How to Ensure AMCA-Certified Products Get Installed

An AMCA International White Paper

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This white paper is available to download at no cost at www.amca.org/whitepapers
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ABSTRACT
This white paper explains what building-industry professionals need to know to properly specify an AMCA-certified product and then ensure that product gets installed. Included are a step-by-step checklist and several practical examples.

AMCA CERTIFIED RATINGS PROGRAM
Air Movement and Control Association (AMCA) International’s Certified Ratings Program (CRP) is a globally recognized third-party program that assures not only that a product line has been tested and rated in conformance with AMCA standards and requirements, but that published performance ratings are accurate and, thus, reliable.

AMCA-CERTIFIED-PRODUCT TYPES
The first and perhaps most obvious step in specifying an AMCA-certified product is to verify a product is of a type AMCA certifies.
FINDING AMCA-CERTIFIED PRODUCTS
The most reliable means of finding AMCA-certified products is the database at http://bit.ly/CRP_database. If you select products based on manufacturer literature, it is good practice to verify certifications are current by checking the database.

AMCA’s online database is searchable by:
- Company name
- Product type
- Country
- Certification type

AMCA offers 18 certifications through the CRP:
- Acoustic Duct Silencer
- Air Leakage
- Air Performance
- Airflow Measurement Station
- Axial Impeller
- CFM per Watt
- Circulating Fan
- Efficiency
- Energy Star
- FEG (fan efficiency grade)
- FEI (fan energy index)
- Induced Flow Fan
- Jet Fan
- Positive Pressure Ventilator
- Sound
- Water Penetration
- Wind Driven Rain
- Wind Driven Sand
If, for example, you are looking for an AMCA-certified induced-flow fan, first search the online database by certification type, and then review products and literature by manufacturer (figures 1 and 2).

**STEP 2: FIND AMCA-CERTIFIED PRODUCTS**

- Search for certified products in AMCA’s online database
- Identify AMCA-certified products in manufacturer literature and verify certification in AMCA’s online database

**VERIFYING CERTIFIED-PERFORMANCE PARAMETERS**

It is important to note that for a general certification type, such as sound, a product may be certified for only certain parameters. For example, a fan may be certified to display the AMCA sound-and-air-performance seal, but be certified for only inlet A-weighted sound power (LwA) and air, not hemispherical sones or octave bands. Or, a louver may be certified to display the AMCA water-penetration-and-air-performance seal, but be certified for only intake pressure drop and water penetration, not exhaust pressure drop. To verify specific certified parameters, view approved manufacturer literature found or referenced in AMCA’s online database.

**STEP 3: VERIFY CERTIFIED-PERFORMANCE PARAMETERS**

- View approved manufacturer literature found or referenced in AMCA’s online database

**WRITING SPECIFICATIONS**

Once an AMCA-certified product is selected and the performance parameters in need of certification are verified, the next step is to write a product specification that will withstand the challenges of plan review and the ever-present threat of inappropriate substitution.

Avoid creating a specification that lists a particular product. Instead, create one that lists requirements for how a product type must perform.
To ensure a specification clearly requires an AMCA-certified product, include statements similar to those for air-circulating fans below:

- All fans shall be certified to bear the AMCA Certified Ratings Program seal for Air Performance.
- All fans shall be certified to bear the AMCA Certified Ratings Program seal for FEI (Fan Energy Index).

**Important:** The following language requires clarification or should be avoided in specifications:

- "Tested in accordance with ...": A product that was tested in accordance with an AMCA standard is not necessarily an AMCA-certified product.
- "Tested in an AMCA or AMCA-accredited laboratory": Again, this language provides no assurance a product is certified. Do not use this language in your specification.

For more information about writing specifications for AMCA-certified products, see the white paper “Guideline Specifications for AMCA-Certified Products.”

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**STEP 4: WRITE A SUBSTITUTION-PROOF SPECIFICATION**

- Write a performance specification; do not flat-spec a specific product
- Do not include “tested in accordance with ...” without referencing compliance with an AMCA 11-series publication
- Do not include “tested in an AMCA or AMCA-accredited laboratory”

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**VERIFY THE AUTHENTICITY OF CERTIFICATION**

The process of designing and constructing a building is long and complex, with things changing along the way: Products get packaged with other products; substitutions happen. From the time products are specified to the time they are procured, installed, and commissioned, building-industry professionals need to ensure there is no elimination of AMCA certification requirements and no substitution with uncertified products.

The goal of the AMCA certification program is to ensure air-movement and control products perform as stated in manufacturer literature. To verify a product is indeed AMCA-certified:

**COMPARE THE ACTUAL PRODUCT TO THE PRODUCT IN THE SPECIFICATION**

At submittal, installation, and commissioning, verify the selected product matches the product specification.

**VERIFY THE PRODUCT IS IN AMCA’S ONLINE CERTIFIED-PRODUCTS DATABASE**

Go to AMCA’s online certified-products database and search by company name, product type, country, or certification type.

**VERIFY THE PRODUCT/MANUFACTURER IS NOT IN AMCA’S ONLINE CRP-VIOLATIONS DATABASE**

Go to the “Violations of the CRP” page on AMCA’s website (www.amca.org/certify/#violations) to see lists of enforced certification withdrawals, program-violation notices, and non-certified products.
VERIFY THE AMCA SEAL IS CORRECT
Manufacturers whose products are certified to bear the AMCA seal are not required to display it. If a product bears the AMCA seal, refer to Table 1 to verify the seal matches the certification requirement identified in the product specification. A printed seal on product packaging does not indicate AMCA certification.

VERIFY THE AMCA SEAL IS AUTHENTIC
Do not assume an AMCA seal affixed to a product is real; a number of counterfeit seals have been found in the field. Manufacturers are not authorized to print their own seals for use on physical products; seals must be purchased directly from AMCA, so AMCA can ensure they are being procured for approved (certified) products. Use Figure 3 and Table 1 to verify the authenticity of seals found in the field.

![Authentic AMCA seal](image1) ![Counterfeit seal](image2)

The seal on the right is too wide, and the text alignment and colors are incorrect.

![Authentic AMCA seal](image3) ![Counterfeit seal](image4)

The seal on the right should say "water penetration," not "water performance." Also, its design, width, text alignment, and colors are incorrect.

![Authentic AMCA seal](image5) ![Counterfeit seal](image6)

All AMCA seals are printed in English.

![Authentic AMCA seal](image7) ![Counterfeit seal](image8)

The fonts, text alignment, and colors of the seal on the right are incorrect. Also, elements are missing.

FIGURE 3. Authentic and counterfeit AMCA seals.
VERIFY THE PRODUCT AND COMPANY NAMES MATCH THOSE ON THE AMCA CERTIFICATION
If an AMCA-certified product is sold to and renamed by another manufacturer, the renamed product must have its own AMCA certification to ensure product performance. Verify AMCA-certified products by name in AMCA’s online database.

BE ON THE LOOKOUT FOR MISLEADING REPRESENTATIONS IN PRODUCT LITERATURE
An AMCA seal can be used only in direct association with a certified product. It cannot, for example, be placed on the cover of a brochure that includes both certified and uncertified products. This is a strict requirement that helps to avoid misrepresentation and confusion. The best practice is to reference approved product literature in AMCA’s online database.

A final note: AMCA’s member logo does not indicate certification; it merely signifies membership in AMCA. To avoid confusion, AMCA prohibits use of its member logo in documents containing product performance data.

STEP 5: VERIFY THE AUTHENTICITY OF CERTIFICATION

- Compare the actual product to the product in the specification
- Verify the product is in AMCA’s online certified-products database
- Verify the product/manufacturer is not in AMCA’s online CRP-violations database
- Verify the AMCA seal is correct
- Verify the AMCA seal is authentic
- Verify the product and company names match those on the AMCA certification

CONCLUSION
There is significant value in the ability to specify a building product backed with independently verified performance data. Given that this benefit is available with many air-movement and control products, it makes sense not only to specify a certified product, but to ensure the product actually gets installed. Specifying AMCA-certified products and then carefully verifying product selection throughout design and construction will ensure the products perform as described and as expected.
### TABLE 1. Certification types, publications, and test standards associated with the 24 products covered by the AMCA CRP.

<table>
<thead>
<tr>
<th>Products</th>
<th>Certification Types</th>
<th>CRP Publications</th>
<th>Test/Rating Standards</th>
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<tr>
<td>Axial impellers</td>
<td></td>
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<td>ANSI/AMCA Standard 250, Laboratory Methods of Testing Jet Tunnel Fans for Performance</td>
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<tr>
<td>Ceiling ventilators</td>
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<td>ANSI/AMCA Standard 300, Reverberant Room Method for Sound Testing of Fans</td>
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<td>Centrifugal fans</td>
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<td>ANSI/AMCA Standard 320, Laboratory Method of Sound Testing of Fans Using Sound Intensity</td>
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<td>Evaporative coolers</td>
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<td></td>
<td>ISO 5801, Fans—Performance Testing Using Standardized Airways</td>
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<td>Jet-tunnel fans</td>
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<td>Mixed-flow fans</td>
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<td>Power roof ventilators</td>
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<td>Propeller fans</td>
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<td>Single-room air handlers</td>
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<td>Air circulator fans</td>
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<td>AMCA Publication 211</td>
<td>ANSI/AMCA Standard 230, Laboratory Methods of Testing Air Circulating Fans for Rating and Certification</td>
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<tr>
<td>Large-diameter ceiling fans</td>
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<tr>
<td>Air-curtain units</td>
<td></td>
<td>AMCA Publication 211, AMCA Publication 311</td>
<td>ANSI/AMCA Standard 220, Laboratory Methods of Testing Air Curtains for Aerodynamic Performance Rating</td>
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<td>ANSI/AMCA Standard 300</td>
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<td>Induced-flow fans</td>
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<td>AMCA Standard 205</td>
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<td>ANSI/AMCA Standard 260, Laboratory Methods of Testing Induced Flow Fans for Rating</td>
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<td>ANSI/AMCA Standard 300</td>
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<tr>
<td>Positive-pressure ventilators</td>
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<td>AMCA Publication 211</td>
<td>ANSI/AMCA Standard 240, Laboratory Methods of Testing Positive Pressure Ventilators for Aerodynamic Performance Rating</td>
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Table 1 continued on next page
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<tr>
<td></td>
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<td>AMCA Publication 511</td>
<td>ANSI/AMCA Standard 500-L, Laboratory Methods of Testing Louvers for Rating</td>
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<td>AMCA Publication 511</td>
<td>ANSI/ASHRAE/SMACNA Standard 126, Methods of Testing HVAC Air Ducts</td>
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<td>Gravity ventilators</td>
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<td>AMCA Publication 511</td>
<td>ANSI/AMCA Standard 500-L</td>
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<td>Spiral duct</td>
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<td>AMCA Publication 511</td>
<td>ANSI/ASHRAE/SMACNA Standard 126, Methods of Testing HVAC Air Ducts</td>
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<td>Transverse duct connectors</td>
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<td>AMCA Publication 511</td>
<td>ANSI/ASHRAE/SMACNA Standard 126, Methods of Testing HVAC Air Ducts</td>
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OTHER CRP WHITE PAPERS
Available at www.amca.org/whitepapers:

AN INTRODUCTION TO THE AMCA CERTIFIED RATINGS PROGRAM—Describes how the AMCA Certified Ratings Program (CRP) works, explains how to properly specify AMCA-certified products for air systems, and maps seals/labels, publications, and test standards to the 24 products covered by the CRP.

GUIDELINE SPECIFICATIONS FOR SELECTED AMCA-CERTIFIED PRODUCTS—Provides example specifications for AMCA-certified products of primary interest to the engineering community. Also provides a list of referenced AMCA standards and publications and a list of online resources from AMCA.