

ANSI/AMCA Standard 260-20

Laboratory Methods of Testing Induced Flow Fans for Rating

An American National Standard
Approved by ANSI on January 14, 2020



Air Movement and Control Association International

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AMCA Standard

Authority ANSI/AMCA Standard 260 was adopted by the membership of the Air Movement and Control Association International Inc. on January 8, 2020. It was approved as an American National Standard on January 14, 2020.

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Laboratory Methods of Testing Induced Flow Fans for Rating

1. Purpose

The purpose of this standard is to establish a uniform laboratory method for determining an induced flow fan's aerodynamic performance in terms of airflow rate, pressure developed, power consumption, air density, speed of rotation and efficiency. This standard is an adjunct to ANSI/AMCA Standard 210 to accommodate the induced flow fans' unique characteristics.

It is not the purpose of this standard to specify the testing procedures to be used for design, production or field testing.

2. Scope

The scope of this standard is limited to induced flow fans, as defined below.

The parties to a test, for guarantee purposes, may agree on exceptions to this standard in writing prior to the test. However, only tests that do not violate any mandatory requirements of this standard shall be designated as tests conducted in accordance with this standard.

3. Normative References

The following standard contains provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below.

ANSI/AMCA Standard 210-16 / ASHRAE 51-16 | Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating

4. Units of Measurement

The International System of Units, *Le Système International d'Unités* (SI units), are the primary units employed in this standard, with inch-pound (I-P) units given as the secondary reference. SI units are based on the fundamental values of the International Bureau of Weights and Measures, and I-P values are based on the values of the National Institute of Standards and Technology, which, in turn, are based on the values of the International Bureau.

5. Symbols and Subscripts

All symbols and subscripts are defined in ANSI/AMCA Standard 210 with the following addition: An induced flow fan has two planes of exit. Where the main (inlet) flow exits the nozzle, the outlet plane will preserve the ANSI/AMCA Standard 210 definition of Plane 2. The plane at the end of the windband will be identified by a subscript of 9. Thus, the average velocity at the exit of the nozzle is identified as V_2 , and the average velocity at the exit of the windband is identified as V_9 .