



# AMCA & AHRI-MENA Webinar: Specifier Beware! The Importance of Certification

AMCA *insite*™ Webinar Series | December 13, 2021 | [www.amca.org](http://www.amca.org)

## Lisa Cherney

Education Manager, AMCA International  
*Webinar Moderator*

- Joined AMCA in February 2019
- Responsible for development of AMCA's education programs; staff liaison for the Education & Training Committee
- Projects include webinars, AMCA's online learning platform programming, presentations at trade shows, PDH/RCEP account management, and AMCA's Speakers Network



# Introductions & Guidelines

- Participation Guidelines:

- Audience will be muted during the session.
- Questions can be submitted anytime via the Airmeet platform and will be addressed at the end of the presentation.
- Reminder: This session is being recorded!
- To earn PDH credit for today, please stay clicked onto the platform for the entire hour.
- A post-program survey will be emailed to everyone within one hour of the conclusion. Your feedback is greatly appreciated, and the survey must be completed to qualify for today's PDH credit.

# Q & A

## To submit questions:

- From the interactive panel on the right side of the screen, select the “Q&A” option at the top.
  - Type your question in the box and click “Send”.
  - Remember: All attendees can see all questions submitted.
- If you would like to verbally ask your question, please click the “Raised Hand” icon at the bottom of your screen.
  - Questions will be answered at the end of the program.



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*Attendance for the entire presentation  
AND a completed evaluation are required  
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# Nabil Shahin

International Technical Director,  
AHRI-MENA Chapter

- Based in Dubai
- Over 25 years of experience in HVAC, including multiple techno-commercial positions in residential and commercial HVAC industry
- Very familiar with international HVAC regulations & standards in the U.S, Europe, Middle East and Africa
- Master's degree in Mechanical Engineering from Tennessee State University





# Charlie Meyers

Certified Ratings Program Manager,  
AMCA International

- Joined AMCA in June 2021
- Over 10 years experience in managing and administering ISO/IEC 17065 product certification programs globally
- Additional expertise in project management and quality control program development
- Bachelor's degree in criminology and criminal justice from the University of Missouri, and a certificate in product management from Loyola University Chicago



# ***Specifier Beware! The Importance of Certification***

## **Purpose and Learning Objectives**

The purpose of this presentation is to address the importance of product certification, what is involved in the process of certification, and what the Middle East's regional regulations are that consultants need to be aware of.

At the end of this presentation you will be able to:

1. Describe the AHRI and AMCA certification process
2. Explain the importance of specifying certified products.
3. Outline the Middle East regional regulations, including the Green Building Codes, MENA & GCC standards

# Introduction to AMCA

- Not-for-profit manufacturer association
- Established 1917 with six member companies in USA
- Now global with almost 400 companies

# The AMCA Mission

*To advance the knowledge of air systems and uphold industry integrity on behalf of AMCA members worldwide.*

# AMCA Certified Ratings Program

- The AMCA CRP has been in existence for at least 50 years
- 4,126 product lines are certified by AMCA
- Why specify certified products?
  - Increased reliability of ratings
  - Apple-to-apples comparisons
  - Catalogs are up to date and accurate
  - “Check testing” ensures ratings are accurate over time



# Who can participate?

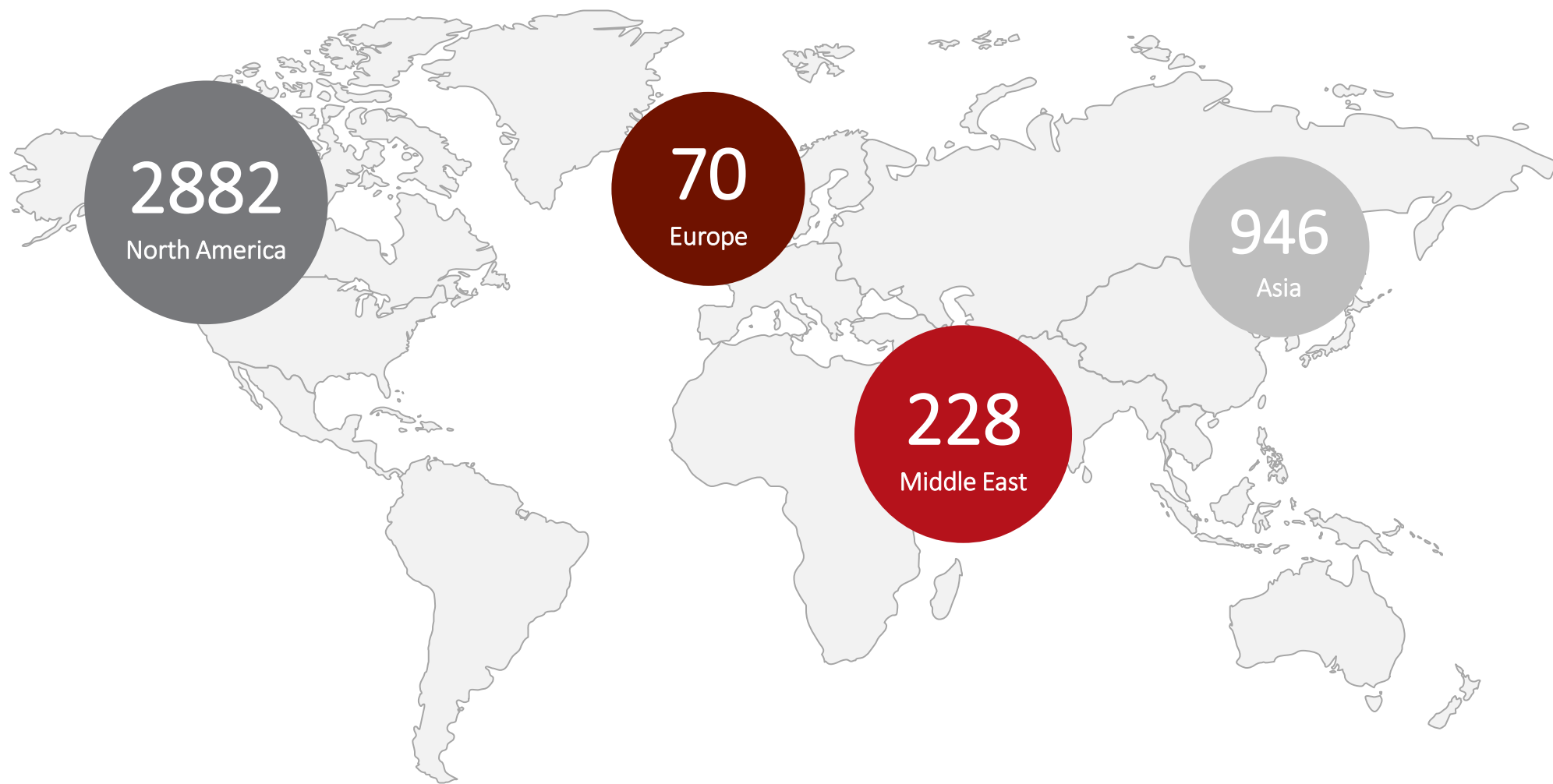
- Members
- Nonmembers
  - CRP Affiliates



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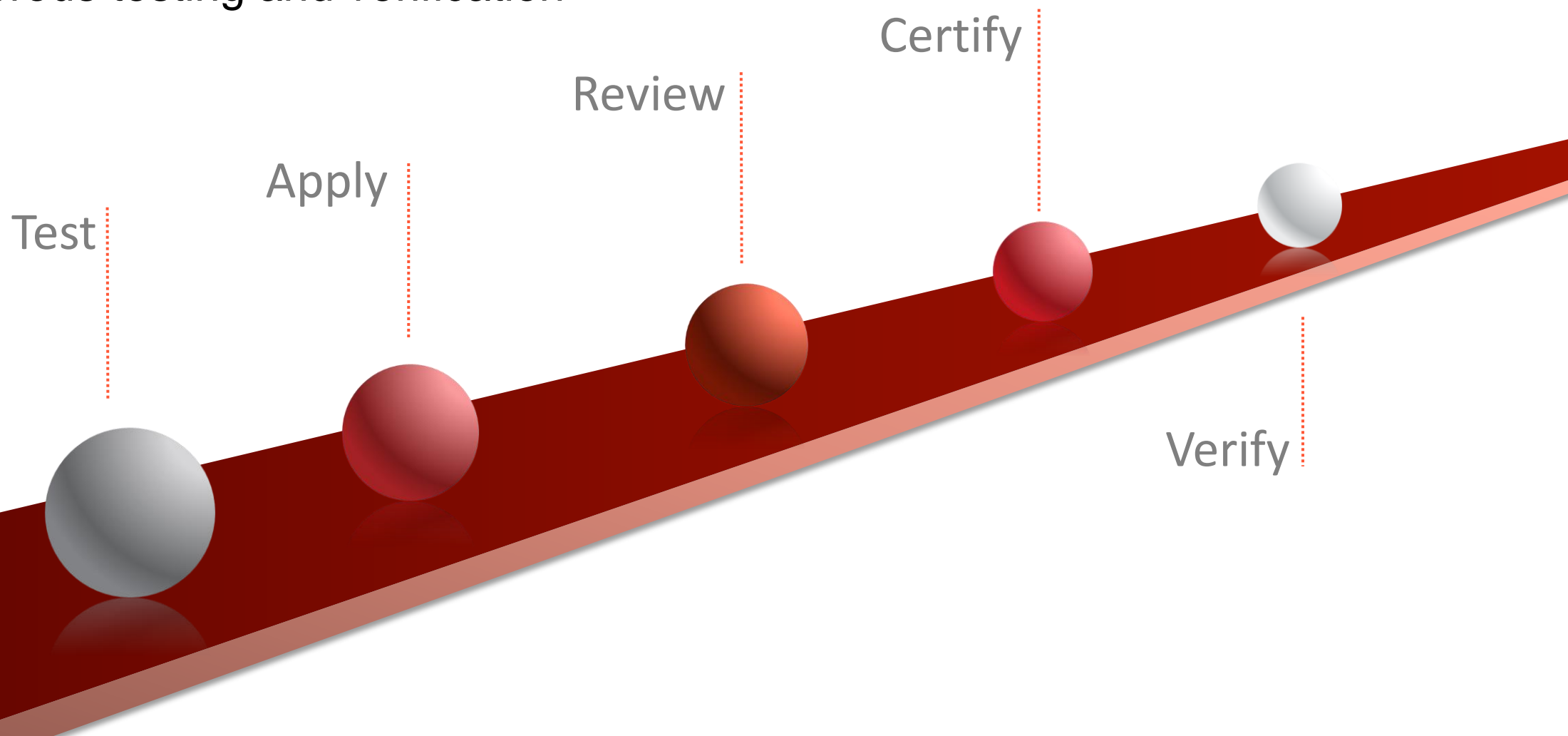


# Product Certifications



# Process for CRP products

Rigorous testing and verification

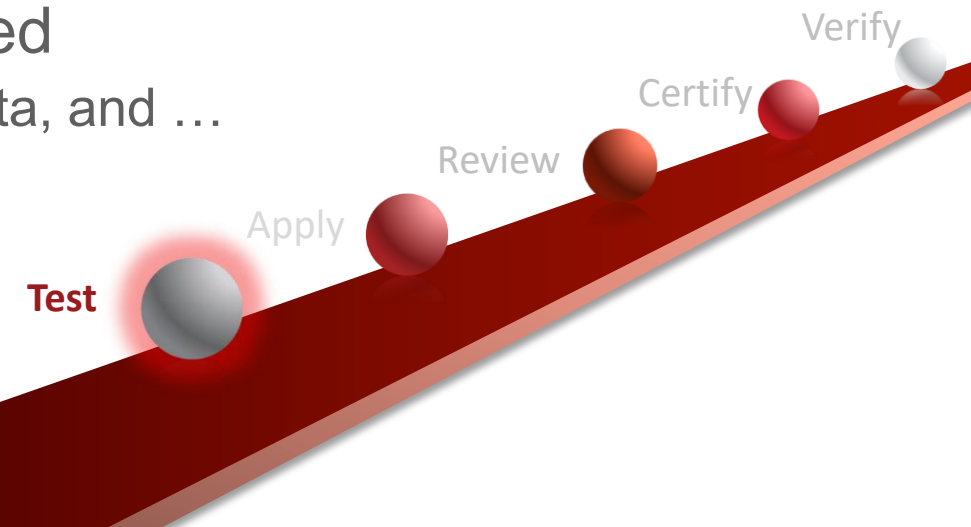


# But first...

- Sign the License Agreement
  - Contract between licensee and AMCA
  - Only signed once
  - An appendix is added for each product line certified

# Develop Test Program

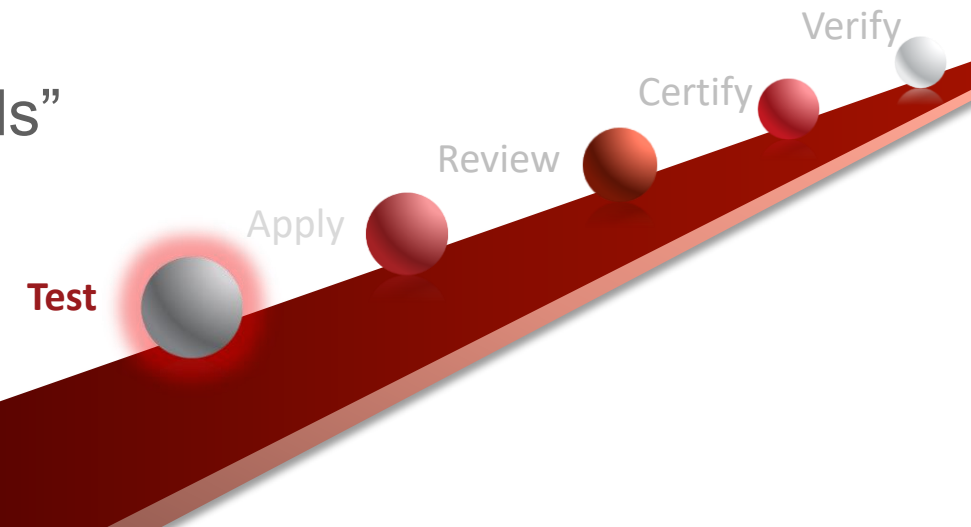
- Often done with assistance from staff
  - Ensures that the test program will lead to certification
- Two types of documents control how products are tested and rated:
  - Standards describe how a product is tested
  - Publications describe how a product is rated
    - i.e. how catalog data is developed from test data, and ...
    - how catalog data is presented to the public





# Develop Test Program, continued

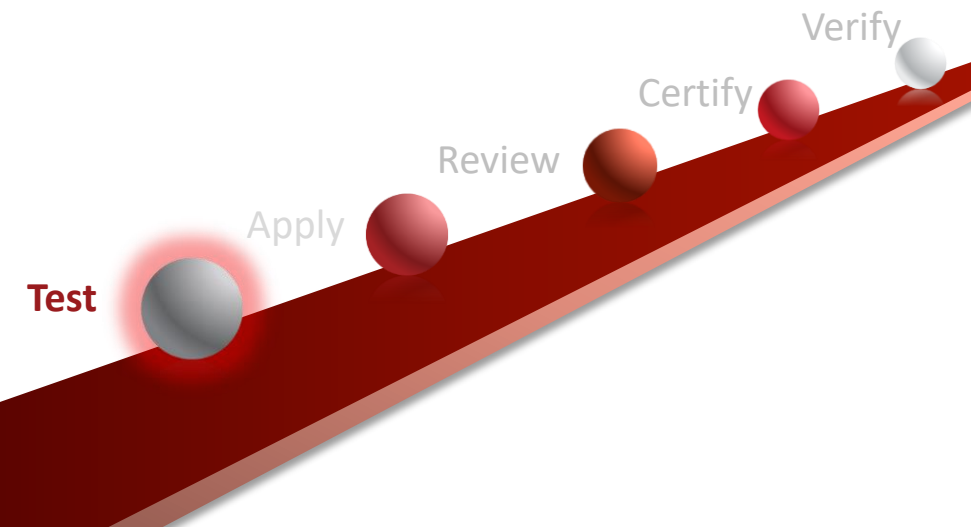
- Sizes
  - Not every size needs to be tested
  - Louvers are simple
  - Axial fans can be complicated – dozens of test sizes
- Sometimes, two products tested in exactly the same way can be rated differently.
  - e.g. AMCA Publication 211 “Rating Methods”



# Develop Test Program, continued

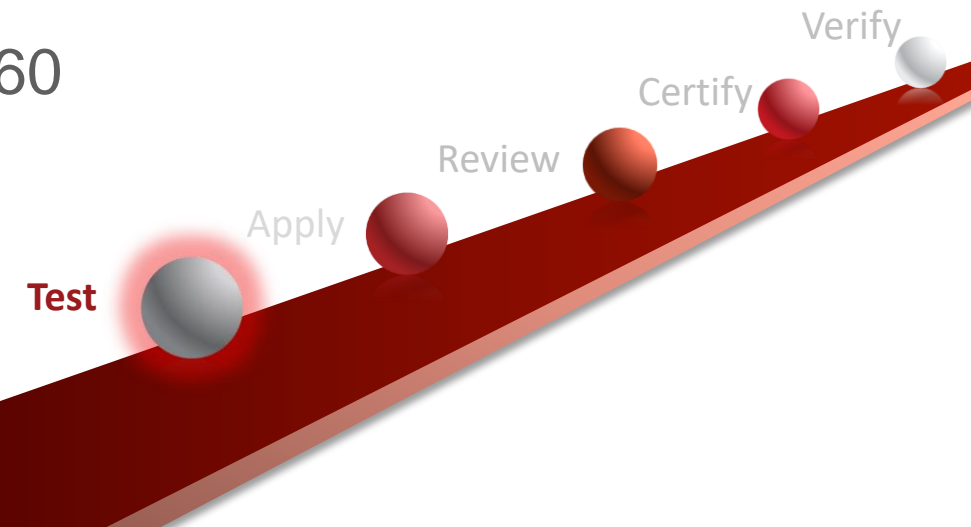
Single-blade, multi-blade or curtain dampers

- Testing shall be conducted in both directions of airflow (front to back and back to front)
  - Test Figure 5.1
  - Test Figure 5.2
  - Test Figure 5.3
  - Test Figure 5.4
  - Test Figure 5.5



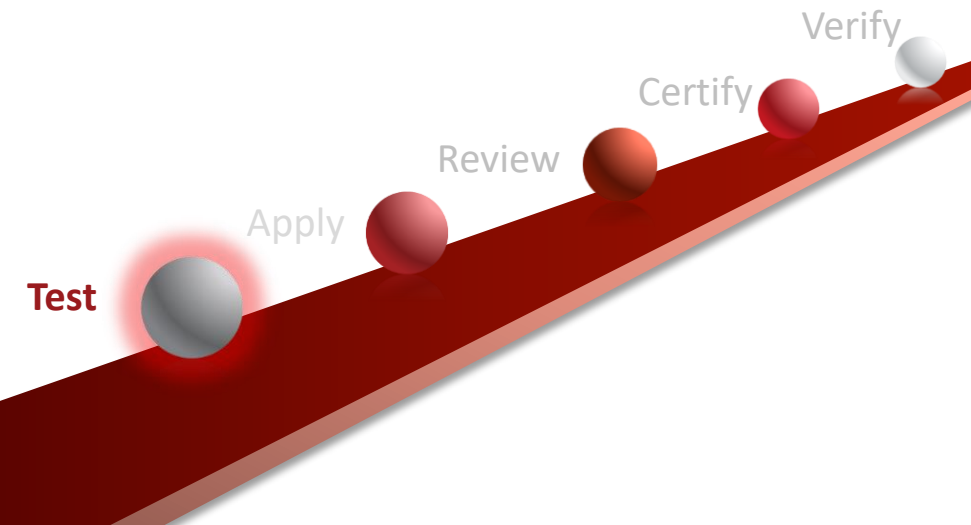
# Test the Product

- Testing Standards for Air Movement Products
  - Fans: ANSI/AMCA 210, 300; ISO 5801, 5136, 13347
  - Air Curtain: ANSI/AMCA 220
  - Ceiling and Circulating Fans: ANSI/AMCA 230
  - Positive Pressure Ventilators: ANSI/AMCA 240
  - Induced Flow Fan: ANSI/AMCA 210 and 260
  - Jet Fan: ANSI/AMCA 250



# Test the Product, continued

- Testing Standards for Air Control Products
  - Louver: ANSI/AMCA 500-L, ASTM E 90
  - Damper: ANSI/AMCA 500-D
  - Acoustic Duct Silencer: ASTM E 477
  - Airflow Measuring Stations: AMCA 600



# Partners

 Kellen



한국기계전자시험연구원  
Fans

 CETIAT  
*ensemble, innover et valider*

Fans

  
ASIA AMCA

Fans and Dampers

 Kellen

  
THOMAS BELL-WRIGHT  
INTERNATIONAL CONSULTANTS

Louvers for Pressure Drop and  
Wind-Driven Sand



Acoustic Duct Silencer



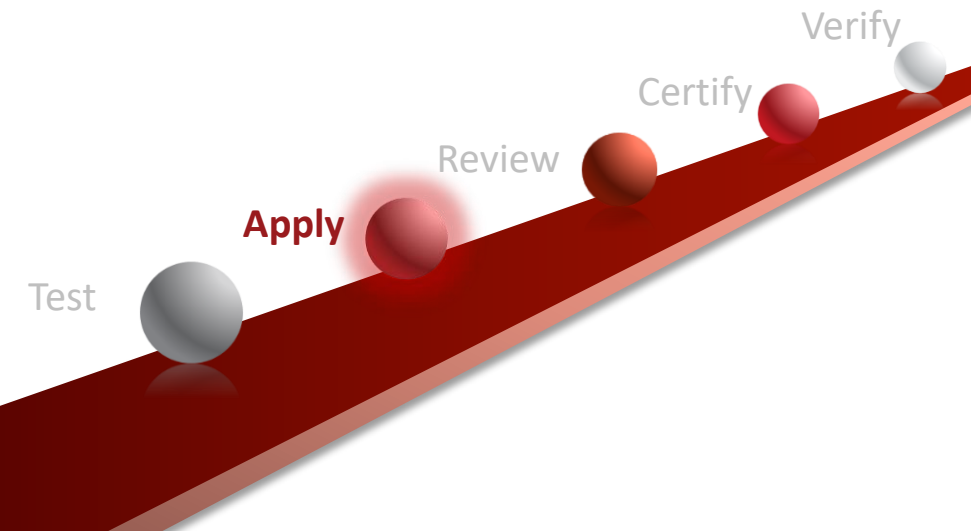
All except Acoustic Duct  
Silencer, Wind-Driven Sand





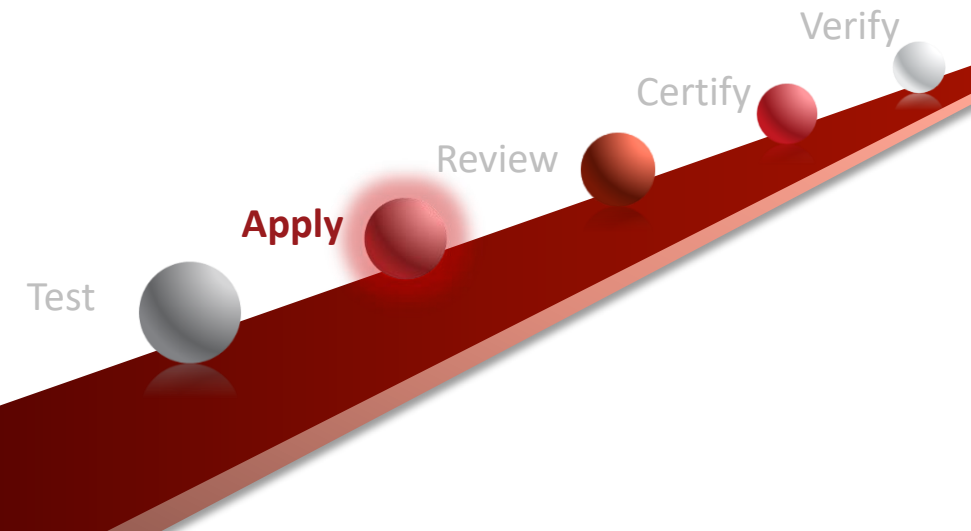
# Apply for Certification

- Submit Product Information
  - Product type
  - Product size
  - Dimensions
  - Drawings
  - Certification type



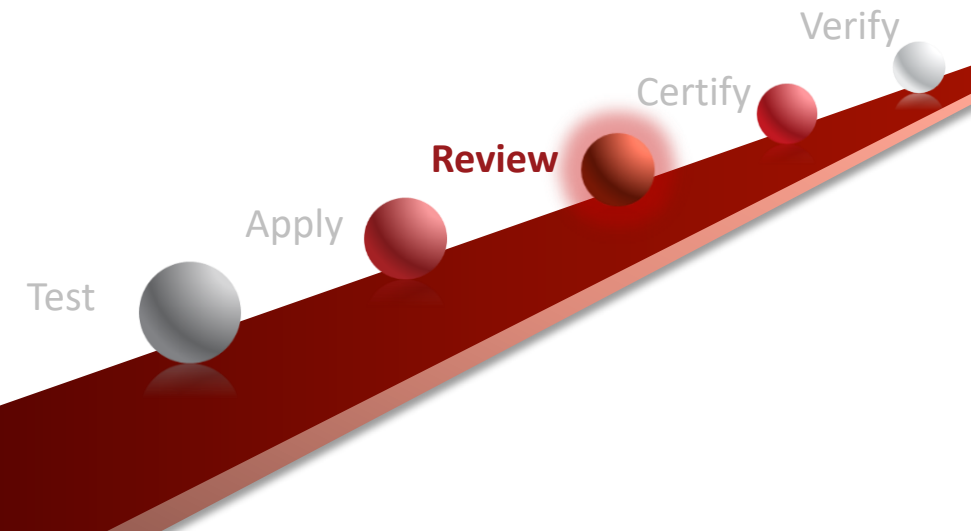
# Apply for Certification, continued

- Certification type
  - Air
  - Sound
    - Inlet, outlet sound
    - Octave band ratings
    - LwA rating
    - Sone rating



# Review the Catalog

- Staff reviews the catalog/selection program
  - Format – Statement requirements per AMCA Publications
    - Seal usage
  - Data – Compares performance data against test data

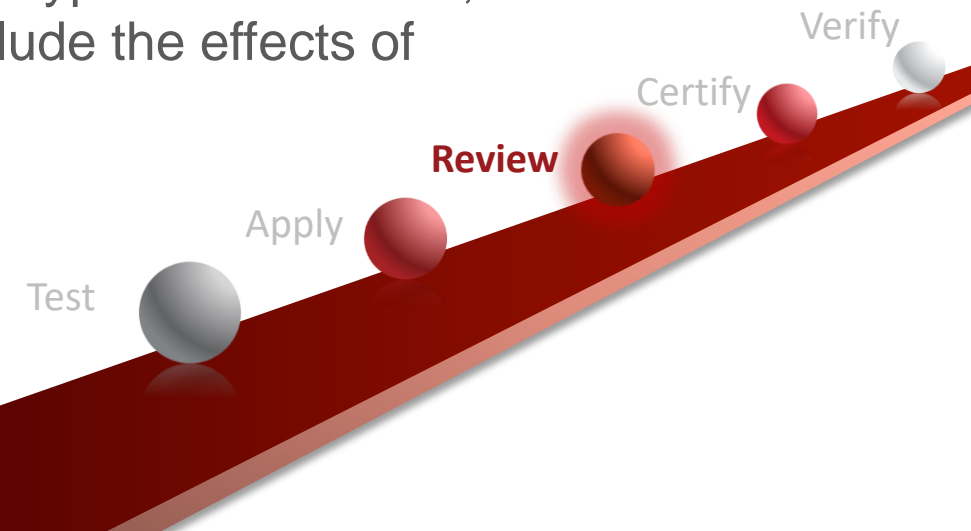


# Review the Catalog, continued



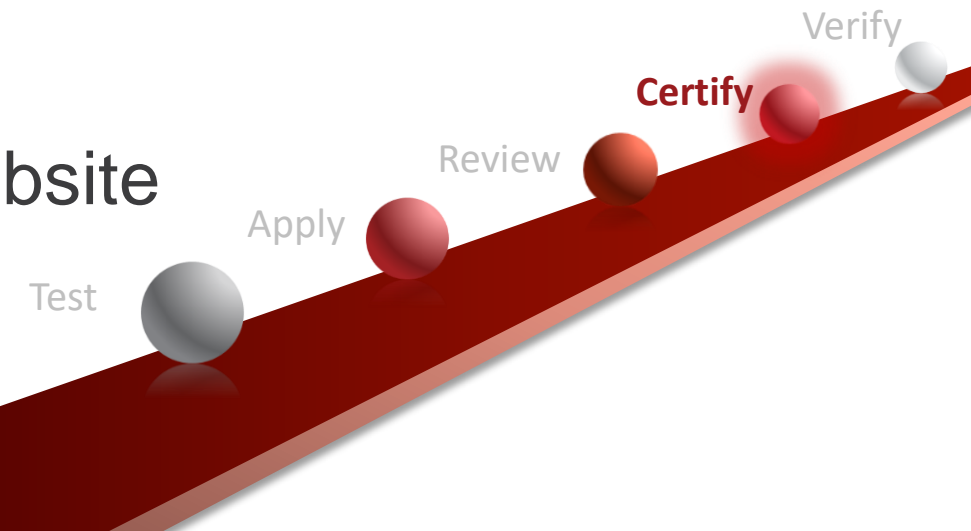
ABC Company certifies that Fan 123 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Performance certified is for installation type B – Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances.



# Certify the Product

- Issue Appendix to License Agreement
  - Size
  - Catalog reference
  - Type of certification
  - Date of certification
- Add link to product directory
- Link the approved catalog to AMCA Website





# Certify the Product, continued

- AMCA's directory of certified products is updated instantly

The AMCA International Certified Ratings Program is a globally recognized third-party program that gives buyers, specifiers and users assurance that manufacturers' published data for air movement and control products are accurate.

Search by company name, product type, country, or license type

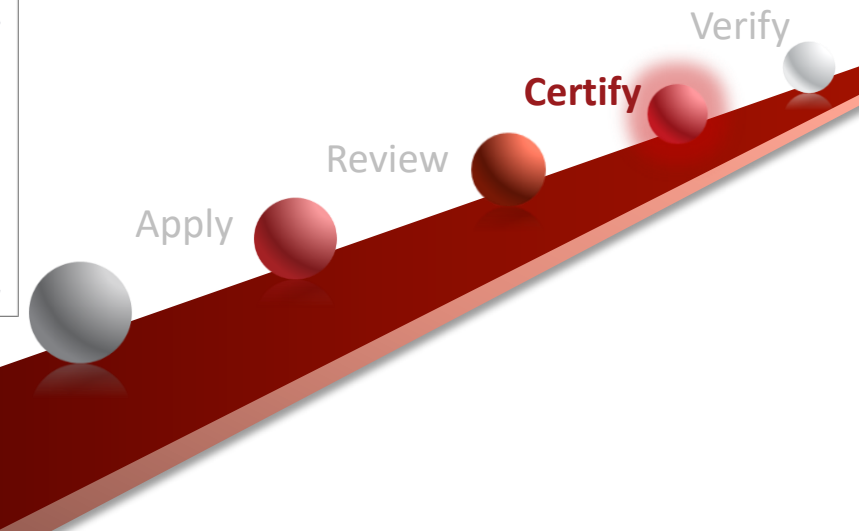


## Product Types:

- |                             |                              |                                |
|-----------------------------|------------------------------|--------------------------------|
| • Acoustic Duct Silencer    | • Centrifugal Fan            | • Mixed Flow Fan               |
| • Agricultural Fan          | • Damper                     | • Positive Pressure Ventilator |
| • Air Circulating Fan       | • Energy Recovery Ventilator | • Power Roof Ventilator        |
| • Air Curtains              | • Evaporative Cooler         | • Propeller Fan                |
| • Airflow Measuring Station | • Induced Flow               | • Single Room Air Handler      |
| • Axial Fan                 | • Large Diameter Ceiling Fan | • Jet Fans                     |
| • Ceiling Ventilator        | • Louver                     |                                |

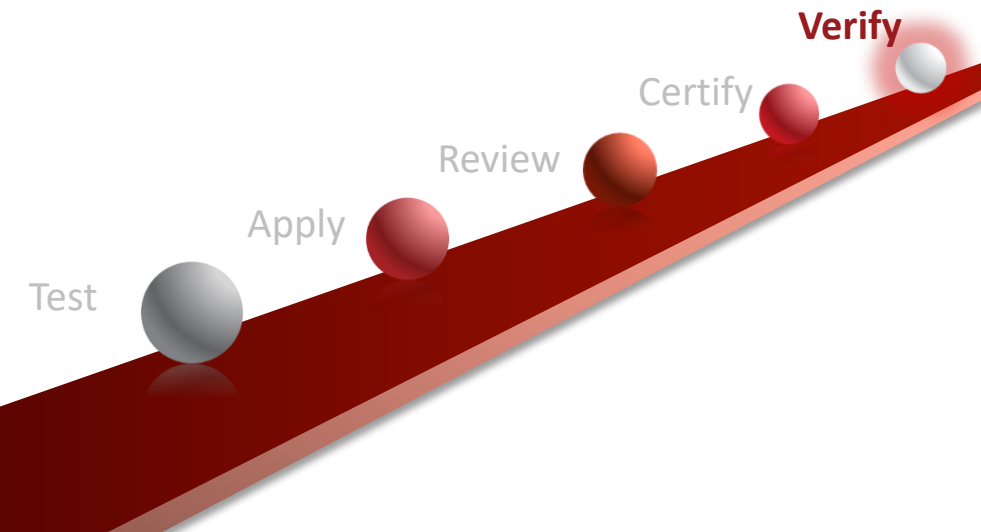
## License Types:

- |                     |                                |                    |
|---------------------|--------------------------------|--------------------|
| • Air Performance   | • Efficiency                   | • Circulating Fan  |
| • Sound             | • FEG                          | • Wind Driven Sand |
| • Air Leakage       | • Positive Pressure Ventilator | • FEI              |
| • Water Penetration | • Airflow Measurement Station  | • Energy Star      |
| • Wind Driven Rain  | • Acoustic Duct Silencer       | • Jet Fan          |
| • CFM per Watt      | • Induced Flow Fan             | • Axial Impeller   |



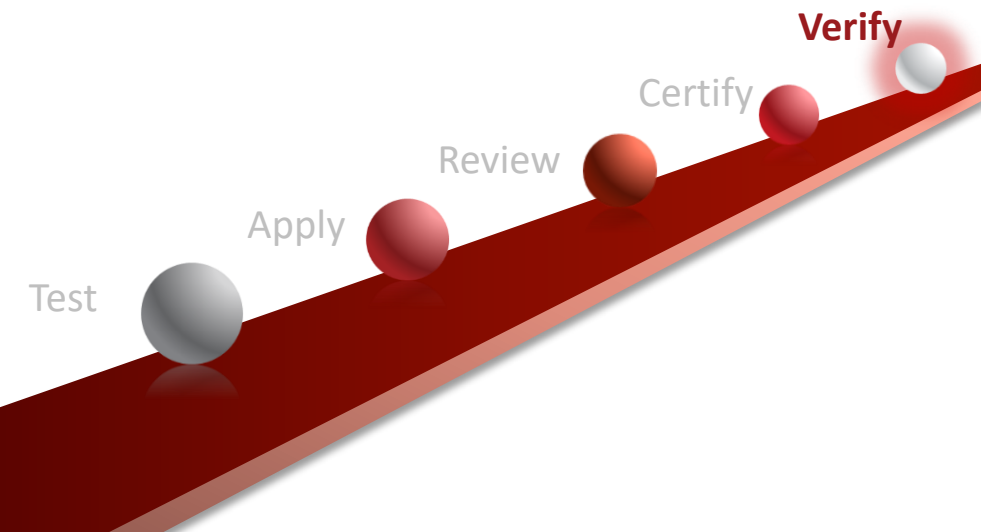
# Ongoing verification

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



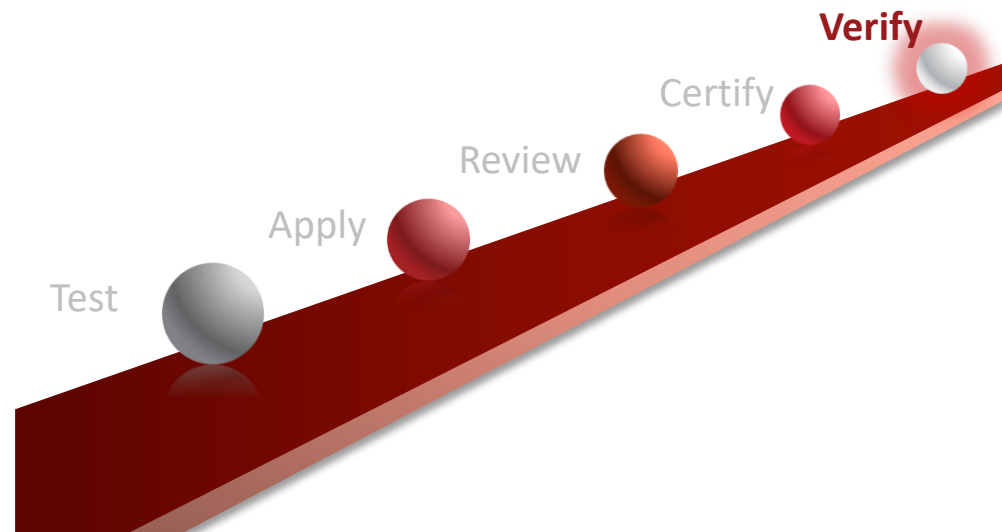
# Ongoing verification, continued

- If all check test results continue within tolerance:
  - Check test frequency decreases
    - Second check test within 36 months
    - Third check test within 36 months after second
    - Fourth check test within 60 months after third
    - Fifth check test within 84 months after fourth



# Ongoing verification, continued

- If a check test result is NOT within tolerance:
- Options for licensee are:
  - Inspect the product
  - Re-catalog within 6 months
  - Withdraw
- Retest within 12 months
- Check test clock resets



# Suspension

- Failure to ship unit for check test
- Failure to correct product after a failed check test
- Failure to submit mandatory re-catalog

# Typical Violations

- Seal applied to non-certified products
- Certification expanded without informing AMCA
  - Non-certified size added
  - Non-certified performance added
    - Fans: Air certification to air and sound
    - Louvers: Pressure drop to pressure drop and water
- Member logo adjacent to performance ratings
- Published, non-approved catalog



# Violations Reported on AMCA Website

- Non-Certified Products
  - Products advertised as certified, but are not
- Program Violation Notices
  - Violations that have not yet resulted in withdrawal
  - Enforced License Withdrawals
  - Products that had certification withdrawn

# Better Enforcement

- Product selection software
- CRP violations
  - Test vs. Certify
  - Unapproved catalog at company website
  - Misuse of CRP seals
  - False claim of AMCA certification
  - AMCA corporate logo, AMCA membership logo

# AMCA Helps Specifiers to be Confident

- CRP confirmation available on AMCA website ([www.amca.org/certify](http://www.amca.org/certify))
  - Verify AMCA seal in submittal
  - Verify model number
  - Verify approved catalogs/selection software
  - Verify CRP seals affixed to products (optional)



# Resources

- **AMCA International:** [www.amca.org](http://www.amca.org)
- **AMCA Publication 11-16** (Free PDF Download):  
[www.amca.org/store](http://www.amca.org/store)
  - > Certified Ratings Program Operating Manual

# Thank you for your time!

*To receive PDH credit for today's program, you **must** complete the online evaluation, which will be sent via email 1 hour after this webinar.*

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# Questions?