EPA WaterSense

Frequently Asked Questions

WaterSense Labeled Flushing Urinals

What is the new WaterSense specification?

The new WaterSense specification applies to flushing urinals. Flushing urinals that meet the final WaterSense specification will use no more than 0.5 gallons per flush (gpf). This is one half of the 1.0 gallon per flush (gpf) federal standard for urinals set by the Energy Policy Act of 1992. Of the 12 million urinals currently in use in the United States, up to 65 percent are inefficient units with flush volumes exceeding the 1.0 gpf federal standard, some by as much as 3.0 gpf. On average, a urinal gets flushed about 20 times a day; therefore a business will save 4,000 gallons or more per year for every WaterSense labeled urinal it installs.

How was the final specification for flushing urinals developed?

All WaterSense specifications are developed through a process that includes market research, technical review, and stakeholder input. In developing the specification, EPA collaborated with interested parties representing industry, water utilities, and water-efficiency advocacy groups. EPA industry and product research, as well nationally recognized performance standards developed by the American Society of Mechanical Engineers (ASME), the Canadian Standards Association (CSA), the International Association of Plumbing and Mechanical Officials (IAPMO), and the American Society of Sanitary Engineering (ASSE), form the basis for the WaterSense flushing urinal specification. These standards include:

- ASME A112.19.2/CSA B45.1 Ceramic Plumbing Fixtures
- ASME A112.19.3/CSA B45.4 Stainless Steel Plumbing Fixtures
- IAPMO Z124.9 Plastic Urinal Fixtures
- ASSE #1037 Performance Requirements for Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures

What types of products can earn the WaterSense label under this specification?

All flushing urinals—meaning those that use water to convey liquid waste through a trap seal into a gravity drainage system—can earn the WaterSense label. This includes both the urinal fixture, which can be made of ceramic (vitreous china), plastic, or stainless steel, and the pressurized (flushometer valve) or gravity tank-type flushing device.

Non-water urinals, composting urinals, and retrofit devices or other aftermarket retrofit systems are not included in the scope of this specification and cannot earn the WaterSense label at this time.

Why are non-water urinals not included in this specification?

Non-water urinals, although often very similar in appearance to flushing urinals, are different in their design, components, and functionality (i.e., how they remove waste). In addition, non-water urinals are subject to significantly different performance standards than flushing urinals. These standards are designed to ensure a high level of performance for non-water urinals, and WaterSense has no basis to propose improvements to these existing standards at this time. As a result, WaterSense has no means to

help purchasers distinguish among these products based on either their efficiency or performance.

Although the specification does not apply to non-water urinals, it is not WaterSense's intention to preclude or prevent their use in water efficiency, green building, or other conservation programs. Non-water urinals continue to be compatible with and a key component of, the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) and other green building programs. WaterSense encourages designers, program administrators, and facility managers to consider all available technologies when making purchasing decisions concerning water-using products, including non-water urinals. The specification and WaterSense label are simply one of many tools available to help consumers make informed purchasing decisions. If decision-makers decide to specify and install water-using urinals, then WaterSense encourages them to choose products with the WaterSense label.

What are the details of the specification?

The WaterSense specification sets the maximum flush volume for flushing urinals at 0.5 gallons per flush (gpf), when tested in accordance with national performance standards (i.e., ASME A112.19.2/CSA B45.1 [ceramic urinals], ASME A112.19.3/CSA B45.4 [stainless steel urinals], IAPMO Z124.9 [plastic urinals], ASSE #1037 [pressurized flushing devices]). The specification also includes three requirements to ensure the long-term performance and water savings of these devices. These are:

- The primary actuator must be a non-hold-open design to limit the amount of water released per flush, regardless of how long the actuator is held opened.
- The device's flush volume can be adjustable, but only to within ± 0.1 gpf of its rated flush volume. This will allow for field adjustments that may be necessary depending on building water pressure or other onsite conditions.
- The device should be designed to prohibit the interchangeability of replaceable or maintainable parts with parts that would cause it to exceed its rated flush volume.

Who will certify that products meet the specification?

All WaterSense labeled flushing urinals must be tested and certified by an independent, EPA-licensed certifying body. Manufacturers can use the WaterSense label to identify flushing urinal fixtures and/or flushing devices that are certified to conform to WaterSense criteria for both performance and efficiency. Only products certified through this process can bear the WaterSense label.

If flushing devices and urinal fixtures are labeled and sold separately, how will purchasers know which components should be used together to ensure water efficiency and performance?

EPA will maintain a registry of WaterSense labeled products that are certified and labeled in accordance with the flushing urinal specification. Within this registry, EPA will provide tools that will help purchasers identify flushing devices and urinal fixtures that have the same rated flush volume in order to ensure that the complete system meets the requirements of this specification for water efficiency and performance. In addition, EPA requires manufacturers to supply similar information in their product documentation to facilitate matching of parts that, when used together, will meet the requirements of the specification.

Are urinals that meet the WaterSense specification more expensive than other urinals?

No. Our product research has found that high-efficiency urinal fixtures and flushing devices are no more expensive than their standard (1.0 gpf) counterparts. The average price of a new high-efficiency or standard urinal fixture is about $350 and the average cost for a high-efficiency or standard pressurized flushing device (flushometer valve) is approximately $200. Because there is very little to no cost difference between high-efficiency flushing urinals and standard flushing urinals, installing high-efficiency models in new construction or as part of the natural replacement process is cost-effective with immediate payback in water cost savings.

How much water will a WaterSense labeled flushing urinal save the average facility?

Replacing an older, inefficient 1.5 gpf flushing urinal with a 0.5 gpf WaterSense labeled flushing urinal can save as much as 4,600 gallons of water per year. This assumes that the average urinal is flushed approximately 18 times per day and is in use 260 days per year. Replacing that same older urinal with a WaterSense labeled flushing urinal with a 0.25 or 0.125 gpf flush volume could save more than 5,800 and 6,400 gallons of water per year per urinal, respectively.