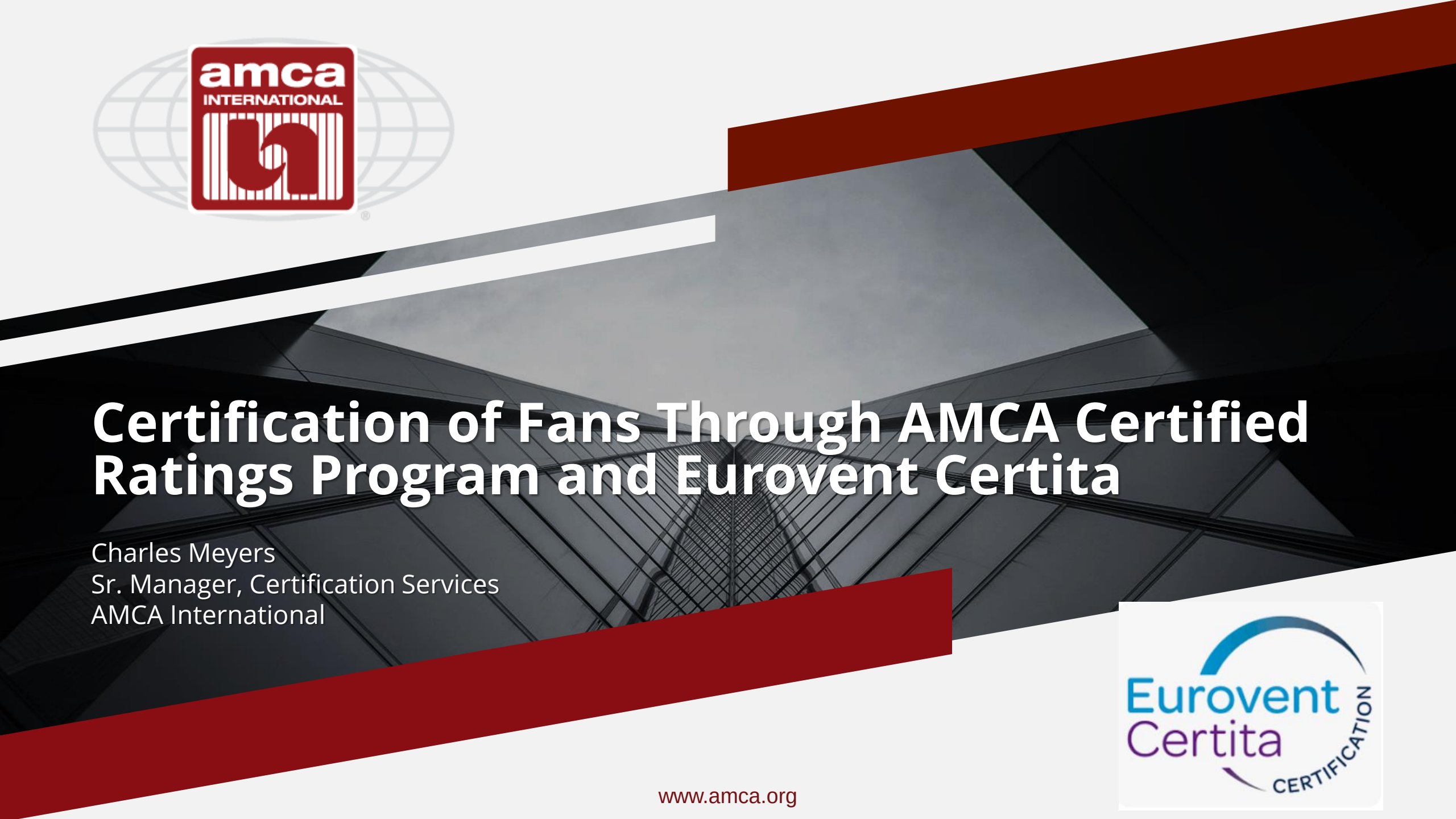

Certification of Fans Through AMCA Certified Ratings Program and Eurovent Certita

Charles Meyers
Sr. Manager, Certification Services
AMCA International

Agenda:

1. Overview of Eurovent/AMCA Certification Program
2. AMCA CRP Overview
3. Eurovent Certification Process

Eurovent/AMCA Fan Certification Program

- Program covers all fans intended to be used in Air Handling Units
  - Fans used in AHU must participate in Certified Ratings Program
    - Additional testing is not required
    - One (1) manufacturing facility will be audited yearly
    - Grants use of the Eurovent Certified Performance (ECP) logo

Eurovent Certita CERTIFICATION

TECHNICAL CERTIFICATION RULES OF THE EUROVENT CERTIFIED PERFORMANCE MARK

EUROVENT CERTIFIED PERFORMANCE

Fans

Identification: ECP 22

Revision 1 – 10-2023
(This version cancels and replaces any previous versions)

Approbation date: 16/10/2023

Comes into effect from: 16/10/2023

Date of 1st application: 16/10/2023

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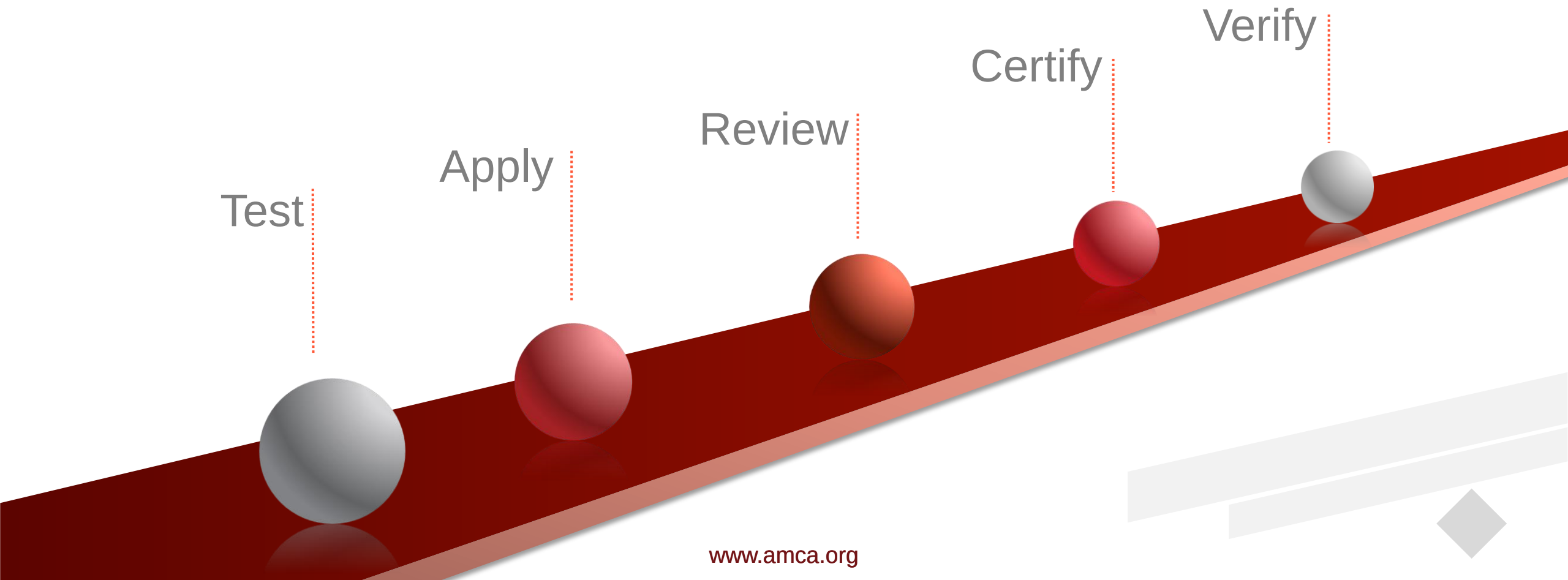
Performance Ratings that are Certified

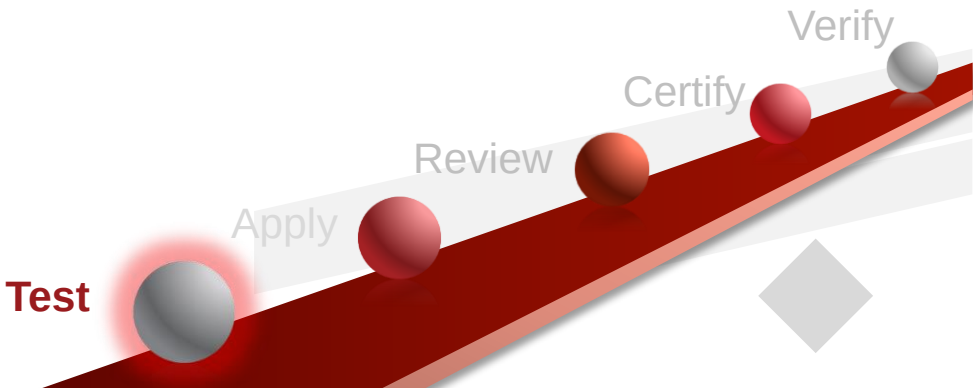
- Air Performance (to AMCA Pub 211)
  - Mandatory
- Sound (to AMCA Pub 311)
  - Optional
- FEI
  - Optional

AMCA Certification Process



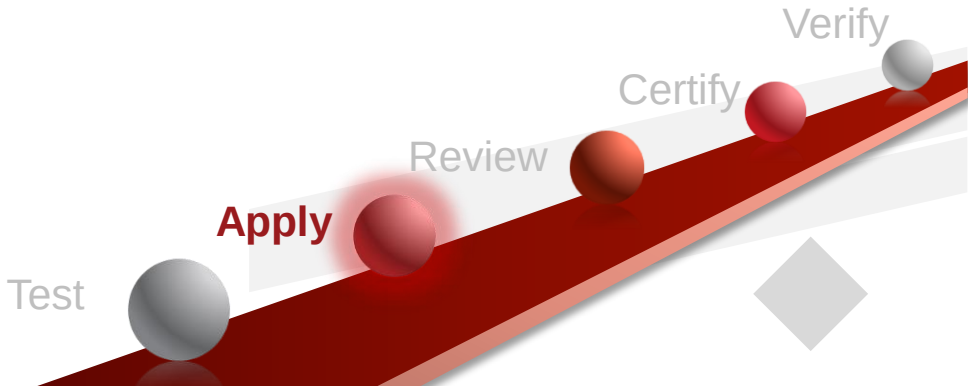
AMCA CRP: Develop test program

- Product type and performance of interest dictate which test standard(s) is(are) used
  - e.g. if a company wants to certify a fan for air performance, we'll select AMCA 210
  - For air performance and sound certification, we'll select AMCA 210 & AMCA 300



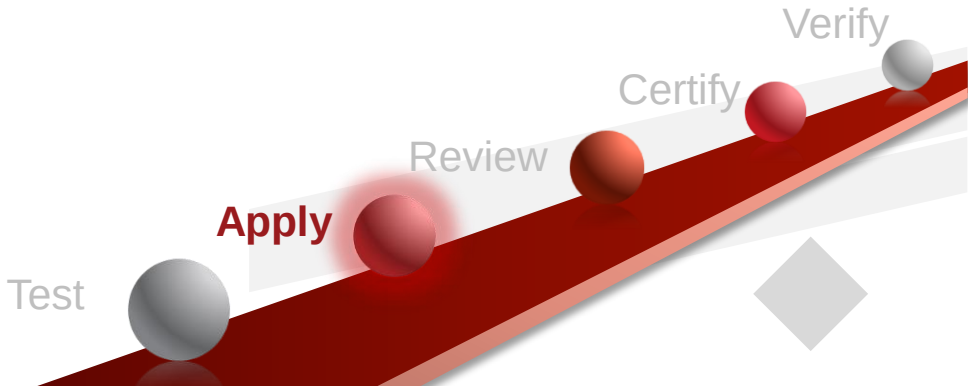
AMCA CRP: Apply for Certification

- Complete and submit application form
  - CRP 8
  - CRP Forms connect the product name to the product testing that supports the certification.
    - Outlines which products have been tested vs those that have been rated
    - How testing was performed
      - Test Fig
      - Installation type
      - Speed
      - # of blades and pitch angle
      - Min/max speeds
      - FEI/FEG/Energy Star (Y/N)



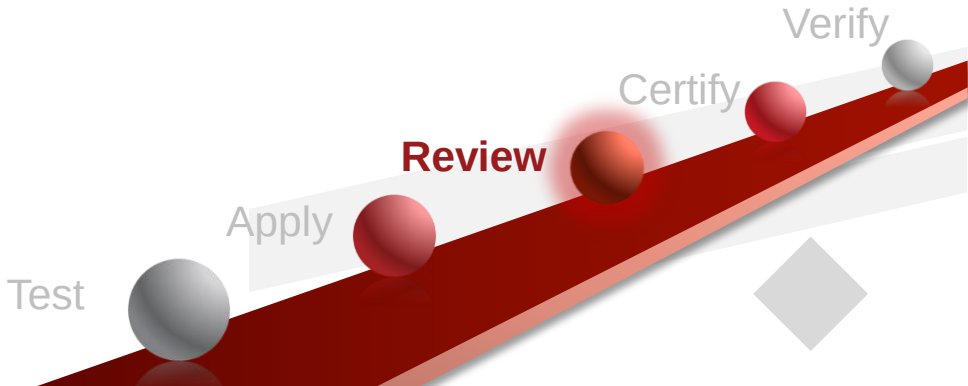
Apply for Certification, continued

- Submit product information through AMCAConnect
  - Product type
  - Product size
  - Dimensional Drawings
  - Certification type



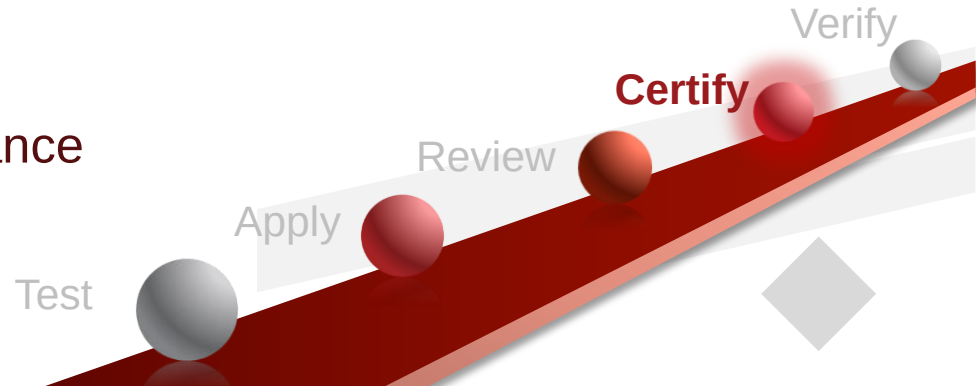
AMCA CRP: Review the Catalog

- Staff reviews the catalog/selection program
  - Format – Statement requirements per AMCA Publications
  - Data – Compares performance data against test data to determine if it falls within tolerance
    - ¼ of Check Test tolerance
      - Example – Airflow Check Test tolerance = ±5%
        - » Catalog tolerance = ±1.25%



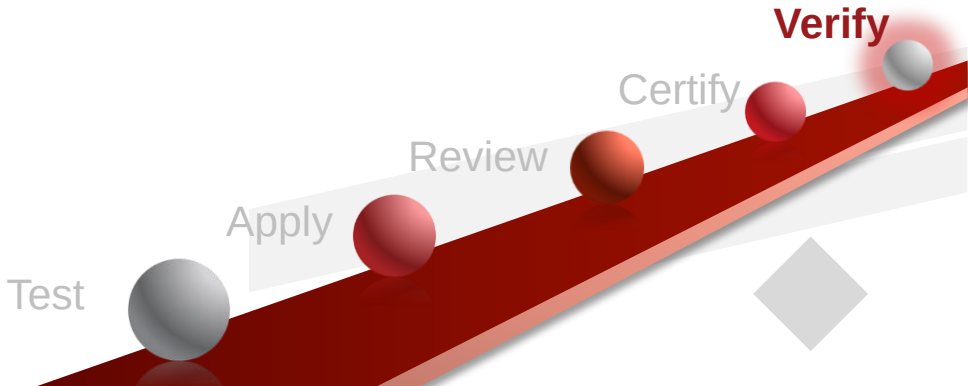
AMCA CRP: Required Statements

- Installation setup
  - Ducted/Non-ducted Inlet/Outlet
- Appurtenances
- Nominal Speed
- Transmission losses
- Required statements are included in:
  - Publication 11
    - Certified Ratings Program Operating Manual
  - Publication 211
    - Certified Ratings Program – Fan Air Performance
  - Publication 311
    - Certified Ratings Program – Fan Sound Performance



AMCA CRP: Ongoing verification

- Done through check testing
- First check test
  - Pre-Production Sample
    - within 12 months of certification
  - Production Sample
    - within 36 months of certification



Eurovent Certification Process

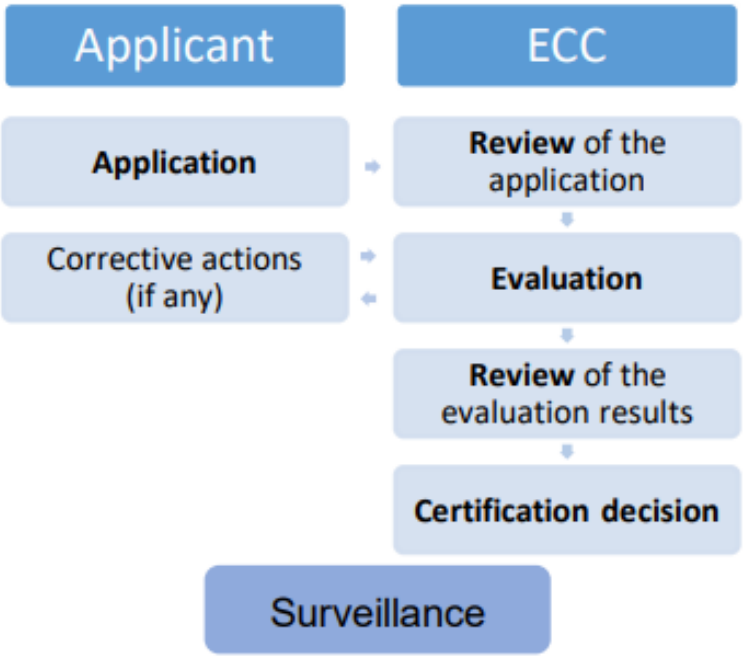
- Step 2: Apply for Eurovent Certification
  - Sign the Certification Agreement
  - Send information required to determine qualification for program
    - Product types
    - Range names
    - Model names
    - Catalogs (PDF and/or software selection programs)
    - List of manufacturing facilities (city and country)
  - .XLSX form files are to be sent to Eurovent for review
  - Applicable documents are:
    - Certification Manual of the Eurovent Certified Performance mark
    - Technical Certification Rules for Fans

Certification Manual for the Eurovent Certified Performance Mark

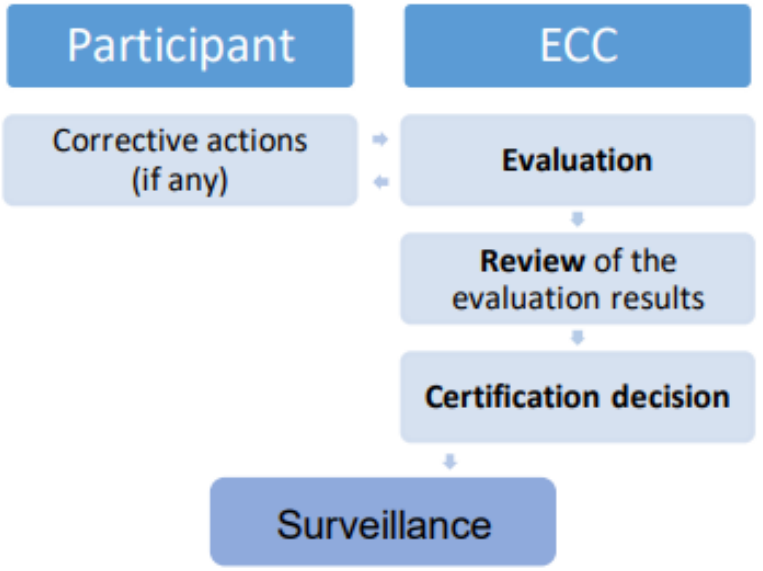
This document describes the common rules for all Eurovent certification programs. It defines in particular the certification process as shown below.

Certification Process:

Admission :



Surveillance :



Eurovent Certification Process for Fans

After Eurovent review and processing, the initial admission audit will be scheduled

- Testing requirements are bypassed through participation in AMCA CRP
- Audit is expected to take one (1) day but can take longer if a joint audit for other Eurovent certifications is desired
  - Once all non-conformities are solved, the certification decision can be taken by ECC.
  - Unit references, performances, software and production place details are listed on ECC website
  - A certificate is granted with a 15 months validity
  - The participant can use the Eurovent Certified Performance mark

Eurovent Certification Audit objectives

- Declaration consistency: ECC will make sure that what is declared is consistent with what is sold
- Production identification and traceability
- Use of the certification mark
- Management of customers claims
- Checking of ISO 9001 certification validity (mandatory for all declared production places)

Eurovent Certified Performance Mark

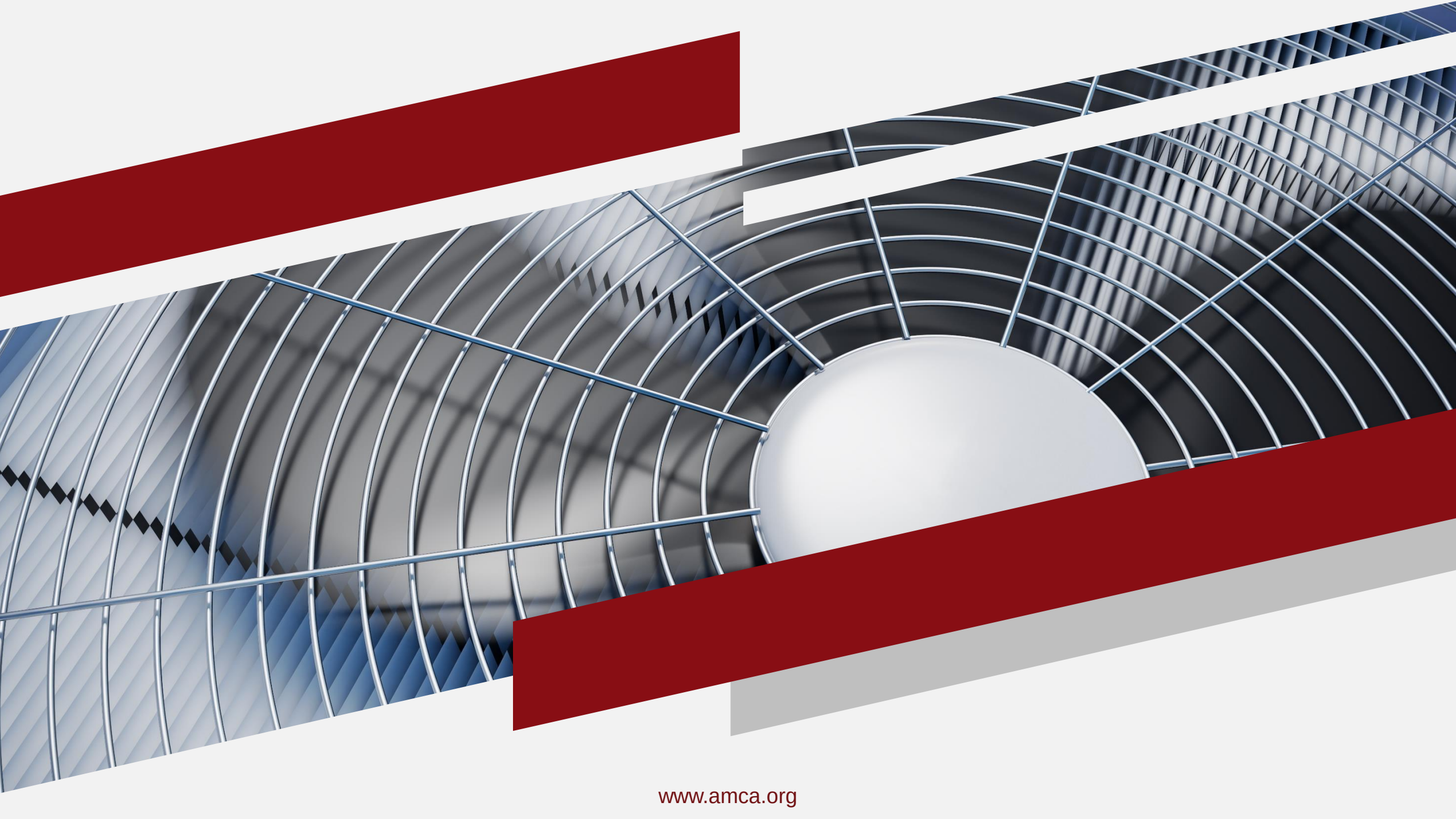
- The rules regarding the use of the Eurovent Certified Performance Mark are given in the Certification Manual for the ECP mark.
- Use of the ECP mark shall be done in a non misleading way.
- How-to-use examples are given in the document.
- ECC is checking participants website and software every year to make sure the mark is properly used.
- ECC also check if the mark is used only by certified companies. A trademark incident list is available on ECC website.
- **Important notice: Non Eurovent certified AHU manufacturers cannot display the ECP mark in their documentation even if they integrate Eurovent certified fans.**

Eurovent Certification Program Maintenance

- Continue participation in AMCA's Certified Ratings Program
  - Check tests every three (3) years to validate performance of on-going production
- Eurovent to perform yearly audits at one (1) manufacturing facility
- Provide necessary Eurovent declaration files and technical data sheets on an annual basis
- Renewal of the Eurovent certification is dictated by the validity of the corresponding AMCA certification.
- Any withdrawal or suspension from AMCA will lead to equivalent decisions for the Eurovent certificate.

Eurovent Certification Program for Fans

Useful links:

- Programme description:
FANS | Eurovent Certita Certification (eurovent-certification.com)

- Online application form:
How to apply | Eurovent Certita Certification (eurovent-certification.com)