

AMCA Publication 511-07 (Rev. 8/08)

Certified Ratings Program -
Product Rating Manual for
Air Control Devices



**AIR MOVEMENT AND CONTROL
ASSOCIATION INTERNATIONAL, INC.**

The International Authority on Air System Components

**AMCA PUBLICATION 511-07
(Revised 8/08)**

**Certified Ratings Program -
Product Rating Manual for Air Control Devices**



**Air Movement and Control Association International, Inc.
30 West University Drive
Arlington Heights, IL 60004-1893**

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Related AMCA Standards and Publications

Related Amca Publications

Standard 500-D *Laboratory Methods for Testing Dampers for Rating*

Standard 500-L *Laboratory Methods for Testing Louvers for Rating*

Publication 11 *Certified Ratings Program Operating Manual*

Publication 261 *Directory of Products Licensed to Use the AMCA Certified Ratings Seal*

Other AMCA Programs

Publication 111 *Laboratory Accreditation Program*

Applicable Forms

CRP-5 Form *Application for Air Control Certified Ratings Seals*

CRP-A Form *Application for AMCA Certified Ratings Seal*

CRP-B Form *Application for AMCA Certified Rating Seal*

CRP-L Form *Application for AMCA Certified Ratings Seal*

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Certified Ratings Program and Product Rating Manual for Air Control Devices

1. Purpose

The purpose of this manual is to prescribe proper presentation of data and other required technical procedures to be used in connection with the AMCA Certified Ratings Program for Air Control Devices. This manual should be used in conjunction with the current edition of AMCA Publication 11.

2. Scope

The products within the scope of this program are air control devices for use in general ventilation and air conditioning systems.

This program shall apply only to complete catalogued series of sizes. It shall not apply to individual sizes in a series, or part of a series of sizes, or to special units on which catalog ratings are not published.

The AMCA Certified Ratings Seal shall be used only in connection with the specifically licensed device. The AMCA Seal shall be used only on complete units. The application of the AMCA Seal to individual component parts, such as blades, frames, etc. is not permitted.

3. Definitions

All definitions found in AMCA Publication 11, as well as the following, apply to this program.

Appurtenance – Any item in or on the inlet or discharge air stream that affects the performance of the air control device.

An appurtenance should be considered a part of the air control device if it is in place when the device is tested for performance rating, and the effect of the appurtenance is included in the cataloged performance rating.

AMCA Certified Ratings Program – A program for certifying a product's performance ratings, as defined in this document.

Performance rating(s) – Data generated from actual tested products used to derive the certified and published information.

Shall and should – The word "shall" is understood to be a mandatory requirement and the word "should" is understood to be advisory.

Aerodynamically similar – Louvers and dampers are considered to be aerodynamically similar if the profiles of the components in the air stream are geometrically similar. The blades must be in relative position to the frame and the center-to-center dimensions are to be the same. Frame, blade stops and blade profiles may have slight variances due to manufacturing methods. Blades must have the same streamline shape in that their leading and trailing edges must be dimensionally equal. The overall angle or curvature of the blade must be the same. Slight deviations in material thickness shall not reduce the overall free area by more than 5% for dampers and 2.5% for louvers. Blade seals must have the same profile, be of the same durometer, and be secured to the blade in the same manner.

Nameplated products – AMCA 11 allows a company to nameplate another company's product line. For the purposes of this document a company can also nameplate a product line of its own (i.e., sell an identical product line under a different name). The product line must be identical to the original product line. All the requirements of AMCA 11 for licensing a nameplated product line would also apply.

3.1 Symbols

Symbol	Description
PL 1	Device inlet plane
PL 2	Device outlet plane
P_s	Static pressure
P_t	Total pressure
ΔP	Pressure drop or pressure differential

4. Data Submittal Requirements

AMCA staff shall accept for review only test data obtained in an AMCA Accredited Laboratory or the AMCA Laboratory in accordance with one or more of the test standards recognized in AMCA Publication 111 *Laboratory Accreditation Program*.

For each product category covered by this program, a separate Product Rating Requirement Subsection of testing and rating requirements is included as part of this document. The specific procedure and test data necessary for preparing performance ratings is defined in these product sections.