native or climate-appropriate low water use species and require minimal water once established. Up to 20% of the plants may be of a non-drought tolerant variety as long as they are appropriately grouped together and irrigated separately and efficiently.
- b. Irrigation.
 - i. Irrigation Efficiency. Irrigation systems shall be designed and installed to avoid overspray and runoff and be operated at no more than 80% of the reference evapotranspiration (the amount of water required to maintain a healthy landscape accounting for the evaporation of water from the soil surface and the transpiration of water through the plant foliage) for the irrigated area.
 - ii. Automatic, self-adjusting irrigation controllers shall be required on all irrigation systems and shall automatically activate and deactivate the irrigation system based on changes in the climate or soil moisture. All automatic irrigation systems shall be equipped with a rain sensor shutoff(s).
 - iii. Overhead sprinklers and spray heads shall not be permitted in areas less than eight feet wide. All sprinklers shall have matched precipitation rates within each control valve and circuit. Landscape design best practices shall include distribution uniformity, head-to-head spacing, and setbacks from walkways and pavement.
 - iv. Valves and circuits shall be separated (individual hydrozones) based on plant material and water need.
 - v. Dedicated Irrigation Meter shall be required for irrigated landscaping of 5,000 square feet or more.

E. PENALTIES/CONSEQUENCES

Failure of Applicant to conform to this Regulation and these water-efficiency requirements stated herein may result in:

1. A requirement to resubmit water service application and water-efficiency plan at Applicant's expense until District approves water service.
2. District's inability to release water meter(s) for installation and inability to activate account until water-efficiency plan is approved by District.