

ENERGY STAR HVAC Commissioning Checklist: 3. Indoor HVAC Fan Airflow

When certifying a home to [ENERGY STAR Certified Homes, Version 3.0/3.1 \(Rev. 08\)](#) [1], the HVAC Installer completes the [HVAC Commissioning Checklist](#) [1] to document information about the contractor and house, refrigerant charge, HVAC fan air flow, and air balancing. One HVAC Commissioning Checklist is completed for each system installed. The HVAC installation contractor must make copies of the HVAC Commissioning Checklist available to the builder, the rater responsible for certifying the home, and the HVAC oversight organization, upon request.

This page shows the checklist requirement for Section 3. Indoor HVAC Fan Airflow and applicable footnotes.

For information on installing HVAC equipment, see installation guides linked to the HVAC section of the [Rater Field Checklist](#) [1].

For information on HVAC fan airflow, see the videos on [“How to Measure HVAC Fan Airflow”](#) [2] on the ENERGY STAR website and ANSI/ACCA 5 QI - 2015 [HVAC Quality Installation Specification](#) [3].



HVAC Commissioning Checklist ^{1, 2} ENERGY STAR Certified Homes, Version 3 / 3.1 (Rev. 08)

HVAC Commissioning Contractor Responsibilities:

- The commissioning contractor must be credentialed by an HVAC oversight organization to complete this checklist. One checklist must be completed and signed by the commissioning contractor for each HVAC system that is commissioned.
- The completed checklist for each commissioned system, along with the corresponding HVAC Design Report, shall be retained by the contractor for quality assurance purposes. Furthermore, the contractor shall provide the completed checklist to the builder, the Home Energy Rater responsible for certifying the home, and the HVAC oversight organization upon request.
- Visit www.energystar.gov/newhomeshvac for information about the credential requirement and this checklist.

3. Indoor HVAC Fan Airflow

3.1 The mode with the higher design HVAC fan airflow used, per Item 5.2 of HVAC Design Report: <input type="checkbox"/> Heating <input type="checkbox"/> Cooling	<input type="checkbox"/>	-
3.2 Static pressure test holes have been created, and test hole locations are well-marked and accessible.	<input type="checkbox"/>	-
Test hole location for return external static pressure: <input type="checkbox"/> Plenum <input type="checkbox"/> Cabinet <input type="checkbox"/> Transition <input type="checkbox"/> Other: _____	-	-
Test hole location for supply external static pressure: <input type="checkbox"/> Plenum <input type="checkbox"/> Cabinet <input type="checkbox"/> Transition <input type="checkbox"/> Other: _____	-	-
3.3 Measured return external static pressure (Enter value only, without negative sign): _____ IWC	-	-
3.4 Measured supply external static pressure (Enter value only, without positive sign): _____ IWC	-	-
3.5 Measured total external static pressure = Value-only from Item 3.3 + Value-only from Item 3.4 = _____ IWC	-	-
3.6 Measured (Item 3.5) - Design (Item 5.4 on HVAC Design Report) total external static pressure = _____ IWC	-	-
3.7 Measured HVAC fan airflow, using Item 3.5 and fan speed setting: _____ CFM	-	-
3.8 Measured HVAC fan airflow (Item 3.7) is \pm 15% of design HVAC fan airflow (Item 5.2 on HVAC Design Report)	<input type="checkbox"/>	-

Checklist revised 09/15/2015. Required for homes permitted starting 07/01/2016.⁵

Footnotes:

1. This Checklist is designed to align with the requirements of [ANSI / ACCA's 5 QI-2015](#) [3] protocol, thereby improving the performance of HVAC equipment in new homes when compared to homes built to minimum code. However, these features alone cannot prevent all ventilation, indoor air quality, and HVAC problems (e.g., those caused by a lack of maintenance by occupants). Therefore, this Checklist is not a guarantee of proper ventilation, indoor air quality, or HVAC performance. This Checklist applies to split air conditioners, unitary air conditioners, air-source heat pumps, and water-source (i.e., geothermal) heat pumps up to 65 kBtuh with forced-air distribution systems (i.e., ducts) and to furnaces up to 225 kBtuh with forced-air distribution systems (i.e., ducts). All other permutations of equipment (e.g., boilers, mini-split / multi-split systems) and distribution systems are exempt.

2. For a home certified in the State of ID, MT, OR, or WA, the following alternatives and exemptions apply:

- a. For a home with an air-source heat pump up to 65 kBtuh with a forced-air distribution system (i.e., ducts), the contractor is permitted to complete the 2011 PTCS® Commissioned Heat Pump Certificate and Startup Form in lieu of this Checklist.
- b. For a home with a split air conditioner or unitary air conditioner up to 65 kBtuh with a forced-air distribution system (i.e., ducts), the contractor is permitted to complete the Northwest Central AC Commissioning & Startup Form in lieu of this Checklist.
- c. For a home in a location with < 600 CDD, the completion of this Checklist is recommended, but not required.

5. This Revision of the HVAC Commissioning Checklist is required to certify all homes permitted after 07/01/2016, but is allowed to be used for any home permitted or completed prior to this date. The Home Energy Rater certifying the home may define the

'permit date' as either the date that the permit was issued or the date of the contract on the home. In cases where permit or contract dates are not available, Providers have discretion to estimate permit dates based on other construction schedule factors.

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More Info.

Access to some references may require purchase from the publisher. While we continually update our database, links may have changed since posting. Please contact our [webmaster](#) if you find broken links.

None Available

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