



# ENERGY STAR® Program Requirements Product Specification for Clothes Washers

## Partner Commitments

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Following are the terms of the ENERGY STAR Partnership Agreement as it pertains to the manufacture and labeling of ENERGY STAR qualified products. The ENERGY STAR Partner must adhere to the following partner commitments:

### Qualifying Products

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1. Comply with current ENERGY STAR Eligibility Criteria, which define performance requirements and test procedures for clothes washers. A list of eligible products and their corresponding Eligibility Criteria can be found at [www.energystar.gov/specifications](http://www.energystar.gov/specifications).
2. **Prior to associating the ENERGY STAR name or mark with any product**, obtain written certification of ENERGY STAR qualification from a Certification Body recognized by EPA for clothes washers. As part of this certification process, products must be tested in a laboratory recognized by EPA to perform clothes washer testing. A list of EPA-recognized laboratories and Certification Bodies can be found at [www.energystar.gov/testingandverification](http://www.energystar.gov/testingandverification).

### Using the ENERGY STAR Name and Marks

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3. Comply with current ENERGY STAR Identity Guidelines, which define how the ENERGY STAR name and marks may be used. Partner is responsible for adhering to these guidelines and ensuring that its authorized representatives, such as advertising agencies, dealers, and distributors, are also in compliance. The ENERGY STAR Identity Guidelines are available at [www.energystar.gov/logouse](http://www.energystar.gov/logouse).
4. Use the ENERGY STAR name and marks only in association with qualified products. Partner may not refer to itself as an ENERGY STAR Partner unless at least one product is qualified and offered for sale in the U.S. and/or ENERGY STAR partner countries.
5. Provide clear and consistent labeling of ENERGY STAR qualified clothes washers.
  - 5.1. The ENERGY STAR mark must be clearly displayed on the top/front of the product (by placement of the ENERGY STAR logo on the FTC's EnergyGuide label, on product labels, and/or as a permanent mark), in product literature (i.e., user manuals, spec sheets, etc.), and on the manufacturer's Internet site where information about ENERGY STAR qualified models is displayed.
  - 5.2. It is also recommended that the mark appear on the product packaging.

### Verifying Ongoing Product Qualification

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6. Participate in third-party verification testing through a Certification Body recognized by EPA for clothes washers, providing full cooperation and timely responses. EPA/DOE may also, at its discretion, conduct tests on products that are referred to as ENERGY STAR qualified. These products may be obtained on the open market, or voluntarily supplied by Partner at the government's request.

### Providing Information to EPA

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7. Provide unit shipment data or other market indicators to EPA annually to assist with creation of ENERGY STAR market penetration estimates, as follows:

- 7.1. Partner must submit the total number of ENERGY STAR qualified clothes washers shipped in the calendar year or an equivalent measurement as agreed to in advance by EPA and Partner. Partner shall exclude shipments to organizations that rebrand and resell the shipments (unaffiliated private labelers).
- 7.2. Partner must provide unit shipment data segmented by meaningful product characteristics (e.g., type, capacity, presence of additional functions) as prescribed by EPA.
- 7.3. Partner must submit unit shipment data for each calendar year to EPA or an EPA-authorized third party, preferably in electronic format, no later than March 1 of the following year.

Submitted unit shipment data will be used by EPA only for program evaluation purposes and will be closely controlled. If requested under the Freedom of Information Act (FOIA), EPA will argue that the data is exempt. Any information used will be masked by EPA so as to protect the confidentiality of the Partner.

8. Report to EPA any attempts by recognized laboratories or Certification Bodies (CBs) to influence testing or certification results or to engage in discriminatory practices.
9. Notify EPA of a change in the designated responsible party or contacts within 30 days using the My ENERGY STAR Account tool (MESA) available at [www.energystar.gov/mesa](http://www.energystar.gov/mesa).

### **Performance for Special Distinction**

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In order to receive additional recognition and/or support from EPA for its efforts within the Partnership, the ENERGY STAR Partner may consider the following voluntary measures, and should keep EPA informed on the progress of these efforts:

- Provide quarterly, written updates to EPA as to the efforts undertaken by Partner to increase availability of ENERGY STAR qualified products, and to promote awareness of ENERGY STAR and its message.
- Consider energy efficiency improvements in company facilities and pursue benchmarking buildings through the ENERGY STAR Buildings program.
- Purchase ENERGY STAR qualified products. Revise the company purchasing or procurement specifications to include ENERGY STAR. Provide procurement officials' contact information to EPA for periodic updates and coordination. Circulate general ENERGY STAR qualified product information to employees for use when purchasing products for their homes.
- Feature the ENERGY STAR mark(s) on Partner website and other promotional materials. If information concerning ENERGY STAR is provided on the Partner website as specified by the ENERGY STAR Web Linking Policy (available in the Partner Resources section of the ENERGY STAR website), EPA may provide links where appropriate to the Partner website.
- Ensure the power management feature is enabled on all ENERGY STAR qualified displays and computers in use in company facilities, particularly upon installation and after service is performed.
- Provide general information about the ENERGY STAR program to employees whose jobs are relevant to the development, marketing, sales, and service of current ENERGY STAR qualified products.
- Provide a simple plan to EPA outlining specific measures Partner plans to undertake beyond the program requirements listed above. By doing so, EPA may be able to coordinate, and communicate Partner's activities, provide an EPA representative, or include news about the event in the ENERGY STAR newsletter, on the ENERGY STAR website, etc. The plan may be as simple as providing a list of planned activities or milestones of which Partner would like EPA to be aware. For example, activities may include: (1) increasing the availability of ENERGY STAR qualified products by converting the entire product line within two years to meet ENERGY STAR guidelines; (2) demonstrating the economic and environmental benefits of energy efficiency through special in-store displays twice a year; (3) providing information to users (via the website and user's manual) about energy-saving features and operating characteristics of ENERGY STAR qualified products; and (4) building awareness of the ENERGY STAR Partnership and brand identity by collaborating with EPA on one print advertorial and one live press event.
- Join EPA's SmartWay Transport Partnership to improve the environmental performance of the company's shipping operations. The SmartWay Transport Partnership works with freight carriers, shippers, and other stakeholders in the goods movement industry to reduce fuel consumption, greenhouse gases, and air pollution. For more information on SmartWay, visit [www.epa.gov/smartway](http://www.epa.gov/smartway).

- Join EPA's Green Power Partnership. EPA's Green Power Partnership encourages organizations to buy green power as a way to reduce the environmental impacts associated with traditional fossil fuel-based electricity use. The partnership includes a diverse set of organizations including Fortune 500 companies, small and medium businesses, government institutions as well as a growing number of colleges and universities. For more information on Green Power, visit [www.epa.gov/greenpower](http://www.epa.gov/greenpower).



# ENERGY STAR<sup>®</sup> Program Requirements Product Specification for Clothes Washers

## Eligibility Criteria Version 6.1

Following is the **Version 6.1** product specification for ENERGY STAR qualified clothes washers. A product shall meet all of the identified criteria if it is to earn the ENERGY STAR.

1) **Definitions:** Below are the definitions of the relevant terms in this document.

- A. **Residential Clothes Washer:** A consumer product designed to clean clothes, utilizing a water solution of soap and/or detergent and mechanical agitation or other movement, and must be one of the following classes: automatic clothes washers, semi-automatic clothes washers, and other clothes washers.
  - i) **Residential Clothes Washer with Optional Dry Cycle:** A Residential Clothes Washer that has an optional add-on dry cycle, where drying is accomplished through use of electricity or gas as a heat source and forced air circulation; drying cannot be selected independently from a wash cycle.
- B. **Commercial Clothes Washer:** A soft-mounted front-loading or soft-mounted top-loading clothes washer that is defined for use in:
  - i) Applications in which the occupants of more than one household will be using the clothes washer, such as multi-family housing common areas and coin laundries; or
  - ii) Other commercial applications.
- C. **Combination All-in-One Washer-Dryer:** A consumer product designed to clean and dry fabrics in a single drum, where a separate drying cycle uses electricity or gas as a heat source and forced air circulation.
- D. **Modified Energy Factor:** Modified Energy Factor ("MEF") is the present energy efficiency measure for all clothes washers. MEF is the quotient of the cubic foot (or liter) capacity of the clothes container divided by the total clothes washer energy consumption per cycle, with such energy consumption expressed as the sum of the machine electrical energy consumption, the hot water energy consumption, and the energy required for removal of the remaining moisture in the wash load. The units are cubic feet per kilowatt-hours (kWh) per cycle (ft<sup>3</sup>/kWh/cycle) (or liters per kilowatt-hour per cycle). The higher the value, the more efficient the clothes washer.
- E. **Water Factor:** Water factor ("WF") is the present water efficiency calculation that allows the comparison of clothes washer water consumption independent of clothes washer capacity. The term is expressed as gallons per cycle per cubic feet (or liter per cycle per liter). WF is the quotient of the total weighted per-cycle water consumption divided by the cubic foot (or liter) capacity of the clothes washer. The lower the value, the more efficient the clothes washer.
- F. **Basic Model:** Units of a given type of covered product (or class thereof) manufactured by one manufacturer, having the same primary energy source, and which have essentially identical electrical, physical, and functional (or hydraulic) characteristics that affect energy consumption, energy efficiency, water consumption, or water efficiency.

2) **Scope:**

- A. **Included Products:** Products with a clothes container volume that is not more than 6.0 cubic feet and that meet the definition of a residential clothes washer or commercial clothes washer as specified herein are eligible for ENERGY STAR qualification, with the exception of products listed in Section 2.B.
- B. **Excluded Products:** Products with a clothes container volume of less than 1.6 cubic feet and/or are configured in any way other than a front- or top-loading design are not eligible for ENERGY STAR. Combination All-in-One Washer-Dryers and Residential Clothes Washers with an Optional Dry Cycle are

not eligible for ENERGY STAR.

3) **Qualification Criteria:**

A. MEF and WF Requirements:

**Table 1: ENERGY STAR Criteria for Clothes Washers**

|                             |                                 |
|-----------------------------|---------------------------------|
| Residential Clothes Washers | MEF $\geq$ 2.0<br>WF $\leq$ 6.0 |
| Commercial Clothes Washers  | MEF $\geq$ 2.2<br>WF $\leq$ 4.5 |

B. Significant Digits and Rounding:

- a. All calculations shall be carried out with directly measured (unrounded) values.
- b. Unless otherwise specified, compliance with specification limits shall be evaluated using directly measured or calculated values without any benefit from rounding.
- c. Directly measured or calculated values that are submitted for reporting on the ENERGY STAR website shall be rounded to the nearest significant digit as expressed in the corresponding specification limit.

C. Model Numbers: Model numbers used for ENERGY STAR qualified product submissions shall be consistent with Federal Trade Commission (FTC) and Department of Energy (DOE) submissions.

4) **Test Requirements:**

A. One of the following sampling plans shall be used to test for qualification to ENERGY STAR:

- a. A representative unit shall be selected for testing based on the definition for Basic Model provided in Section 1. above; or
- b. Units shall be selected for testing per the sampling requirements as defined in Table 2

**Table 2: ENERGY STAR Sampling Requirements for Clothes Washers**

|                             |   |
|-----------------------------|---|
| Residential Clothes Washers | 10 CFR § 429.20, which references 10 CFR § 429.11 |
| Commercial Clothes Washers  | 10 CFR § 429.46, which references 10 CFR § 429.11 |

B. When testing clothes washers, the following test methods shall be used to determine ENERGY STAR qualification:

**Table 3: Test Methods for ENERGY STAR Qualification**

| Efficiency Requirement | Test Method Reference                             |
|------------------------|---|
| MEF                    | 10 CFR § 430, Subpart B, Appendix J1 <sup>1</sup> |
| WF                     |   |

<sup>1</sup> And in accordance with any applicable DOE issued test procedure guidance, listed here: <http://www1.eere.energy.gov/guidance/default.aspx?pid=2&spid=1>

5) **Effective Date:** The ENERGY STAR Clothes Washer specification shall take effect on **February 1, 2013**. To qualify for ENERGY STAR, a product model shall meet the ENERGY STAR specification in effect on the model's date of manufacture. The date of manufacture is specific to each unit and is the date on which a unit is considered to be completely assembled.

- 6) **Future Criteria Revisions:** EPA reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions. In the event of a specification revision, please note that the ENERGY STAR qualification is not automatically granted for the life of a product model.