



Certification Body Webinar for CAC/ASHP V5.0 and Draft Directive for Verifying ICM Combinations

ENERGY STAR® Program Integrity

March 3, 2015





Webinar Logistics

- Audio provided via teleconference:

Call in: +1 (877) 423-6338 (U.S.)

Code: 316317

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Agenda

- Overview of the ENERGY STAR program
- Reviewing Central Air Conditioners and Air-source Heat Pumps (CAC/ASHP) Version 5 specification
- Summarizing the CAC/ASHP draft requirements for verifying Independent Coil Manufacturers (ICM) Certified Combinations under the new specification



ENERGY STAR Program Overview

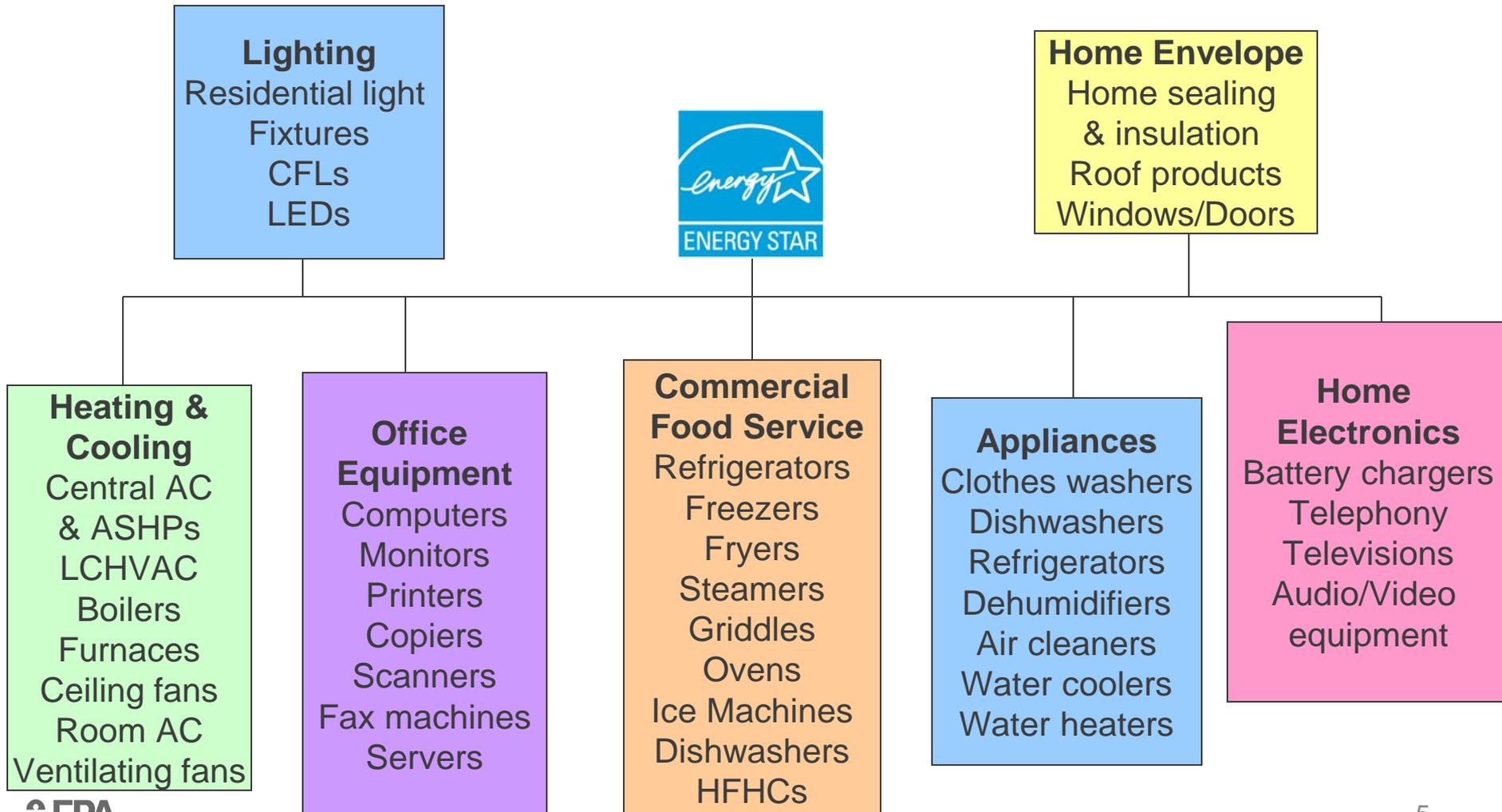


ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment.

From 1993 to 2013 Americans have purchased more than 300 million products that earned the ENERGY STAR across **more than 70 product categories**. That's more than 4.8 billion products, about 58 million vehicles off the road, and **\$30 billion saved!**



ENERGY STAR Products Available





Air Source Heat Pump and Central Air Conditioner Equipment Version 5.0

- V5.0 effective September 15, 2015
- Changes compared to V4.1 specification:
 - Scope expansion – Independent Coil Manufacturer (ICM) coil combinations added to the scope.
 - In an ICM coil combination, the coil (indoor unit) is manufactured by the ICM and is matched with an outdoor unit of a different manufacturer.
 - For ENERGY STAR qualification, an ICM coil can only be matched with an outdoor unit that is part of an ENERGY STAR qualified system manufacturer combination (System).
 - ENERGY STAR is awarded to the coil combination and not just the coil.
 - New national performance levels
 - Split Systems – 15 SEER, 12.5 EER and 8.5 HSPF
 - Single Package – 15 SEER, 12 EER and 8.2 HSPF



Initial Certification Guidance for ICM Combinations

Test Requirements (CAC/ASHP Specification, section 4.0)

- ICMs have the following sampling options for certification testing
 - Single test sample:
 - A single sample ICM coil is selected and tested with its matched outdoor unit.
 - The measured performance of this combination and of each subsequent combinations must be equal to or better than the ENERGY STAR specification requirements.
 - Multiple sample or ARM:
 - Rating determined by selecting units based on sampling requirements defined in 10 CFR Part 429, Subpart B § 429.16 or by the application of an alternative rating method (ARM) as defined in 10 CFR Part 429.70
 - The certified rating must be equal to or better than the ENERGY STAR specification requirements.



Verification Testing Guidance for ICM Combinations - Sample Size

- Under the multiple test sample approach, four units of the indoor coil from the ICM should be available for testing.
 - Each of the four ICM coil samples will be paired and tested with the same selected outdoor unit sample.
- In the unlikely event that Partners opt for the single sample approach, only 1 unit of the indoor coil from the ICM will be paired and tested with the selected outdoor unit sample.



Verification Testing Guidance for ICM Combinations – Unit Selection

- Select an outdoor model sample that has been verified to perform $\geq 95\%$ of its rating as part of the System within the last three years
 - If a verified outdoor unit sample is not readily available, the CB will need to obtain an outdoor model unit from a verified system, assuming every outdoor unit from that sample performed $\geq 95\%$ of its rating as part of the System within the last three years
- If there are no outdoor units available that are matched with the ICM coil, that performed $\geq 95\%$ of its rating as part of the System within the last three years, then the CB is required to obtain a System that includes a relevant outdoor unit and test it as soon as possible.
 - The System test can be counted towards the annual testing requirement.
 - If the System performed at $\geq 95\%$ of its rating, then the ICM can be tested with the outdoor unit sample.



CB Responsibilities for ICM Combinations

- Coordinate testing based on the availability of outdoor units from previously verified system manufacturer combinations
- Make arrangements to store eligible outdoor units (verified to perform at $\geq 95\%$ of its rating) that are paired with a certified ICM combination, for 3 years for verification testing purposes
- The ICM is responsible for enabling verification testing of their indoor units with an eligible outdoor unit
- Report any issues with procurement or selection of ICM combinations or outdoor units to EPA immediately



Timeline

- **May 1, 2015** – Version 4.1 cessation date, all newly certified combinations must be certified to Version 5.0.
- **September 15, 2015** – Version 5.0 effective date, all combinations not certified to Version 5.0 must be removed from the qualified product list.
- **September 15, 2015** – Any verification testing conducted starting on September 15, 2015 will be for units certified to Version 5.0.
 - Per [Directive #2011-06](#), count all base model group (BMG) units as one unique model
 - All certified Systems and ICM combinations are eligible for verification testing
 - When making test failure determinations, the CB may verify the test setup with the manufacturer to confirm that the test was valid
 - CB must report testing failures to EPA within 2 business days of determining the failure
 - EPA will determine if the BMG will be disqualified per the [Disqualification Procedures](#)



Questions?



Questions? Contact us!

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