

WaterSense Performance Overview: *Ensuring Products Perform*

WaterSense is a voluntary partnership program supported by the U.S. Environmental Protection Agency (EPA). The WaterSense label identifies products that have been independently certified to use at least 20 percent less water and perform as well or better than standard models.



Beginning with its first product labeling specification for tank-type toilets in 2007, EPA has specified both water efficiency and performance criteria for products to earn the WaterSense label. Ensuring performance is vital for maintaining program integrity. If end users are satisfied with the performance of WaterSense labeled products, they are less likely to replace them with less efficient models and are more likely to pursue other water-efficient products in the future. Assuring performance also provides confidence that the products can achieve their intended use efficiently and that consumers will not be required to operate the product more than previously required by a less efficient model. For example, if a user is required to shower longer with a WaterSense labeled showerhead, more water would be used, negating the water savings and potentially leading to user frustration. EPA has worked to understand user concerns and perceptions associated with products that use less water and has collaborated with WaterSense manufacturing partners and other stakeholders to develop technically sound criteria to overcome performance concerns of low-flow products of the past. In some cases, the specifications have driven engineering design changes that have enhanced performance while ensuring water savings.

WaterSense has provided overviews of each of its labeled products that describe EPA's performance test methods and criteria. As part of the specification development process, EPA involves many WaterSense stakeholders, including manufacturers, certifying bodies and testing laboratories, standard development organizations, trade organizations, water and energy utilities, and other water efficiency experts and advocates. Each of these stakeholders offers a unique perspective and has dedicated technical expertise and other resources that have contributed to the development of performance criteria used to ensure WaterSense labeled products perform as well or better than standard products on the market.

During the WaterSense product specification development process, EPA evaluates a variety of factors to determine the feasibility of establishing a product specification:¹

- Potential for significant water savings on a national level.
- Equal or superior product performance compared to conventional models.
- State of technology development—product categories that rely on a single, proprietary technology will not be eligible for the label.
- Efficiency differentiation—high-efficiency models are effectively differentiated from standard or conventional models.

¹ For more information, review the *WaterSense Program Guidelines* at www.epa.gov/watersense/program-guidelines.

- Independent third-party certification to confirm products meet EPA's criteria for efficiency and performance.
- Ability to measure and verify water savings and performance.
- Cost-effectiveness.
- Stakeholder support.

Equal or superior product performance is a pillar of the WaterSense label. EPA also evaluates whether high-efficiency products will have other environmental or economic impacts. This includes whether there will be unintended or negative impacts to overall system performance, which may affect user satisfaction and health and safety.

To develop performance criteria for WaterSense product specifications, EPA references appropriate consensus standards with existing performance criteria applicable to the specific product category being labeled. In circumstances where existing performance criteria do not exist or are insufficient, EPA works with standard development organizations, industry representatives, and other stakeholders to identify performance attributes that are important to users. Subsequently, EPA works with these entities to develop or improve test methods and criteria to evaluate those attributes. In many cases, WaterSense's performance test methods and criteria have been later adopted into the applicable national standards.

Once WaterSense establishes test methods and criteria within a product specification, EPA requires products to be independently tested and certified to meet water efficiency and performance requirements by an EPA licensed certifying body in order to earn the WaterSense label. Further, following initial certification, product models are randomly selected on an annual basis to undergo retesting to confirm they meet specification criteria. WaterSense's independent certification provides a means of evaluating product conformity with WaterSense specifications not only when the product is initially tested, but on an ongoing basis to ensure the products being sold to consumers consistently meet performance requirements.

Throughout the life of its product specifications, EPA continues engagement with relevant standard development organizations and committees that maintain referenced national standards and test protocols, continually evaluating changes to the applicable standards, as well as evolving product research. This ensures EPA specifications remain consistent with national standards and continue to meet program needs.