



Guideline Specifications for Selected AMCA- Certified Products

An AMCA International White Paper

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ABSTRACT

In January 2015, AMCA published a white paper entitled “How to Specify AMCA-Certified Products.” The white paper describes how products attain AMCA certification and how to cite the correct AMCA publications and standards to ensure AMCA-certified products are required, where applicable. It also generally describes how to specify AMCA-certified products and provides a few examples of fan, damper and louver specifications.

This white paper provides more examples of specifications for AMCA-certified products that are of primary interest to the engineering community. It also provides a list of referenced AMCA standards and publications and a list of online resources that would help find additional information at AMCA International websites.



*A fan being prepared for testing at the AMCA headquarters laboratory.
All photos courtesy of AMCA International.*

The guideline specifications are arranged below by categories of air movement and air control equipment. Engineers are free to copy/paste these provisions into their office library specifications and project specifications.

AIR MOVEMENT PRODUCTS

- “Fans shall comply with AMCA Publication 11 to bear the AMCA Certified Ratings Program seal for air performance and sound performance, according to AMCA Publications 11, 211 and 311.”

“Fans must comply with AMCA Publication 211 and be licensed to bear the AMCA Certified Ratings Program seal. The fans shall be tested for air performance – flow rate, fan pressure, power, air density, speed of rotation and fan efficiency – according to ANSI/AMCA Standard 210/ASHRAE 51. Fan sound ratings shall be certified in compliance with AMCA Publication 311 and shall comply with ANSI/AMCA Standard 301. The fans shall be tested according to ANSI/AMCA Standard 300.”

- “Induced flow fans must comply with AMCA Publication 211 and be licensed to bear the AMCA Certified Ratings Program seal. The fans shall be tested for air performance in accordance with ANSI/AMCA Standards 260 and 210. Fan sound ratings shall be certified in compliance with AMCA Publication 311 and shall comply with ANSI/AMCA Standard 301. The fans shall be tested according to ANSI/AMCA Standard 300.”

- “Positive pressure ventilators must comply with AMCA Publication 211 and be licensed to bear the AMCA Certified Ratings Program seal. They shall be tested for air performance in accordance with ANSI/AMCA Standard 240.”
- “Air curtains must comply with AMCA Publication 211 and be licensed to bear the AMCA Certified Ratings Program seal. The air curtains shall be tested for aerodynamic performance in accordance with ANSI/AMCA Standard 220. Fan sound ratings shall be certified in compliance with AMCA publication 311 and shall comply with ANSI/AMCA Standard 301. The air curtains shall be tested according to ANSI/AMCA Standard 300.”

AIR CONTROL PRODUCTS

- “Volume control dampers shall be licensed to bear the AMCA Certified Ratings Program seal for air performance, air leakage and efficiency [as applicable] in accordance with AMCA Publication 511. The dampers shall be tested according to ANSI/AMCA Standard 500-D.”
- “Louvers shall be licensed to bear the AMCA Certified Ratings Program seal for air performance, wind-driven rain, wind-driven sand and water penetration [as applicable] in accordance with AMCA Publication 511. The louvers shall be tested according to ANSI/AMCA Standard 500-L.”

ADDITIONAL RECOMMENDED SPECIFICATIONS

- “Fans shall be balanced in accordance with ANSI/AMCA Standard 204”
- “Classification for spark-resistant construction shall conform to ANSI/AMCA Standard 99|0401”

REFERENCED PUBLICATIONS AND STANDARDS

The following AMCA publications can be downloaded free of charge from AMCA International's website, under the “Resources” tab (www.amca.org/store):

■ AMCA PUBLICATION 11

CERTIFIED RATINGS PROGRAM OPERATING MANUAL

This publication sets the foundation for how the AMCA Certified Ratings Program works across all certifiable products and defines requirements for licensing the AMCA seal.

■ AMCA PUBLICATION 211

CERTIFIED RATINGS PROGRAM—PRODUCT RATING MANUAL FOR FAN AIR PERFORMANCE

This publication sets forth requirements and processes for fan air performance and lists approved test standards for rating.

■ AMCA PUBLICATION 311

CERTIFIED RATINGS PROGRAM—PRODUCT RATING MANUAL FOR FAN SOUND PERFORMANCE

This publication governs fan sound ratings and certification.

■ AMCA PUBLICATION 511

CERTIFIED RATINGS PROGRAM—PRODUCT RATING MANUAL FOR AIR CONTROL DEVICES

This publication covers damper and louver certification.

ABOUT THE AMCA SEAL

The hallmark of the AMCA Certified Ratings Program is the seal (Figure 1), which may be affixed to equipment and required in catalogs and sizing/selection software.

Contrary to popular belief, the AMCA seal does not have to be physically affixed to products licensed to bear it. Thus, when developing project submittals and specifications, it is best to specify that “products must be licensed to bear the AMCA seal.”

Once licensed, CRP seals can only be applied according to very specific rules. For example, seals must be directly and specifically associated with a product currently licensed to bear the AMCA seal and cannot be displayed on the cover of a catalog containing both licensed and unlicensed products. These rules are contained within the CRP publications listed in the references section. Unless architects and contractors properly specify AMCA-certified products in project submittals, owners may not get the performance they believe they are paying for.

This white paper summarizes how the AMCA CRP works and how series products that undergo the rigorous certification process deserve to be specified ahead of noncertified series equipment when AMCA-certified products are available. It also matches certified products to the AMCA CRP publications that lay out the rules of certification for that product and identifies the product rating test standards associated with the product and certification.

This paper also clears up a few prevalent misconceptions about the AMCA CRP, and it provides some exemplary language that can be used as a guideline for cogent and enforceable specifications.



Figure 1. Example CRP seals for fans & dampers (left) and a seal that combines damper air performance, efficiency and air leakage (right).

The following AMCA standards can be purchased from AMCA International's website, under the "Resources" tab (www.amca.org/store):

- **ANSI/AMCA STANDARD 99**
STANDARDS HANDBOOK
- **ANSI/AMCA STANDARD 204**
BALANCE QUALITY AND VIBRATION LEVELS FOR FANS
- **ANSI/AMCA STANDARD 205**
ENERGY EFFICIENCY CLASSIFICATION FOR FANS
- **ANSI/AMCA STANDARD 210/ASHRAE 51**
LABORATORY METHODS OF TESTING FANS FOR CERTIFIED AERODYNAMIC PERFORMANCE RATING
- **ANSI/AMCA STANDARD 220**
LABORATORY METHODS OF TESTING AIR CURTAINS FOR AERODYNAMIC PERFORMANCE RATINGS
- **ANSI/AMCA STANDARD 240**
LABORATORY METHODS OF TESTING POSITIVE PRESSURE VENTILATORS FOR AERODYNAMIC PERFORMANCE RATING
- **ANSI/AMCA STANDARD 260**
LABORATORY METHODS OF TESTING INDUCED FLOW FANS FOR RATING
- **ANSI/AMCA STANDARD 250**
LABORATORY METHODS OF TESTING JET TUNNEL FANS FOR PERFORMANCE
- **ANSI/AMCA STANDARD 300**
REVERBERANT ROOM METHOD FOR SOUND TESTING OF FANS
- **ANSI/AMCA STANDARD 301**
METHODS FOR CALCULATING FAN SOUND RATINGS FROM LABORATORY TEST DATA
- **ANSI/AMCA STANDARD 500-D**
LABORATORY METHODS OF TESTING DAMPERS FOR RATING
- **ANSI/AMCA STANDARD 500-L**
LABORATORY METHODS OF TESTING LOUVERS FOR RATING

AMCA ONLINE RESOURCES

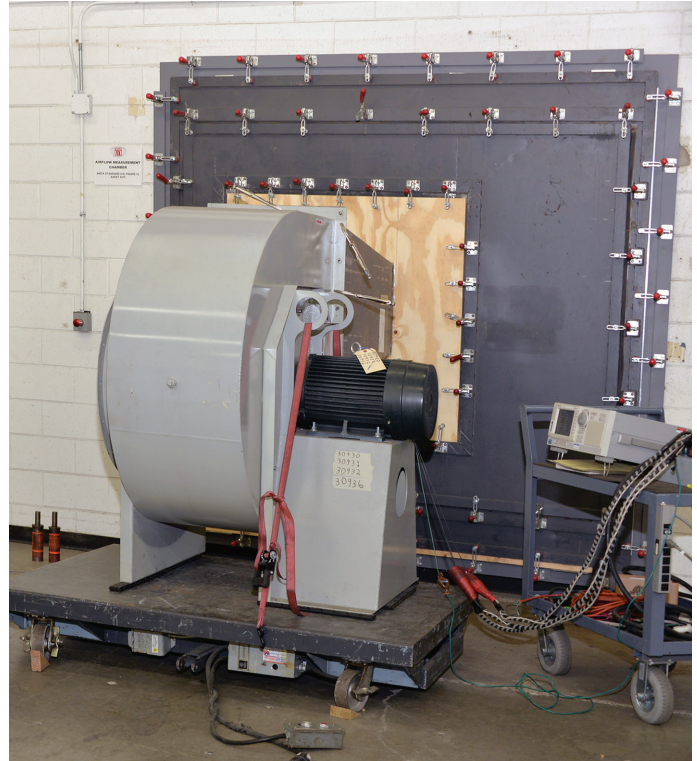
AMCA International Headquarters and Laboratory
www.amca.org

Asia AMCA Offices and Testing Lab
www.asiaamca.org

AMCA White Papers
www.amca.org/whitepapers

CRP-Related Publications (no cost) and Standards (cost)
www.amca.org/store

Searchable Database of AMCA-Certified Products
www.amca.org/certified-listed/cpsearch.php



Fan air performance (above) and damper leakage testing (below) at AMCA headquarters laboratory.





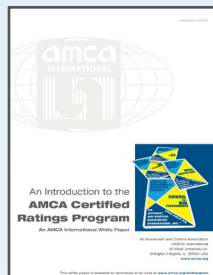
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DIRECTORY OF CRP WHITE PAPERS

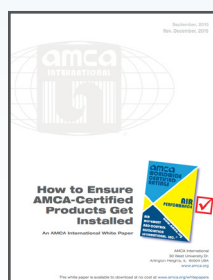
available at www.amca.org/whitepapers:



“AN INTRODUCTION TO THE AMCA CERTIFIED RATINGS PROGRAM” – Includes a detailed explanation of how the AMCA Certified Ratings Program (CRP) works and how to properly specify AMCA-certified products for air systems, plus a mapping of the different CRP seals/labels, publications and test standards applicable to the 21 air movement and control products covered by the CRP.



“GUIDELINE SPECIFICATIONS FOR SELECTED AMCA-CERTIFIED PRODUCTS” – This white paper provides examples of specifications for AMCA-certified products that are of primary interest to the engineering community. It also provides a list of referenced AMCA standards and publications, as well as a list of online resources from AMCA International websites.



“HOW TO ENSURE AMCA-CERTIFIED PRODUCTS GET INSTALLED” – This white paper describes what building industry professionals need to know to properly specify an AMCA-certified product and then ensure that product gets installed. Included are a handy step-by-step checklist and several practical examples.



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