

Certification Overview



Globally Recognized. Industry Respected.

Air-Conditioning, Heating, and Refrigeration Institute

- One of the nation's largest member-based trade associations
 - Representing 300+ HVACR and water heating manufacturers
- Promotes policies beneficial to industry
- Represents the industry domestically & globally
- Establishes international standards
 - Over 100 industry standards and guidelines
- Administers rigorous certification programs
- Administers a comprehensive industry statistics program



AHRI CERTIFIED®
www.ahridirectory.org

AHRI Members are...

Our members manufacture and participate in certification programs for equipment in the following categories:

- Commercial and industrial air-conditioning, heating, and ventilation equipment
- Commercial and industrial refrigeration equipment
- Central air conditioning and heating equipment
- Water heating equipment
- Hydronic heating equipment
- Components for heating, air-conditioning, and refrigeration systems



Four Pillars of AHRI



Standards

Advocacy

Certification

Analytics

Standards

- AHRI has published more than 100 standards and guidelines
 - Many in both I-P and SI
 - Majority are designated American National Standards by ANSI
- Regularly work with organizations and governments around the world to help them either adopt or harmonize our standards
- Standards form the basis for AHRI's Certification Programs
- Standards are available free online at www.ahrinet.org



Building Codes

- AHRI staff works directly with codes bodies to ensure its members' products are accurately represented
 - ASHRAE
 - International Code Council
 - Canadian Standards Association
 - California Energy Commission and Building Energy Efficiency Standards

Advocacy

- U.S. Congress
- Federal Agencies
 - Department of Energy
 - Environmental Protection Agency
 - Department of Commerce
 - Federal Trade Commission
- State Governments
- Foreign Organizations and Governments
 - Standards Adoption and Harmonization
 - Performance Certification
 - International Trade Issues

Analytics



Voluntary program
for multiple product
sections

Provides **aggregate**
data

Generates nearly
1,000 reports
annually



Confidential,
antitrust, non-
disclosure

Supports key
legislative agenda

ENERGY STAR
submission for
nearly **80** member
companies

Member Benefit: Research



The screenshot shows the AHRI website's 'Research' page. The top navigation bar includes 'Member Login', 'Search Standards', 'Contact Us', and a 'Search Site' input field. Below this is a 'Search AHRI Certification Directory' dropdown menu. The main navigation menu lists 'Certification', 'Standards', 'Contractors & Specifiers', 'Homeowners', 'Policy', 'Resources', 'News & Events', 'About Us', and 'Members'. The left sidebar contains a 'Resources' menu with options like 'Statistics', 'Research', 'Global Resources', 'Regulatory Support', 'HVACR Education and Training', 'Systems Steering Committee (SSC)', and 'Terms and Technical Definitions'. The main content area is titled 'Resources > Research' and features a 'Research' section with a paragraph explaining AHRI's research programs. It also includes three sub-sections: 'AHRI Low-GWP Alternative Refrigerants Evaluation Program' with a circular logo, 'AHRI Members Only Research', and 'Public Sector Research'.

Resources > Research

Research

AHRI's research programs are guided by the AHRI Research and Technology Committee, which acts as the industry's think tank to provide research and analysis to support industry policy development and decision making.

AHRI Low-GWP Alternative Refrigerants Evaluation Program

This industry-wide cooperative research program is to identify and evaluate promising alternative refrigerants for major product categories. These include air conditioners, heat pumps, dehumidifiers, chillers, water heaters, ice makers, and refrigeration equipment.

AHRI Members Only Research

Research undertaken to support AHRI's advocacy positions, standards program, and certification program are funded and managed entirely by AHRI or one or more of its product sections. As such, results are typically for AHRI members only.

Public Sector Research

Basic scientific, collaborative research jointly funded by AHRI, other industry trade associations and federal or state public funds to assist the industry in long-term research needs, is undertaken through research programs of the Air-Conditioning, Heating and Refrigeration Technology Institute, Inc. (AHRTI). Since these projects involve public funds, their results are available to the public.

- Pre-competitive
- Overseen by Research & Technology Committee



Globally Recognized. Industry Respected.

Certification

Globally recognized
HVACR & water
heating certification
program

Certification
program dates back
100+ years



40+ individual
programs

Globally recognized
and specified
Path of compliance
for efficiency
regulatory (MEPS)
requirements

Certification

1000+ licensees,
including more than
280 international

Accredited to ISO
Standard 17065 by
SCC and COFRAC



Globally Recognized. Industry Respected.

3,000+ annual
performance tests

100% of testing by
independent third-
party labs (ISO
17025-accredited)

ENERGY STAR
approved
Certification Body

Equipment Certified By AHRI

- Air-Heating and Air-Cooling Coils
- Baseboard Heaters
- Central Station Air-Handling Units
- Chillers
- Commercial Refrigerators
- Direct Heaters
- Finned Tube Radiators
- Gas Purge Equipment for Use with Chillers
- Geo-Exchange Heat Pumps
- Energy Recovery Ventilators
- Ice-Makers/Ice Bins
- Indirect Fired Water Heaters
- Liquid-to-Liquid Heat Exchangers
- Pool Heat Pumps
- PTAC/PTHP
- Reclaimed Refrigerant
- Refrigerant Recovery/Recycling Equipment
- Residential & Commercial Furnaces
- Residential & Commercial Water Heaters
- Residential & Commercial Boilers
- VRF Equipment
- Room Fan-Coils
- Refrigerant Testing Laboratory Certification
- Single Package Vertical ACs and Heat Pumps
- Truck/Trailer Refrigeration Units
- Unit Ventilators
- Unit Coolers
- Residential ACs and Heat Pumps
- Large Commercial ACs and Heat Pumps
- Variable Air Volume Terminals
- Variable Frequency Drives
- Water Source Heat Pumps

Value Proposition: AHRI Certification

- ▶ Meets demands from regulators, policy makers, and consumers concerned about performance
 - Ensures accurate manufacturer data
 - Provides consumer/government confidence
 - Enables fair product comparisons
 - Allows for informed choices
 - Assists in achieving LEED certification
 - Provides data to conduct building energy analysis



AHRI Program Strengths

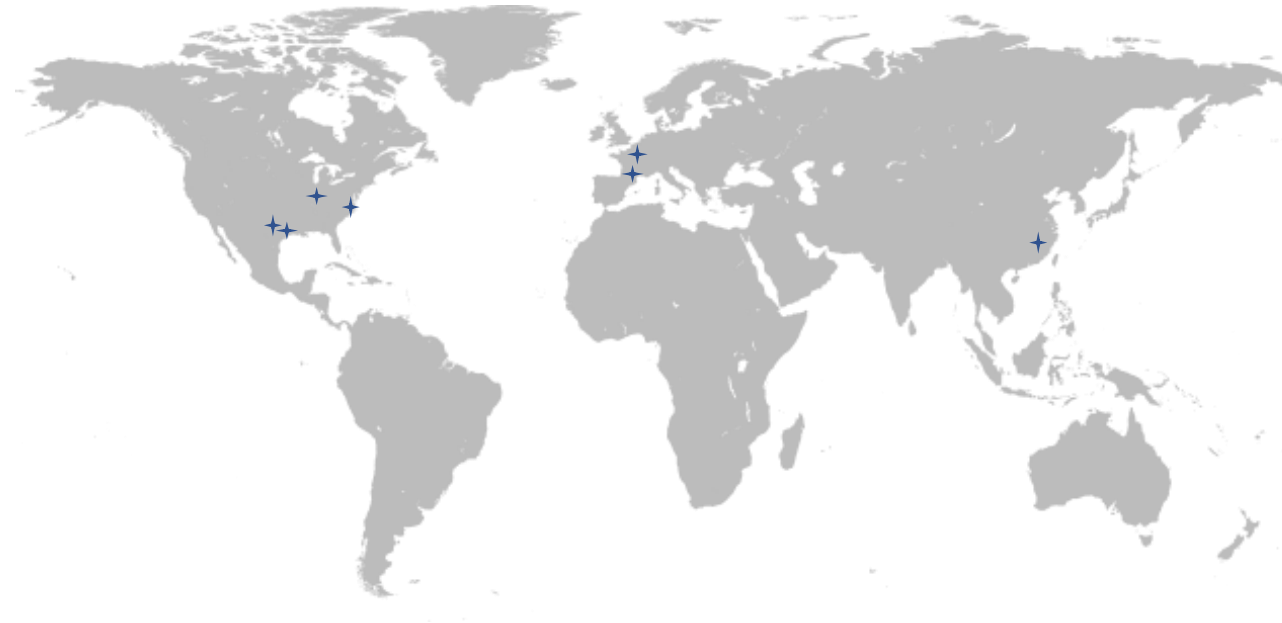
- AHRI, not manufacturers
 - Selects which models to certify
 - Chooses laboratory for testing
 - Selects sample for testing
- Continuous testing; not one-offs
- Selection criteria: 20% + annually
- Labs run satellite programs for product safety certification that includes performance

Certification Programs Ensure Market Surveillance

- Third-party certification programs verify compliance with design or performance criteria
- Technically defensible and credible to the engineers and specifiers

AHRI Testing Laboratories

- **Air Movement and Control Association (AMCA) – U.S.A.**
- **Canadian Standards Association (CSA) – U.S.A.**
- **CETIAT - France**
- **DMT GmbH & Co. KG – Germany**
- **General Machinery Product Institute (GMPI) – China**
- **Intertek – U.S.A**
- **Lucerne University (HSLU) – Switzerland**
- **Underwriters Laboratories (UL) – U.S.A.**



Third-party Verification

1

Manufacturer performance ratings verified through testing at a third-party laboratory

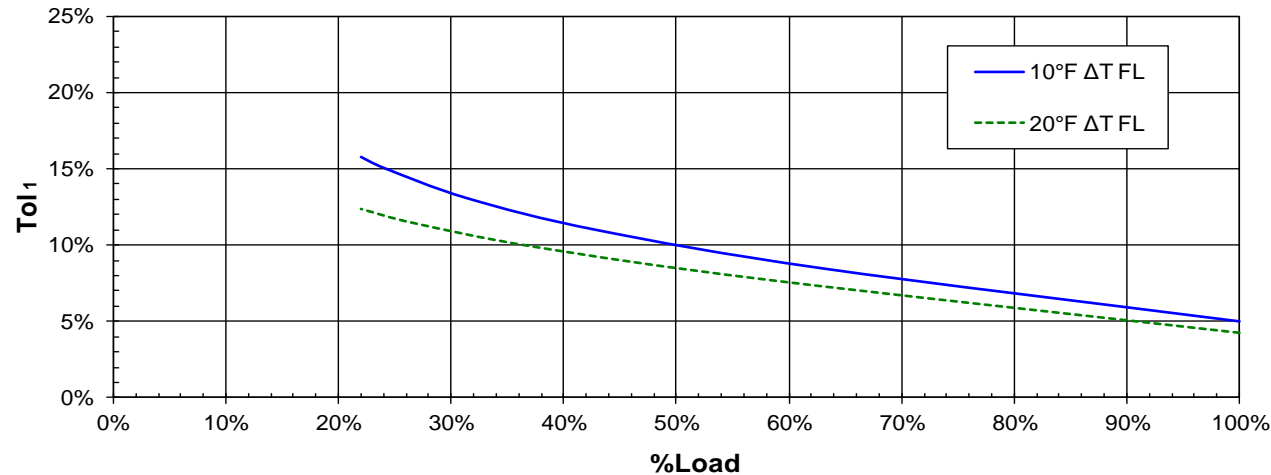
2

Holds manufacturers accountable

3

Provides consumers with confidence in performance of the product

Uncertainty – Published vs. Tested Performance



- AHRI verifies published performance based on testing
- Tested performance must match published performance within a tolerance as defined by each specific standard (e.g. +/- 5%) or test fails
- AHRI requires manufacturers to re-rate their published performance based on the failed test result

Rated

- Conforms to standard
- Subject to rigorous and continuous testing
- Manufacturers' performance ratings independently measured
- Third-party verified
- All products within program scope certified
- Provides marketplace clarity

AHRI-Certified[®]

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AHRI Directory of Certified Product Performance

AHRI CERTIFIED
www.ahridirectory.org

AHRI DIRECTORY OF CERTIFIED PRODUCT PERFORMANCE
The trusted source of performance certified heating, ventilation, air-conditioning and commercial equipment and components.

Help | Login | English

AHRI
AIR-CONDITIONING, HEATING,
& REFRIGERATION INSTITUTE
we make life better*

Search Product Database | Additional Resources

AHRI Certified Reference Number
Model Number

Enter AHRI Certified Reference Number

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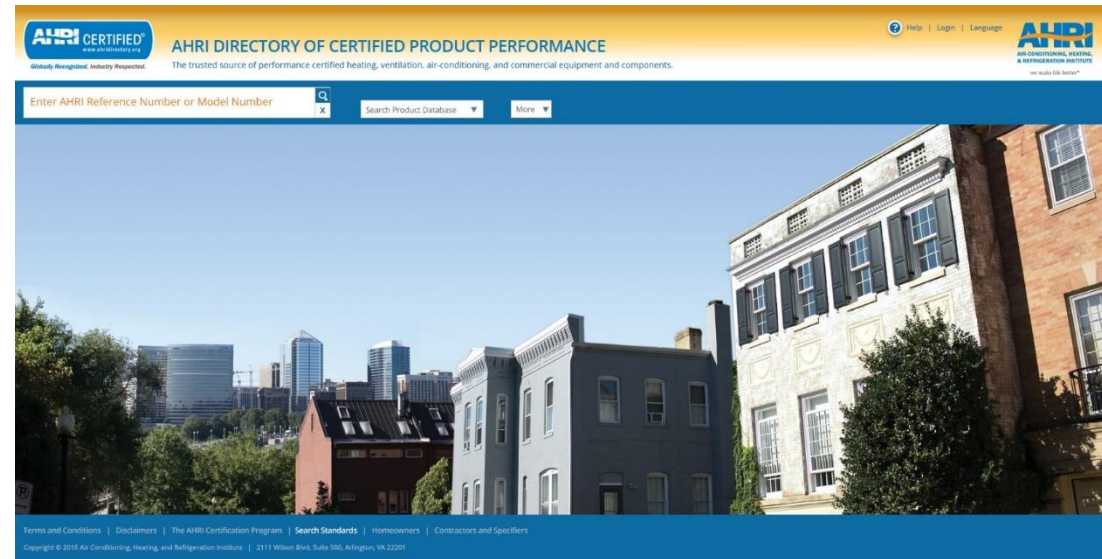
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Certification Directory and Regulatory Reporting System

7 million+ certified performance ratings for 40 product categories

Real-time data

Certificates of product performance



www.ahridirectory.org

AHRI Directory of Certified Product Performance

- Relied upon by government agencies
 - DOE reporting
 - ENERGY STAR Certification Body
 - Consortium for Energy Efficiency
 - California Energy Commission
 - Natural Resources Canada
- Certified products listed in the AHRI Directory of Certified Product Performance www.ahridirectory.org
- Updated in real-time
- Complements specification database/software

Learn More



USA



CANADA



CHINA



UAE

North America:
www.ahrinet.org/certification

China: Bridge Xue
bxue@ahrinet.org

Middle East and
North Africa:
mena@ahrinet.org

www.ahridirectory.org