



# ENERGY STAR® Program Requirements for Dehumidifiers

## Partner Commitments

### Commitment

The following are the terms of the ENERGY STAR Partnership Agreement as it pertains to the manufacturing of ENERGY STAR qualified dehumidifiers. The ENERGY STAR Partner must adhere to the following program requirements:

- comply with current ENERGY STAR Eligibility Criteria, defining the performance criteria that must be met for use of the ENERGY STAR certification mark on dehumidifiers and specifying the testing criteria for dehumidifiers. EPA may, 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 EPA's request;
- comply with current ENERGY STAR Logo Use Guidelines, describing how the ENERGY STAR labels and name may be used. Partner is responsible for adhering to these guidelines and for ensuring that its authorized representatives, such as advertising agencies, dealers, and distributors, are also in compliance;
- qualify at least one ENERGY STAR labeled dehumidifier model within one year of activating the dehumidifiers portion of the agreement. When Partner qualifies the product, it must meet the specification (e.g., Tier 1 or 2) in effect at that time;
- provide clear and consistent labeling of ENERGY STAR qualified dehumidifiers. The ENERGY STAR label must be clearly displayed on the top/front of the product, 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. It is also recommended that the label appear on the product packaging;
- provide to EPA, on an annual basis, an updated list of ENERGY STAR qualifying dehumidifier models. Once the Partner submits its first list of ENERGY STAR labeled dehumidifier models, the Partner will be listed as an ENERGY STAR Partner. Partner must provide annual updates in order to remain on the list of participating product manufacturers. Charter Partners — companies that join the program prior to its launch — will be added to the Partner List immediately, will be designated as Charter Partners in the List, and, like all other partners, will have one year to submit a list of qualifying products;
- provide to EPA, on an annual basis, unit shipment data or other market indicators to assist in determining the market penetration of ENERGY STAR. Specifically, Partner must submit the total number of ENERGY STAR qualified dehumidifiers shipped (in units by model) or an equivalent measurement as agreed to in advance by EPA and Partner. Partner is also encouraged to provide ENERGY STAR qualified unit shipment data segmented by meaningful product characteristics (e.g., capacity, size, speed, or other as relevant), total unit shipments for each model in its product line, and percent of total unit shipments that qualify as ENERGY STAR. The data for each calendar year should be submitted to EPA, preferably in electronic format, no later than the following March and may be provided directly from the Partner or through a third party. The 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;

- notify EPA of a change in the designated responsible party or contacts for dehumidifiers within 30 days.

### **Performance for Special Distinction**

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:

- consider energy efficiency improvements in company facilities and pursue the ENERGY STAR label for buildings;
- purchase ENERGY STAR labeled 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 labeled product information to employees for use when purchasing products for their homes;
- ensure the power management feature is enabled on all ENERGY STAR qualified monitors 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 labeled product models;
- feature the ENERGY STAR label(s) on Partner Web site and in other promotional materials. If information concerning ENERGY STAR is provided on the Partner Web site as specified by the ENERGY STAR Web Linking Policy (this document can be found in the Partner Resources section on the ENERGY STAR Web site at [www.energystar.gov](http://www.energystar.gov)), EPA may provide links where appropriate to the Partner Web site;
- 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, communicate, and/or promote Partner's activities, provide an EPA representative, or include news about the event in the ENERGY STAR newsletter, on the ENERGY STAR Web pages, etc. The plan may be as simple as providing a list of planned activities or planned milestones that Partner would like EPA to be aware of. For example, activities may include: (1) increase the availability of ENERGY STAR labeled products by converting the entire product line within two years to meet ENERGY STAR guidelines; (2) demonstrate the economic and environmental benefits of energy efficiency through special in-store displays twice a year; (3) provide information to users (via the Web site and user's manual) about energy-saving features and operating characteristics of ENERGY STAR qualified products, and (4) build awareness of the ENERGY STAR Partnership and brand identity by collaborating with EPA on one print advertorial and one live press event;
- 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.



# ENERGY STAR<sup>®</sup> Program Requirements for Dehumidifiers

## Eligibility Criteria

Below is the product specification for ENERGY STAR qualified dehumidifiers. A product must meet all of the identified criteria if it is to be labeled as ENERGY STAR by its manufacturer.

- 1) **Definitions:** Below is a brief description of dehumidifiers and common energy consumption characteristics relevant to ENERGY STAR.
  - A. **Dehumidifier:** A dehumidifier is a self-contained, electrically operated, and mechanically refrigerated encased assembly consisting of (a) a refrigerated surface (evaporator) that condenses moisture from the atmosphere; (b) a refrigerating system, including an electric motor; (c) an air-circulating fan; and (d) means for collecting and/or disposing of the condensate.<sup>1</sup>
  - B. **Energy Factor:** The energy efficiency of dehumidifiers will be measured in liters of water removed per kilowatt-hour (kWh) of energy consumed at standard test conditions. This metric is defined as the energy factor. Energy factor will be calculated according to the test procedure listed in Section 4.
  - C. **Capacity:** Capacity refers to water removal capacity at standard test conditions, measured in liters. Capacity will be calculated according to the test procedure listed in Section 4.
- 2) **Qualifying Products:** For the purposes of ENERGY STAR, dehumidifiers include the following:
  - A. **Standard Capacity Dehumidifiers:** Dehumidifiers with daily water-removal capacities up to 35 Liters (74.0 US pints).
  - B. **High Capacity Dehumidifiers:** Dehumidifiers with daily water-removal capacities up to 57 Liters (120.5 US pints).
- 3) **Energy-Efficiency Specifications for Qualifying Products:** Only those products listed in Section 2 that meet the criteria outlined in Table 1 or Table 2 below may qualify as ENERGY STAR.

**Table 1: Criteria for ENERGY STAR Qualified Standard Capacity Dehumidifiers**

<b>Product Capacity (L/day)</b>	<b>Energy Factor Under Test Conditions (L/kWh)</b>
L/day < 10	≥ 1.20
10 ≤ L/day < 25	≥ 1.30
25 ≤ L/day ≤ 35	≥ 1.50

<sup>1</sup> Source: *Performance of Dehumidifiers, National Standard of Canada CAN/CSA-C749-94*. Ontario, Canada 1994.

**Table 2: Criteria for ENERGY STAR Qualified High Capacity Dehumidifiers**

<b>Product Capacity (L/day)</b>	<b>Energy Factor Under Test Conditions (L/kWh)</b>
$36 \leq L/\text{day} \leq 57$	$\geq 2.25$

- 4) Test Criteria: Tests shall be conducted in accordance with Clauses 4, 5, and 7 of ANSI/AHAM Standard DH-1, except that a watt-hour meter shall be used to measure dehumidifier energy consumption during the capacity rating test. The watt-hour meter shall be accurate within 0.5 percent of the indicated value and have a scale with graduations of 1 watt-hour or less. Energy Factor is to be calculated according to Section 4.2 of CAN/CSA-C749-94.
- 5) Effective Date: The date that manufacturers may begin to qualify products as ENERGY STAR will be defined as the *effective date* of the agreement. The ENERGY STAR Dehumidifier specification is effective on January 1, 2001.
- 6) Future Specification Revisions: ENERGY STAR reserves the right to revise the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. Revisions to the specification are generally made following discussions with industry.

Approximately two years after the specification announcement, ENERGY STAR will thoroughly assess the impact of the original specification in order to evaluate the level at which its partners have performed. A Tier 2 set of specifications may be issued to recognize those manufacturers who have gone beyond the original energy-efficiency limits. Similar to Tier 1, the new criteria would be selected such that the top 25 percent of the market in terms of energy efficiency qualifies initially for the label. Models produced under the Tier 1 guidelines would be allowed to carry the ENERGY STAR label until they are phased out of the market, assuming the manufacturer continues its participation in the program and the product model continues to meet the specifications under which it was originally qualified (i.e., new specifications would not apply retroactively to previously qualified products). Once the Tier 2 specifications took effect, models shipped on or after that date would be required to meet the new specifications in order to use the ENERGY STAR label.