



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

December 5, 2024

Dear ENERGY STAR® Commercial Water Heater Stakeholders:

With this letter, the U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy (DOE) are releasing the [Final Draft ENERGY STAR Test Method for Central Heat Pump Water Heater Systems](#) and should the public have any comments we will accept them through December 19, 2024.

The EPA and DOE received many informative comments in response to the Draft 1 Test Method for Central Heat Pump Water Heater Systems and have adjusted the Final Draft Test Method in response; responses to comments can be found in note boxes throughout the Final Draft Test Method as well as in the accompanying [Draft 1 Test Method Comment Response Matrix](#). All comments received on the Draft 1 Test Method can be found posted on the [Commercial Water Heaters product development website](#). The following changes are reflected in the Final Draft:

- Test condition temperatures for outdoor air-source heat pumps have been adjusted to be more evenly spaced out, and an optional defrost test added.
- Indoor air-source heat pump units are defined, with a single test at 80.6°F conducted in the ducted configuration, to better represent this application.
- Additionally, separate condenser entering water temperature conditions for indoor air-source heat pump units and water-source heat pump units are included as these only require one single-pass and one multi-pass test condition.
- Evaporator test conditions for outdoor air-source heat pump units have been split up into Types A-D, differentiated by compressor cut-in and cut-out temperatures (equivalent to Types 1-4 in the [ENERGY STAR Test Method to Determine Room Air Conditioner Heating Mode Performance](#)).
- Condenser entering water temperatures varying with the evaporator entering air temperature for single-pass tests, reflecting a mix of return water and city water.
- A Water Heating Energy Efficiency Ratio (WHEER) seasonal metric has been added, applicable to all outdoor air-source heat pump units.

The EPA also received helpful comments and input to the discussion guide that will inform the updated ENERGY STAR specification. These comments will be addressed at the time EPA releases a first draft specification – currently planned for the first quarter of 2025.

Comment Submittal:

Comments on this draft may be submitted for EPA and DOE consideration to HVAC@energystar.gov no later than **December 19, 2024**. As a reminder, all submitted comments will be posted to the [ENERGY](#)

[STAR product development website](#) unless the submitter specifically requests their respective comments remain confidential.

Please contact Abigail Daken, EPA, at Daken.Abigail@epa.gov or 202-343-9375 or Megan McNelly, ICF, at Megan.McNelly@icf.com with questions or concerns. For any questions on commercial water heater testing, please contact Julia Hegarty, DOE, at Julia.Hegarty@ee.doe.gov. Thank you for your continued support of the ENERGY STAR program.

Sincerely,

A handwritten signature in black ink, appearing to read "Abigail Daken", is enclosed in a thin black rectangular border.

Abigail Daken, Product Manager ENERGY STAR HVAC and Water Heating
U.S. Environmental Protection Agency

Enclosures:

[ENERGY STAR Final Draft Test Method for Central Heat Pump Water Heater Systems](#)

[ENERGY STAR Draft 1 Test Method for Central Heat Pump Water Heater Systems Comment Response Matrix](#)