

# **High-Efficiency Bathroom Sink Faucet Specification**

## 1.0 Scope and Objective

This specification establishes the criteria for a high-efficiency bathroom sink (lavatory)<sup>1</sup> faucet under the U.S. Environmental Protection Agency (EPA) WaterSense<sup>®</sup> program. It is applicable to all types of lavatory faucets, lavatory faucet accessories<sup>2</sup> specifically designed to control the flow of water, and any other lavatory faucet technologies that meet these performance specifications.

The specification is designed to ensure both sustainable, efficient water use and a high level of user satisfaction with lavatory faucet performance.

# 2.0 WaterEfficiency and Performance Criteria

Lavatory faucets and lavatory faucet accessories must conform to applicable requirements in ASME A112.18.1.<sup>3</sup> In addition, the flow rate shall be tested in accordance with the procedures in ASME A112.18.1 and shall meet the following criteria:

- The flow rate shall not exceed 1.5 gallons per minute  $(gpm)^4$  (5.7 liters per minute) at a pressure of 60 pounds per square inch (psi) at the inlet, when water is flowing; and
- The flow rate shall not be less than 1.2 gpm (4.5 liters per minute) at a pressure of 20 psi at the inlet, when water is flowing:

The flow rate, tested at 60 psi in accordance with the procedures in ASME A112.18.1, shall not vary beyond +/- 0.1 gpm of the certified flow rate of the product.

#### 3.0 Effective Date

This specification is effective on July 1, 2007.

#### 4.0 Future Specification Revisions

EPA reserves the right to revise this specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment, Revisions to the specification would be made following discussions with industry partners and other interested stake holders.

<sup>&</sup>lt;sup>1</sup> Lavatory, other than public lavatory or metering.

<sup>&</sup>lt;sup>2</sup> Accessory, as defined in ASME 112.18.1, means a component that can, at the discretion of the user, be readily added, removed, or replaced, and that, when removed, will not prevent the fitting from fulfilling its primary function. For the purpose of this specification, an accessory can include, but is not limited to lavatory faucet flow restrictors, flow regulators, aerator devices, laminar devices, and pressure compensating devices.

Reference to this ASME standard applies to the most current version.

<sup>&</sup>lt;sup>4</sup> The maximum flow rate has been established as 1.5 gpm, which is a 32 percent reduction from the 2.2 gpm standard codified under 10 CFR Part 430 (63 FR 13307; March 18, 1998).



# 5.0 Definitions

Definitions within ASME A112.18.1 are incorporated herein by reference.

**Certified flow rate:** The intended flow rate at a pressure of 60 psi, when water is flowing, based on the design of the product, as marked on the product or product packaging.



# APPENDIX A

## Informative Annex for WaterSense Labeling

The following requirements must be met for products to be marked with the WaterSense label.

# 1.0 WaterSense Partnership

The Manufacturer<sup>5</sup> of the product must have a signed partnership agreement in place with EPA.

# 2.0 Conformity Assessment

Conformance to this specification must be certified by a body either accredited by ANSI in accordance with the WaterSense certification scheme, or otherwise approved for that purpose by EPA.

<sup>&</sup>lt;sup>5</sup> Manufacturer, as defined in the WaterSense program guidelines, means "Any organization that produces a product for market that might be eligible to meet WaterSense criteria for efficiency and performance. Manufacturers may also produce "private label" products that are sold under the brand name of a separate organization, which is treated as a separate partner/application from the original product manufacturer."