

This presentation premiered at WaterSmart Innovations

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ASHRAE 189.1:

Moving at the Speed of Green

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ANSI/ASHRAE/USGBC/IES Standard 189.1-2014
(Supersedes ANSI/ASHRAE/USGBC/IES Standard 189.1-2011)

Standard for the Design of High-Performance Green Buildings

Except Low-Rise
Residential Buildings



A Compliance Option of the International Green Construction Code™

See Appendix H for approval dates by the ASHRAE Standards Committee, the ASHRAE Board of Directors, the U.S. Green Building Council, the Illuminating Engineering Society of North America, and the American National Standards Institute.

This standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE website (www.ashrae.org), or in paper form from the ASHRAE Manager of Standards.

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ISSN 1041-2336



Landscape Water

	ASHRAE 189.1 2014	ASHRAE 189.1 2017
Plant Selection	60% bio-diverse native or adapted and non-turf	60% bio-diverse native or ETC-Rainfall Compatible Plant
Controllers	Smart Controller and moisture sensors required	WaterSense Specifications
Performance Option	Potable and reclaimed water limited to 35% of the water demand for landscape.	No performance option
Potable Water Use	Prescriptive option: restricted to 33% of landscape of non recreational use areas.	New exception: "Landscape areas irrigated solely with alternate on-site sources of water"

Landscape Water (cont)

	ASHRAE 189.1 2014	ASHRAE 189.1 2017
Hydrozones	required	Turfgrass on its own hydrozone
New Required Equipment		backflow preventer, master valve, flow sensor with auto shut-off, check valve to prevent station drain
Spray Heads		Matched precipitation rates on station; maximum 0.75"/hr on slopes; limited to use on turfgrass and groundcover
Irrigation Controller Settings		Required Posting: Precipitation rates, ETc for each zone, soil type, sensor settings, peak demand schedule, runoff times

Outdoor Water

	ASHRAE 189.1 2014	ASHRAE 189.1 2017
Roofs	No potable or reclaimed water for roof cooling or vegetation	No change
Fountains	No potable water where altwater available, meters required,	Meters only required where fountains have auto-refill
Pools & spas	Re-use filter backwash, pressure gauge to determine backwash, splash trough returns water to pool.	No changes

HVAC Water

	ASHRAE 189.1 2014	ASHRAE 189.1 2017
Cooling Towers	Meters on make-up & blow-down, controllers, overflow alarms, drift eliminators.	No change , Addendum BF failed despite no non-supportive Public Comments
Air Conditioning	Condensate recovery + re-use required from large systems in some climates.	No Change

Toilets and Urinals

	ASHRAE 189.1 2014	ASHRAE 189.1 2017
Residential toilets OR "private" setting in commercial – FOM type	HET: 1.28gpf	No change
Residential toilets – TANK type	HET: 1.28gpf + WaterSense	No change
Commercial toilets – "public" setting	HET: 1.28gpf	No change
Commercial toilets "public" setting and <i>remote locations</i>	Tank-type must comply with WaterSense	No change
Flushing urinals	HEU: 0.5gpf + WaterSense	No change

Toilets and Urinals

	ASHRAE 189.1 2014	ASHRAE 189.1 2017
Residential & commercial “private” lavatory faucets	1.5 gpm + WaterSense	No change
Commercial & non-residential “public” lavatory faucets	0.5 gpm	No change
Commercial kitchen & bar sink	1.8 gpm; hands-free in food prep area & in dish room of commercial kitchen	No change
Commercial metering faucets	0.25 gpc	No change
Residential kitchen faucets	1.8 gpm; allows temporary override to 2.2 gpm	No change
Showerheads	2.0 gpm + WaterSense; 2.0 gpm per 2600 sq. inches shower floor area	No change

Commercial Kitchens

	ASHRAE 189.1 2014	ASHRAE 189.1 2017
Ice makers	Energy Star	No change
Connectionless steam cooker	2.0 g/hr/pan	No change
Connected steam	10 gpm max	No change
Combination ovens	10g/hr/oven	No change
Dishwashers	Energy Star	No change
Pre-rinse spray valve	1.3gpm	No change
Kitchen faucets	Hands-free in food prep area & in dish room	No change

Other

	ASHRAE 189.1 2017
Water softeners	Demand initiated regeneration, max. water discharge 4 gal./1000 grains, no discharge to reclaimed water collection system, max. 1 pound salt per 4000 grains removed.
Reverse osmosis water treatment system	Auto shut-off, NSF 58,
On-site water reuse treatment systems	NSF 350
Dual Plumbing for non-potable fixture flushing	Where available now or within 5 years, dual plumbing required
	50 % of required drinking fountains shall include bottle filling feature

Alliance for Water Efficiency

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