

AHRI's Central Station Air-handling Unit Supply Fans (AHU) Certification Program – Frequently Asked Questions

Q: What's the value in joining the AHU 430 Certification Program?

A: The AHU Certification Program is a voluntary program, administered and governed by AHRI, which ensures that AHU supply fans perform according to manufacturers' published claims, and meet criteria outlined in AHRI Standard 430, *Performance Rating of Central Station Air-handling Unit Supply Fans*. AHUs that are certified through the AHU Certification Program are continuously tested by an independent third-party laboratory contracted by AHRI. Best of all, AHRI's program covers a variety of HVACR products, and is widely known and respected by owners, contractors, and design engineers. All are likely to prefer products listed in this certification program.

Q: Do ASHRAE 90.1 and IECC require the use of products that are listed in independent certification programs like the AHRI AHU Certification Program?

A: Yes, ASHRAE 90.1-2013 6.4.1.4 Paragraphs b and c require the use of certified products, whenever possible, or else the ratings must be verified by an independent testing laboratory. IECC-2015 Paragraph C403.2.3 requires the use of certified products whenever possible.

Q: What types of units are included in the scope of the AHU Certification Program?

A: The AHU Certification Program applies to AHU supply fan ratings for plenum fans, fan arrays, housed centrifugal fans, and axial fans that are generally capable of delivering greater than 1.0 in H₂O ESP. Any AHU model for which a manufacturer regularly publishes data, catalogs, specification sheets, or marketing materials and which is intended for regular production or sale (including custom units) is included within the scope of the certification program.

Q: Why are custom-type units included in the AHU Certification Program?

A: Custom air handlers constitute a large portion of the marketplace and their customers require accurate fan performance just as much as commercial air handler customers. No other North American certification program provides appropriate performance verification. Furthermore:

- The scope of AHRI AHU Certification Program has recently been expanded to include plenum fans and fan arrays, so most custom air handler supply fans are now in scope.
- Customers require the same performance information and the method of test is the same for both commercial and custom air handlers.

Please note that any special units excluded from catalogs and customer selection software are out of scope.

Q: What are the certified ratings for the AHU Certification Program?

A: The AHU certification program certifies fan speed and fan shaft power for any given CFM and ESP. It also certifies the entire map of supply fan operating points that are offered to customers.

Q: How many units does a manufacturer have to test before applying to join the program?

A: It depends on the number of Basic Model Groups (BMGs) offered by the manufacturer. In the AHU Certification Program, the required BMG divisions are based on units having a similar configuration [ducted or unducted], supply fan type [housed or plenum], supply fan geometry [airfoil/backwards-inclined, forward-curved, or axial], and drive type [belt or direct]. A private test report for a representative unit must be submitted for each BMG. For applicants, 20 percent of BMGs (with a minimum of 2) must be submitted for qualification testing. For example, if a manufacturer has 13 BMGs, they would need to submit 13 test reports and undergo three qualification tests.

Q: How many units does a manufacturer have to test annually once they are in the certification program?

A: 20 percent of a Participant's BMGs shall be tested annually, with a minimum of two (2) models.

Q: Custom air handlers are often one of a kind or extremely large and complex. Will this make participating in the AHRI AHU Certification too challenging or expensive?

A: Custom air handler certification requirements are reasonable. Test units are limited to a fan section, a coil section, and a discharge plenum (if applicable). It is optional to certify air handlers larger than 50,000 CFM. The number of tests and test unit configuration are the same for both custom and commercial air handlers.

Q: Is AMCA Certification the same as AHRI Certification?

A: No, they are very different. AMCA Fan Certifications are for "fan only" applications in a wide-open environment and do not consider significant and unavoidable air handler cabinet losses. Air handler fans do not operate in a wide-open environment and their cabinets cause air flow restrictions, air flow directional changes, and turbulence. AHRI Standard 430 includes these cabinet losses, as well as losses from appurtenances, including coils and filters.

For any further questions, please contact [Lauren Zelinski](#).