

the **NEWS**  Book

PUBLISHED FALL 2015

A **bnp** PUBLICATION
media

SOLVING THE HVACR

CERTIFICATION PUZZLE

Sponsored by



Warm up with AHRI

HVACR and water heating performance certification program



Reconhecido Globalmente. Indústria Respeitada.

AHRI administers certification programs for more than 40 products, including these heating products:

- Commercial and Residential Boilers
- Commercial Finned Tube Radiation
- Commercial and Residential Furnaces
- Direct Heating
- Indirect Water Heaters
- Residential Baseboard Radiation



Contents

| | | |
|-----------|---|----|
| Chapter 1 | Certifications Create Competency, Invoke Trust..... | 4 |
| Chapter 2 | Business Benefits of Technician Certification are Numerous..... | 17 |
| Chapter 3 | Certification Provides Benchmark for Contractor Quality | 23 |
| Chapter 4 | Certifications Help Distinguish HVAC Professionals | 26 |

Editors Note



Building Competency in HVAC

The goal of any contractor is to make the homeowner completely satisfied. This is done by stellar customer service, a quality product, and educated technicians installing and servicing the equipment. Of those, the educated technician is sometimes the hardest piece of the puzzle.

That is where certification comes into play. This can be confusing for the contractor because there are a lot of different organizations giving out a lot of different certifications. We hope this eBook sheds some light on the process. We will introduce readers to the multiple certification organizations within the industry as well as spell out the advantages of getting technicians certified.

Published by The Air Conditioning, Heating and Refrigeration News, September 2015. Copyright © 2015, BNP Media. All Rights Reserved. No part of this book may be reproduced or used in any manner, except as permitted by the U.S. Copyright Act, without the express written permission of the publisher. Every effort has been made to ensure the accuracy of the information presented in this book. However, BNP Media does not guarantee its accuracy. Any error brought to the attention of the publisher will be corrected in a future edition. For ordering information, go to www.achrnews.com/products.

Certifications Create Competency, Invoke Trust

DOZENS OF CERTIFICATIONS AVAILABLE TO HVAC TECHNICIANS WITH ALL LEVELS OF EXPERIENCE

by Jen Anesi of *The NEWS* Staff 

Certifications play a very important role in the HVAC industry. Basic industry certifications from certifying bodies like North American Technician Excellence (NATE) help ensure HVAC professionals have the training and core competency they need to perform quality work; meanwhile, other, more advanced certifications — such as the Home Energy Rating System (HERS) Rater certification from Residential Energy Services Network (RESNET) — can help technicians perform more specialized work and break into new markets.

But, choosing which certifications to apply and test for can be daunting for some, especially since these certifications often come with a price tag. Here, you will find a list of some of the most common certifications available to HVAC

industry professionals, what those certifications can be used for, and where to find information about testing. This information has been provided directly by the certifying bodies and is listed in alphabetical order by organization; any questions regarding these certifications should be directed to them.



ACCA

CERTIFICATIONS OFFERED

ACCA, the Indoor Environment & Energy Efficiency Association, offers three certifications:

- Light Commercial Design for Quality Installation;
- Residential Design for Quality Installation; and
- Instructor Certification (EPIC).

The Light Commercial Design for Quality Installation certification is designed for contractors, technicians, design and utility personnel, wholesalers, energy commission officials, licensing and code officials, and others interested in learning the importance — including the economic and environmental benefits — of accurate commercial load calculation procedures for system design. Similarly, the Residential Design for Quality Installation certification is designed for contractors, technicians, design and utility personnel, wholesalers, energy commission officials, licensing and code officials, and others interested in learning the importance — including the economic and environmental benefits — of accurate residential load calculation procedures for system design.

Instructor Certification (EPIC) is a “train the trainer” course for experienced HVAC professionals looking to take their careers to the next level. EPIC is an extremely intensive four-day class that is offered just twice a year, and it is not for beginners. Successful completion of the final exam provides a five-year certification for teaching the ACCA residential design process.

HOW TO GET CERTIFIED

ACCA’s Light Commercial and Residential Design for Quality Installation certifications are offered at various locations

and online; EPIC certification is offered at ACCA’s headquarters in Arlington, Virginia, twice a year. ACCA’s certifications are valid for five years. Because the certification process is relatively new, ACCA is in the process of developing recertification guidelines.

COST

The cost to become certified varies by class and ACCA membership status.

BENEFITS

Those who earn these certifications demonstrate a greater knowledge of the manuals covered, and the certification is something to show potential employers and customers that they have completed the course. Customers have verification that the individual has completed the course successfully and understands the processes covered.

“Certification is a great way to move our industry in a positive direction and help contractors be seen as true professionals by their customers,” said Paul Stalknecht, president and CEO of ACCA. “ACCA developed its certification programs to help indoor environment and energy contractors and their employees be able to better meet their customers’ needs by getting quality train-

ing along with a certificate that proves they have been trained and are proficient in the various industry-recognized standards.”

ADDITIONAL INFORMATION

For more information, visit <http://www.acca.org/certification>.



The Building Performance Institute Inc. (BPI)

CERTIFICATIONS OFFERED

BPI offers the following core certifications:

- Building Analyst;
- Envelope Professional;
- Infiltration & Duct Leakage (IDL);
- Air Leakage Control Installer (RBEWHALCI);
- Heating;
- Air Conditioning & Heat Pump;
- Multifamily;
- Manufactured Housing;

BPI offers the following advanced certifications:

- Energy Auditor;
- Quality Control Inspector;
- Retrofit Installer; and
- Crew Leader.



Building Performance Institute Inc. (BPI)-certified professional Richard Perez of ABC Cooling & Heating in Fresno, California, conducts a blower door test. (Photo courtesy of ABC Cooling & Heating)

While BPI does not require training prior to attempting certification, individuals completing training typically perform better on BPI exams. Candidates can find training from independent training organizations using the Training Organizations Locator Tool at www.bpi.org/pros. All certifications require both written and field exams, except for the IDL (field exam only).

Unlike BPI's whole-house certifications, BPI's new IDL certification is a task-oriented credential that only verifies the candidate can conduct blower-door and duct-leakage tests to ASTM standards. It's a simple, comprehensive, affordable way for HVAC companies to deliver the tests that builders need to meet IECC codes for air infiltration and duct leakage in new homes.

HOW TO GET CERTIFIED

In-person training is offered through BPI's 150-plus affiliated training organizations, which can be found online at www.bpi.org/pros. Certifications are valid for three years, and BPI is approved by the American National Standards Institute Inc. (ANSI) as an accredited developer of American National Standards and as a certifying body for personnel credentials. For most BPI certifications, earning 30 CEUs over a three-year period waives the re-certification written exam requirement. Proving 3,000 hours of relevant work experience over a three-year period (with employer letter) waives the re-certification field exam requirement.

COST

BPI Test Centers set their own prices for training and administering exams. BPI's list price for most certification ex-

ams is \$500 for field exams and \$250 for written exams. The re-certification application fee is \$300.

BENEFITS

For the customers, BPI's certifications offer peace of mind that the job was done right the first time. For industry professionals, BPI certifications verify they have the house-as-a-system building science knowledge, skills, and abilities necessary to diagnose and solve critical performance factors in a home. That means a higher degree of confidence from the employer, customers, and the market at large. In today's tough job market, this ensures greater job security and increased opportunities for career advancement.

HVAC contractors are also uniquely positioned to expand services into whole-house home-performance contracting through these certifications. By training and certifying techs in BPI's house-as-a-system approach, HVAC contractors can provide complete solutions to customers that go beyond the heating or cooling systems and involve the whole house through air sealing, insulation, ventilation, and combustion safety. This not only expands average ticket sizes, it allows for reduced callbacks, improved satisfaction, and higher gross margins. It also improves the closing rates of referrals from customers and reduces the need for competitive bidding.

“BPI certification has opened the door to increased profits,” said Kieth Hilligoss, president of Air Solutions Heating & Cooling Inc. in Tulsa, Oklahoma. “As we progressed [in home-performance contracting], we found out there’s a lot more to heating and air than just the boxes we were changing out on a daily basis. It changed our company in the way we approach the market.”

ADDITIONAL INFORMATION

For more information, visit www.bpi.org/pros.



HVAC Excellence

CERTIFICATIONS OFFERED

HVAC Excellence offers more than 70 industry certifications to aid technicians with their specific needs at various stages in their careers. The most common certifications technicians pursue are: Principles of Electrical and Refrigeration Theory, Basic Refrigeration and Charging Procedures, Carbon Monoxide Safety, Combustion Analysis, Combustion Appliance Zone (CAZ), Duct Testing, Economizer Commissioning Certification, Electrical, Electric Heat, Envelope Testing, Fuel Oil Combustion, Gas Heat, Green Awareness, Heat Pump Installer, Heat Pump Service, Hydrocarbon Refrigerants, Light Commercial Air Conditioning, Light Com-



HVAC Excellence offers more than 70 industry certifications to meet technicians’ specific needs at various stages of their careers. (Photo courtesy of HVAC Excellence)

mercial Refrigeration, Natural Gas Combustion, Oil Heat, Outdoor Air Commissioning for Commercial Constant Volume — Single Zone Units, R-410A, Residential Air Conditioning, Residential Energy Auditor, Residential Heat Load Analyst, Residential & Light Commercial Hydronic Heat, System Diagnostics and Troubleshooting, and System Performance.

MANTOOTH



2015 GOLD WINNER "ELECTRONICS"
DEALER DESIGN AWARDS



◀ **THE YELLOW JACKET® MANTOOTH™ WIRELESS DIGITAL P/T GAUGE** 📶 Take a bigger, man-sized bite out of your workday with the ManTooth™ Wireless Digital P/T Gauge. This baby delivers actual pressures, temperatures, superheat and subcooling right to your smartphone, so you can work smarter and faster. Plus, it eliminates the hassle of hauling a bunch of bulky equipment from your truck, and is available in a number of configurations. Put it this way: If you're not using ManTooth, you're working way too hard. **DOWNLOAD THE YELLOW JACKET® MANTOOTH™ RSA APP AT THE APP STORE OR GOOGLE PLAY.**

Bluetooth®

**ASSEMBLED
IN THE U.S.A.**

LEARN MORE AT
YELLOWJACKET.COM



Certification exams are commonly used by technicians who want to validate their knowledge of a subject or who need continuing education in that area. Certification exams are an excellent tool to help technicians market their skills to prospective employers and customers, and HVAC Excellence continually adds new certifications as industry needs and technologies change.

“As one who has taken HVAC Excellence programs at various stages in my career, I can attest that their certification and programs lead to success,” said Tom Tebbe, Executive Board member, HVAC Excellence.

HOW TO GET CERTIFIED

HVAC Excellence certifications are traditionally offered at HVACR educational programs, wholesalers, and testing centers. A growing number of secure online testing services are now available to meet the demands of today’s technicians. Technicians contact the testing facility and arrange a mutually agreeable time to take the exam. As the majority of today’s exams are conducted online, persons taking the exams will receive the results as soon as they complete their exam. For those taking paper exams, HVAC Excellence grades all exams and mails results within one business day of receiving them.

Certification is valid for five years. To maintain certification, HVAC Excellence requires a minimum of 10 continuing education hours (CEHs) annually — 10 CEHs equals one CEU — from an approved CEH provider. The cost will depend on the technology and type of training required.

COST

Certification fees vary, though they are affordably priced with the technician in mind and can be as low as \$15 per exam (not including the proctoring fee).

BENEFITS

Throughout each stage of a person’s career in the HVACR industry — student, apprentice, technician, instructor — they will take various exams to validate their knowledge and readiness to move on to the next stage. What makes HVAC Excellence unique is that it offers exams at each stage of a person’s career, providing them a singular organization from pupil to instructor.

Certification testing validates whether a technician understands a particular subject or if they need additional training in that area. The certifications are also a great tool for contractors and manufacturers to validate that a technician has the knowledge that can reduce service call time

and service callbacks, improve profitability, and reduce warranty claims. Certification also shows the customer that they are dealing with a trained professional who has the retained knowledge necessary to perform the job correctly.

ADDITIONAL INFORMATION

For more information, visit www.hvacexcellence.org.



National Air Duct Cleaners Association (NADCA)

CERTIFICATIONS OFFERED

NADCA offers the following certifications:

- Air System Cleaning Specialist (ASCS)
- Certified Ventilation Inspector (CVI)

NADCA's ASCS certification was developed to recognize those industry professionals involved in the proper cleaning of HVAC systems. An Air System Cleaning Specialist is qualified to serve as a project manager for residential and commercial HVAC cleaning and restoration projects; the ASCS certificate holder also qualifies as a Ventilation System Mold Remediator (VSMR). NADCA's CVI certification was developed to recognize those industry professionals involved in the inspection of HVAC systems. A CVI-certified individual demonstrates knowledge and understanding of in-

specting HVAC systems, diagnosing IAQ problems, and reporting findings to the customer.

HOW TO GET CERTIFIED

In order to become ASCS- or CVI-certified, individuals must pass proctored exams, which are administered during NADCA's Annual Meeting, Fall Technical Conference, and International Summits. The ASCS and CVI exams are also administered at standardized testing centers around the globe; registration can be done online and test takers can find available testing locations, dates, and times at www.nadcatesting.com. Though anyone can take the exams, it is recommended that a test taker have field experience and industry knowledge prior to taking them.

ASCS certification is renewable each year by June 30; CVI certification is renewable every three years by June 30. To re-certify, ASCS-certified individuals are required to obtain six Continuing Education Credits (CECs) each year in order to be eligible for renewal; CVI-certified individuals are required to pass a CVI renewal quiz every three years in order to renew their certifications.

COST

The member discounted rate for the ASCS exam at a NADCA event is \$275; at a testing center, it is \$385. The member

discounted rate for the CVI exam is \$275. To recertify, the annual renewal fee for ASCS-certified individuals is \$75 for individuals employed by a NADCA member company; the cost of the CVI renewal quiz is \$150 for individuals employed by a NADCA member company. (Pricing is subject to change; non-member pricing and fees are available upon request.)

BENEFITS

Both the ASCS and CVI certifications are recognized worldwide. The ASCS certification is often specified as a requirement for commercial HVAC system cleaning projects, and individuals who are interested in enhancing their professional development in the HVAC system cleaning industry will benefit from becoming ASCS-certified. Individuals who are interested in enhancing their professional development in the HVAC system inspection industry will benefit from becoming CVI-certified as industry demand for HVAC inspections as part of routine maintenance and IAQ diagnostics continues to grow. Other benefits include increased compensation, enhanced career mobility and marketability, and increased recognition to employers, customers, and industry peers. Additionally, customers who work with ASCS- and CVI-certified individuals will have the benefit of knowing that those individuals possess the knowledge necessary

to perform HVAC system cleaning and inspection services to the highest standards.

ADDITIONAL INFORMATION

For more information, visit www.nadca.com or contact NADCA headquarters at membership@nadca.com.



North American Technician Excellence (NATE)

CERTIFICATIONS OFFERED

NATE offers the following certifications:

- Air Conditioning (AC) (Service exam also available in Spanish);
- Air Distribution (AD);
- Heat Pumps (Air-to-Air) (HP) (Service exam also available in Spanish);
- Gas Heating (GS) (Service exam also available in Spanish);
- Oil Heating (OL);
- Hydronics Gas (HG) (service only);
- Hydronics Oil (HO) (service only);
- Light Commercial Refrigeration (LC) (service only);
- Commercial Refrigeration (RC) (service only);
- Ground Source Heat Pump Loop Installer;

- HVAC Efficiency Analyst (Senior Level) (EA); and
- HVAC Performance Verifier (for HERS Raters).

As the HVACR industry braces for a predicted significant workforce shortfall in the next couple of years, NATE will soon launch new levels of testing to assist contractors in finding and hiring better entry-level candidates and providing them a career development path as they learn and grow professionally.

The certifications are recognized nationwide. Many manufacturers require NATE certification of its top-tier dealers, some state and municipal governments use NATE certification as a requirement for licensing and contracts, and some utilities use it as a requirement for its contractor trade ally networks and homeowner rebates.

“For nearly 20 years, NATE certification has been an important standard to the HVACR industry to measure technician competency. Technicians who have earned and maintained NATE certification are viewed as the finest in HVACR and have greater earning potential, since they are preferred by consumers and recognized by contractors, distributors, and manufacturers throughout the industry,” said John Lanier, COO of NATE.

HOW TO GET CERTIFIED

NATE certification is offered nationwide by a network of more than 500 testing organizations that order and admin-

ister the certification exams. Exams can be taken online or via paper in a proctored test setting. As of 2014, NATE certifications are valid for two years, requiring fewer training hours and lower fees for recertification.

The process time may vary depending on how much study one does prior to testing. NATE offers multiple senior-level certifications divided into installation and service and senior categories. All NATE exams are based on Knowledge Areas of Technician Expertise (KATEs), statistically proven job-task analyses from experts in the HVACR industry. One must prepare to take the Core (if required) and at least one specialty exam and pass both in order to achieve NATE certification in that specialty. There are no educational or work experience requirements, yet NATE strongly recommends you have some formal training provided by an employer, a technical school, or other educational institution before taking relevant NATE exams. We also suggest one year of experience for installation technician tests, two years of experience for service technician tests, and five years of experience for senior-level technician tests, though there are no formal work experience requirements.

To recertify, technicians must either complete 16 continuing education hours (CEH) in the current specialty and apply for recertification before the certification lapses, or retake the specialty exam.

COST

The cost of certification testing varies by testing provider and the number of certifications the technician is seeking. NATE encourages those interested in testing to visit www.natex.org/test, enter their zip code, and contact multiple testing providers to compare cost and availability.

BENEFITS

NATE certification is voluntary, but more and more programs are recognizing the certification as the competency measure it has become over the past nearly 20 years and, as such, are requiring technicians to have earned the certification for government contracts, manufacturer dealer programs, state and local licensure, etc. Many of the technicians who seek NATE certification do so to challenge themselves and take pride in the recognition of being part of the best of the best in the industry.

Technicians who have earned NATE certification are preferred among consumers, require fewer callbacks, and generate more income for their employers, thus earning higher wages on average and demonstrating greater value to employers than non-certified technicians. Meanwhile, the entire industry benefits from NATE-certified technicians because they remain in the industry longer, know how to do the job right the first time, and are more productive.

In addition, more and more homeowners look for NATE certification because they are seeking knowledgeable, well-trained, and highly experienced technicians who will service their home heating or cooling systems. A recent survey found that 70 percent of homeowners are interested in using NATE-certified technicians for their HVACR equipment service and installation needs, and many are willing to pay a premium for their quality services.

ADDITIONAL INFORMATION

For more information, visit www.natex.org.



**National Comfort
Institute (NCI)**

CERTIFICATIONS OFFERED

NCI offers the following certifications:

- Residential System Performance;
- Commercial System Performance;
- Residential Air Balancing;
- Commercial Air Balancing;
- Carbon Monoxide Safety and Combustion Diagnostics;
and
- Home Performance for HVAC Professionals.

What makes the National Comfort Institute's (NCI) certi-



Those who apply the principles of performance-based contracting — and receive the proper training necessary to do it right — can and will increase the efficiency of their customers' HVAC systems, said Rob Falke, president of National Comfort Institute (NCI). (Photo courtesy of NCI)

fications unique is that they are based on practical standards, field testing, and diagnostics rather than laboratory conditions and engineering manuals. NCI is one of the only organizations that also provides training directly tied to the certifications. Students leave NCI classes with the ability to immediately use their new knowledge in the field.

“The most exciting emerging trend in the HVAC industry is the ability for a contractor or technician to measure and increase the installed efficiency of an HVAC system,” said Rob Falke, president of NCI. “We call this performance-based contracting, and those who apply the principles of this approach and the training necessary to do it right can and will increase the efficiency of their customers' systems — from 56 percent to 88 percent. There's nothing out there that compares.”

HOW TO GET CERTIFIED

Certification is valid nationwide for two years, and testing is

offered in person at various locations nationwide. Students must complete intensive instructor-led courses of 2-5 days, which includes lecture, interactive discussion, hands-on training, and a comprehensive written exam. NCI certification is recommended for business owners, HVAC service technicians and service managers, installers and installation managers, sales staff, and managers. Recertification requires eight hours of approved NCI coursework every two years.

COST

Costs vary.

BENEFITS

Industry professionals benefit from NCI certification through new or enhanced skills in diagnosing and repairing residential and commercial HVAC systems. Students leave classes with the ability to perform accurate, measurable, and verifiable evaluations of HVAC system performance and efficiency. Customers benefit from a verifiable improvement in system energy efficiency and performance, enhanced safety, and comfort.

ADDITIONAL INFORMATION

For more information, visit www.nationalcomfortinstitute.com.



Residential Energy Services Network (RESNET)

CERTIFICATIONS OFFERED

RESNET offers the following certifications:

- HERS Rater;
- Rating Field Inspector;
- Home Energy Survey Professional;
- Quality Assurance Designee;
- Rater Trainer; and
- Energy Smart Contractor.

Individuals interesting in becoming certified in the above specialties must successfully complete training by a RESNET Accredited Rater Training Provider and must be certified by a RESNET Accredited Rating Provider. The training is conducted in accordance with a syllabus developed by RESNET.

HOW TO GET CERTIFIED

RESNET does not directly certify individuals; it accredits providers who certify individuals. Certification is achieved through classroom, online, and field instruction; assessment (field and simulation); and probationary jobs. The certifica-

tion process averages a week, and certification is valid for three years. Recertification requires completion of the required professional development training.

COST

Costs vary and are market-driven.

BENEFITS

Individuals who earn RESNET certifications are able to provide professional energy-saving services, and customers benefit by having their homes energy rated and receiving a HERS index score.

“You can’t get into the home energy rating industry without being certified, so if you want to provide rating services, you have to have this certification,” said Steve Baden, executive director of RESNET. “The fact is that, in the rating world, owners are increasingly having their homes energy-rated. Last year, a third of all homes were rated. This is an expanding field.”

ADDITIONAL INFORMATION

For more information, visit www.resnet.us.

Business Benefits of Technician Certification are Numerous

CERTIFICATION CAN OPEN DOORS TO NEW BUSINESS AND PROVIDE MARKETING BOOST

by Ron RajECKi of *The NEWS* Staff 

Having technicians certified through an organization such as North American Technician Excellence (NATE) or HVAC Excellence is great for technicians, who gain objective proof of their skills. It's also great for customers, who benefit from having quality installations or accurate and thorough service performed on their HVAC equipment by certified technicians. But, certification also carries with it numerous benefits for contractors and their businesses. These benefits include differentiation, access to utility rebate and incentive programs, and technician retention, among others.

Jeff Cox is owner and president of Right Now Heating and Air Conditioning, Caldwell, Idaho. The residential service and replacement company has 120 employees, in-



Mike Decker, CM, and Mark Ferguson CM (l-r). Decker is a 35-year RSES member. Ferguson said a good reason to get technicians certified is the opportunity to meet the best technicians in the business.

cluding 23 service technicians and 42 installation technicians. Fifteen of the technicians hold at least one NATE certification, and another eight have passed the NATE core exam.

Cox said major benefits to his company of having certified technicians include differentiation from the competition, fewer callbacks, and technician retention.

“We strongly support the NATE program here,” Cox said. “We train a lot — it’s a culture we instill, and it helps us retain our technicians because we don’t see that same urgency from our competitors.”

Certification gives technicians a sense of security and stability about who they are, what they’re capable of, and their value to both the company and the customer, Cox added.

“NATE certification and the training that it requires helps build confidence in technicians,” he said. “It gives them the precise information necessary to perform a thorough diagnostic. It also helps make technicians comfortable and confident when communicating with homeowners about the condition of their system. This is especially true when the technicians are discussing all the factors that go into the decision to repair or replace.”

Randy LeBlanc, CM, owner and operator of LeBlanc Mechanical, Waltham, Massachusetts, said he and all

three of his technicians are either NATE-certified, QIV-certified, or both. QIV is Quality Installation Verification, which is a part of the Mass Save Cool Smart program, a utility program in Massachusetts that offers rebates and incentives for properly installed energy-efficiency equipment. Having those certifications allows his company to participate in the program.

“The only way homeowners can get access to those rebates is by using companies that have certified technicians,” he said.

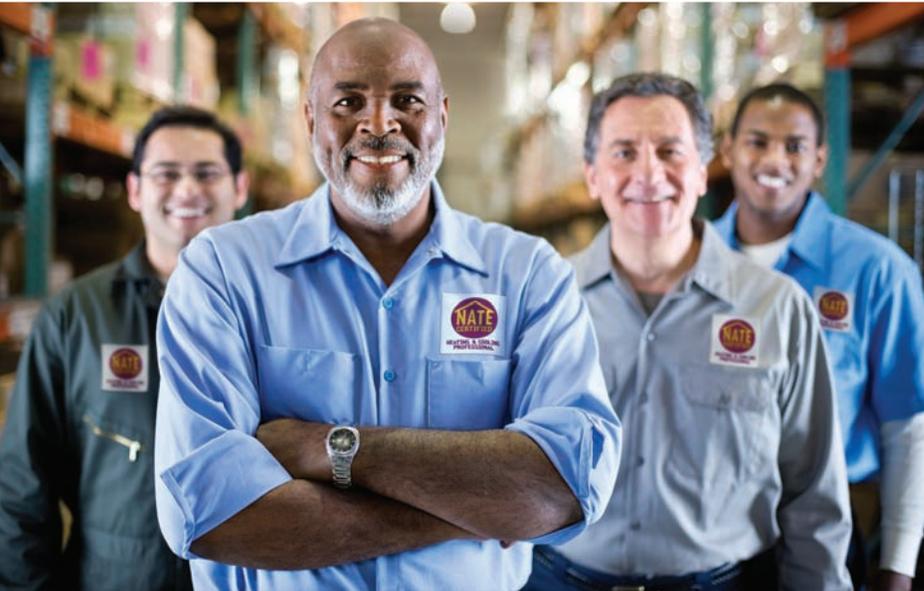
Not only does having certified technicians open the door to the new business and incentives of the Cool Smart program, both Mass Save and the Air Conditioning Contractors of America provide a marketing boost to companies that have certified technicians by listing them on their websites.

LeBlanc added that certification is different — and more difficult to achieve — than licensure.

“You can pass a state test to get a license, but having a Certificate Member (CM) designation from RSES or a NATE or QIV certification means you’re not only book smart, but you have hands-on industry experience as well,” LeBlanc said. “In addition, both NATE and QIV certifications require ongoing continuing education.”



New NATE Exams to Build the HVACR Workforce



NATE offers multiple levels of testing to help contractors find the best technicians and help them build strong HVACR careers.

NATE Industry Competency Exam (ICE) Certification

Coming soon! NATE HVACR Ready-to-Work Certificate

- Job-ready online certificate exam, along with NATE training guides, to test HVACR work-readiness

Coming soon!

NATE HVACR Support Technician Certification

- Certification exam for technicians with 6–12 months of experience

NATE Heating & Cooling Professional Technician Certification

NATE Refrigeration Professional Technician Certification

(incl those with active certifications earned before 1/2016)

- Certification exams for technicians with 2+ years of experience

NATE Efficiency Analyst Professional Technician Senior Certification

More information soon at www.natex.org

LeBlanc has particular reason to be proud of the CM designation after his name — he passed the CM exam last year on his second try.

“The CM exam is probably the most well-rounded and toughest in HVAC,” he said. “I took it 20 years ago and did not pass it, so I went back and got it 20 years later.”

Mark Ferguson, CM, a commercial service specialist for Frymire Services, Dallas, Texas, holds NATE certifications in air conditioning service and installation and heat pump service and installation.

Ferguson, being a previous HVAC company owner for 20 years, moved to Frymire because the company believes hiring certified technicians is important.

He said that having the CM designation and NATE certifications gives him credibility and rapport with technicians.

“It raises you up in the eyes of techs who understand the broad knowledge of HVAC that’s required to earn that designation and those certifications,” he said.

For company owners, Ferguson said a good reason to get technicians certified is the opportunity to meet the best technicians in the business.

“Certified techs meet other certified techs, so, as the owner, you get to know who the good guys are and which ones really care,” Ferguson said. “You also get to know

which of your own techs you can send on the most difficult jobs, which is important for doing the job right the first time and preventing callbacks.”

Ferguson added that when hiring, it’s important to look for technicians who truly want to become certified.



Randy LeBlanc, CM, owner and operator of LeBlanc Mechanical, Waltham, Massachusetts.

“Those are the ones you want on your crew,” he said.

Hvacredunet.net is an online learning site for HVAC technicians. Faculty Lead Jeff Taylor, certified master HVAC educator (CMHE), said the site has about 1,800 students on its roster at any given time. Taylor, who holds four NATE specialty certifications and has worked as an HVAC technician, service manager, and service advisor, said he is sometimes “mystified” by the attitude of some contractors toward certification.

“It seems that the same contractors who don’t care about certification are the ones who are always leery about educating their technicians because they think they’ll leave for a better job,” Taylor said. “That just mystifies me.”

Taylor said owners should embrace technicians who want to become certified, because wanting to keep up with the habit of education indicates a positive attitude.

“Pursuing certification takes tenacity and initiative, and those are great qualities in a technician,” Taylor said. “In addition, I’ve found that certified techs seem to understand that they don’t know everything, and that there’s always more to learn. They understand the importance of continuing education, and they also understand mentoring, which makes them great additions to a company.”

In addition, getting technicians certified can actually be fun.

“I’ve been in shops where we pushed for full certification, and it took on almost a spark-like attitude because everybody comes on board with it and it becomes a competition,” he added. “The techs really enjoy it.”

Chris Compton, CMHE, founder and CEO of hvacredunet.net, said technician certification helps owners differentiate their companies in the marketplace.

“Any time you can differentiate yourself, it’s a positive, and I think most of the owners get that,” Compton said. “Owners who have certified technicians need to advertise it and broadcast it and get certification stickers on their vans. If they’re not taking advantage of the fact that they have certified techs, they’re really missing the boat.”

Compton added that certification also provides owners with an objective measure of what their technicians know.

“In a sense, your technicians are the product that your company is selling to your customers every day,” he said. “‘How good is my product?’ should be a question in every contractor’s mind. If I was a company owner, I sure would want to know, and certification is really the only way to objectively test technicians’ knowledge base. Let’s face it, the risk of not knowing how good your product is ranks pretty high, and the cost of getting certification is pretty minimal by comparison.”

There is a caveat that accompanies technician certification, however, and it comes from Milton Baum, general manager, KEIL Heating and Air Conditioning, Riverdale, New Jersey. The company believes in supporting certification — it conducts weekly in-house technical training for its people, sends technicians out for training off-site, and regularly brings in manufacturers for training sessions. KEIL has two NATE-certified technicians, and two more who are in the process of their certification. And, KEIL offers an incentive and a reward: Technicians who are NATE-certified earn \$1 more per hour than non-certified technicians.

However, Baum warned that contractors who expect consumers to understand and appreciate the value of certification are likely to be disappointed, and therefore need to be prepared to wave the certification banner and educate homeowners about the value of using a certified technician.

“I believe the biggest single detriment to certifications such as NATE is that our end users — the homeowners — have no idea what it is and how it benefits them,” Baum said. “And, it would take a tremendous marketing budget for any certification program to change that and help homeowners nationwide understand why certification is important.”

Unfortunately, the challenge extends beyond homeowners and into the HVAC industry itself, Baum added.

“Homeowners never ask about [certification], our distributors rarely do, and I sit on the boards of several technical schools, and it’s barely on their radar,” Baum said. “Certification is a great thing for a technician, and it brings them many benefits, but company owners need to be aware that if they want to bring the benefits of certification to their bottom lines, the onus will be on them.”

Certification Provides Benchmark for Contractor Quality

EMPLOYEES HAVE BETTER OPPORTUNITIES, MORE STABILITY AFTER ATTAINING CERTIFICATION

by Nick Kostora of *The NEWS* Staff 

Certification can be a great asset for an HVAC technician, proving they have legitimate professional training, national recognition, and thorough knowledge of their chosen craft.

The availability of work for new technicians will certainly be plentiful in the coming years, as the United States Bureau of Labor Statistics foresees a 21 percent increase in HVAC jobs by 2022, and 55,900 new jobs to open up in that timeframe.

KEEPING TECHNICIANS EMPLOYED

The challenge will be filling those open positions, as the skills gap is becoming an ever-increasing issue throughout the industry. It is now of the utmost importance to ensure that young technicians getting their start in the trades have



NATE certification covers topics such as air conditioning, air distribution, gas heating, oil heating, and more.

gone through proper training, and have not been rushed into work because of the need for technicians. It is also important for contractors to provide opportunities to expand and further technician training within their companies.

“The value of certifications to contractors is certainly there, and it is measurable,” said Jim Johnson, owner, Technical Training Associates, Tucson, Arizona. “Certified technicians experience fewer callbacks, and that translates

directly to revenue. Beyond that, there are other factors that may not be measurable, but they certainly contribute to the success of a technician and the employer.”

And the reality is the millennial generation of Americans are switching jobs at a higher rate than its predecessors.

Today’s average worker stays at each of his or her jobs for 4.4 years, according to the Bureau of Labor Statistics, per Forbes.com, but the expected tenure of the workforce’s youngest employees is about half that. A survey of 1,189 employees and 150 managers, titled “Multiple Generations @ Work,” conducted by Future Workplace, found that 91 percent of Millennials only expect to stay in a job for three years or less.



Certification is seen as an integral part of technician training for many throughout the HVAC industry.

Those numbers go across the spectrum of employment throughout the country, but some contractors believe that having certified technicians is an important step in keeping them under their employment.

“I am in the educational side of HVAC, but my family owns and runs a local HVAC business,” said Carter Stanfield, author of “Fundamentals in HVAC/R.” “I know that they prefer technicians who hold professional certi-

fication. Another contractor in town bases its salaries on it. They pay \$1 per hour for each North American Technician Excellence (NATE) certification held and they pay \$2 per hour for a diploma from our school. The idea is to tell technicians that they’re in control of their salaries through documented achievement. I also know that my family’s business occasionally is asked by prospective customers if their technicians are certified. Another contractor in town prefers certified technicians. They will pay for uncertified people to test once. After that, the technicians pay.”

And without certification, technicians are behind the eight-ball with consumers. Per NATE, a recent American Home

Comfort Study reported that 94 percent of homeowners believe having a certified technician repair or install their home comfort system is important to them. And, half of consumers defer retrofits or new installations because they don't know which contractors have competent technicians.

QUALITY CERTIFICATION MATTERS

Contractors are also quick to point out their desire to have technicians go through difficult certification, truly showing that their training has been beneficial.

"In the near future, homeowners will be asking for proof of certification before they let a technician work on their HVAC system, and they should," said Jamey Hale, senior technical support supervisor, ICOR International Inc., Indianapolis. "Carter [Stanfield] and Jim [Johnson] know firsthand how many technicians are out in the field that need better training. Do you think a technician fresh out of trade school should be able to pass a NATE certification? I think if a technician can pass a NATE exam fresh out of school the exam is too easy. Certification exams should not be easy to pass."

"All written tests can produce people who can pass a test but not actually work on systems," said Stanfield. "Typically, the top students in my class can and do pass the NATE Core and one or two specialty exams. I suspect the same is

true at other schools. However, that does not mean certification is no good. A certified technician has demonstrated some knowledge, while skills are another matter. It is time-consuming to test actual skills, but it can be done. At schools we must test skills. I think one solution might be a standard skills test administered by someone other than the teacher, possibly akin to welding certification."

Don Leonardi, owner, Leonardi HVAC Training & Consulting, Denver, also noted that while certification does not mean you know everything there is to know as an HVAC technician, it does show a clear fundamental understanding of the profession that is not guaranteed from those without the same level of certification.

"I graduated from my college two-year course in HVAC/R Technology with a 4.0 GPA," said David Watson, Senior HVAC/R technician, One Hour Heating & Air Conditioning, LLC., Sarasota, Florida. "I have been NATE-certified for the last 10 years. I worked my butt off for both because I wanted to be the best I could be at what I was doing. For the last 30 years, I have proved that I deserved both. It's true that neither is worth the paper they're printed on if you can't perform with the excellence claimed. I can, and I do, and no man is going to take that away from me. Mainly because it's not just on paper. It's in my mind and I own it."

Certifications Help Distinguish HVAC Professionals

CONTRACTORS DISCUSS HOW TO USE CERTIFICATION TO BENEFIT THEIR BUSINESSES

by Nicole Krawcke of *The NEWS* Staff 

Certifications have long provided HVAC industry professionals with legitimization and the reputation as first-rate in different areas. They signify that an individual has taken the time and effort, and undergone training to become experts in their chosen fields.

And, with the HVAC industry constantly changing, certifications help contractors stay up to date on the latest technology and advancements, according to David Richardson, curriculum developer and instructor, National Comfort Institute (NCI).

“If you look at where a lot of things go wrong, it ties in specifically to the lack of training,” Richardson said. “Certification gives them the ability to be able to have those necessary technical and customer service skills that they’re going to need. It tends to raise the bar in the industry.”



JBS Heating & Air Inc., Yucaipa, California, displays North American Technician Excellence (NATE) and National Comfort Institute (NCI) logos on its vehicle wraps to highlight that its technicians carry certifications from both organizations.



Get Qualified. Earn More.

Don't fix the symptoms without knowing their root causes.

Training for BPI exams teaches you the fundamentals of home performance assessments, building envelope evaluations, HVAC testing and more. Using the house-as-a-system approach, you'll be able to trace problems to their root causes, prescribe real solutions and get the job done right—the first time. With happier clients, you'll get fewer callbacks, more referrals and more profit.

Earn your BPI certification today.
www.bpi.org/pros

✦ BUILDING ANALYST

Go beyond a traditional energy audit to perform comprehensive, whole-home assessments and prescribe and prioritize solutions based on building science. **GO**

✦ ENVELOPE PROFESSIONAL

Quantify performance and prescribe improvements to help tighten the building envelope, stop uncontrolled air leakage and optimize comfort and HVAC performance. **GO**

✦ AIR CONDITIONING AND HEAT PUMP

Understand the role of these systems within the whole home and how to diagnose and correct problems properly to achieve peak performance. **GO**

✦ HEATING

Optimize the installation, operation and maintenance of heating equipment in relation to other building systems, to help save energy and ensure occupant comfort, health and safety. **GO**

✦ INFILTRATION & DUCT LEAKAGE (IDL)

Deliver the blower door and duct leakage tests that builders need to meet IECC codes for air infiltration and duct leakage. **GO**

Standards.
Certifications.
Quality Management.
Rating System.



**Building
Performance
Institute**
RAISING THE BAR SINCE 1993

“It’s just like being an athlete,” he continued. “Those baseball guys practice their swings and catching drills religiously. They learn how to do the stuff when they’re probably 8 years old, but they do it on a continuous basis, constantly fine tuning their skills — and they stay up to date on it. Certification and training is the same thing. It follows a very parallel path. Just because you go and get trained once, it doesn’t mean you’re always going to retain it.”

Certification also allows contractors to differentiate themselves from others, Richardson noted. “You can typically tell the companies who have gotten the most up-to-date training — they become students of their trade. Those are the guys I don’t get a lot of calls from. The ones who take advantage of that, for most of them, the sky is the limit.”

Additional benefits of certification include reduced callbacks and improved customer satisfaction, said Leslie McDowell, director of marketing and communications, Building Performance Institute Inc. (BPI). “Contractors have given us feedback that they begin to see how they can expand their average ticket sizes and ultimately, they have higher gross margins on their jobs. It also improves the close rates and number of referrals.”

GAINING CUSTOMER CONFIDENCE

While certifications lend credibility to HVAC businesses, the average customer usually has no idea what they mean. North American Technician Excellence (NATE), BPI, and NCI are all just alphabet soup to homeowners, according to Brad Bartholomew, owner of Bartholomew Heating & Cooling Inc., located in Kalamazoo, Michigan. Bartholomew and his technicians have multiple certifications from all three aforementioned organizations.

“They don’t know what BPI is and they don’t know what NATE is,” Bartholomew said. “They say, ‘NATE certified? I know Nate; he flips my burgers down here.’ That doesn’t mean anything to them. But it’s all about the visuals. I wear all four of my badges from BPI on my auditing shirts and we have our NATE stuff displayed. People don’t know what they are, but it looks impressive.”

Bartholomew noted that contractors should always display their certifications where people can see them. “It doesn’t do any good to have it and not display it. You don’t have to walk around and point at your shoulder all the time. You just need to have those on and people will notice and read it.”

Joaquin Contreras, president, JBS Heating & Air Inc., Yucaipa, California, agrees that customers really don’t care about certifications.

“When consumers are searching for a contractor, there is so much noise on the Internet,” he said. “Each one of the ‘experts’ are telling them what they should and should not do. It becomes the best sales job, not what the best practice is.”

Contreras, who has both NATE and NCI certified technicians with various specialties on his staff, said the certifications definitely help discern his company from his competition, but only when given the chance to talk to the customer. “Once we have an opportunity to sit down at the kitchen table and explain, the difference is huge. The problem is getting to the kitchen table. I would say that NCI means the most to our customers because we provide them with documentation of their systems’ performance.”

Bill Campbell, president, Campbell Comfort Systems Inc., West Deptford, New Jersey, also has multiple certifications, including NATE, NCI Combustion, Air Flow, and System Design, as well as several BPI disciplines. Campbell said he doesn’t believe his customers care much about certifications either, because “their expectation is that any contractor they hire is ‘certified’ without really understanding what that is or what it means.”

“Becoming certified in something as a technician is the first step in increasing knowledge and professionalism,”



Joaquin Contreras, president, JBS Heating & Air Inc., Yucaipa, California, said certifications definitely help discern his company from his competition, but only when given the chance to sit down and explain them to the customer.

Campbell said. “It is the key for the gate that allows you to become very good at something specific. It generally includes training, education, and CEUs to maintain. The CEUs require you to continually learn more about the specialty. As you learn more, and most importantly, apply the knowledge in everyday situations, you get extremely competent in what you do. The reputation as a company that follows is the differentiator, not the certifications themselves. The competence of a technician that has learned his trade is palpable and I know commands a higher price because he/she is bringing something to the table others cannot: the value that comes with having a true professional working in your house and educating you on what is going on in there.”

MARKETING HVAC CERTIFICATIONS

There are many different ways to market certifications. Bartholomew said he promotes his NATE certifications on his company's fleet of vehicles.

"We market ourselves as we're the guys who fix things. We're the only ones in town who can come in and tell you if it's a heating or cooling problem or a building envelope problem. And whatever the problem is, we have the tools and expertise to diagnose and fix it."

Bartholomew also has TV and radio commercial advertisements. "We're lucky that we've been doing this a long time, so we have that expert reputation. Last winter, it was really cold, and the news stations were doing some articles on what to do when it's really cold outside, so guess who they called? I get on my local TV a lot, not for advertising, but for news. You can't buy that time, you earn that time. You have to be out there awhile and get that reputation as the problem solver. That's why we have all the certifications we have. We want to have more certifications than anybody else. Not that that makes us problem solvers, but it certainly legitimizes the idea.

"The certifications are good if you're marketing them, but it's the knowledge that comes along with them that is what gets me the time on TV and things like that," Bartholomew added. "You don't get those certifications without doing work."

Contreras said most of his marketing pieces show the NATE and NCI logos, including vehicle wraps, the website and newsletters.

While Campbell says his certifications appear on his company's website and in print advertising, he does not actively publicize them as a point of marketing.

PICKING AND CHOOSING

Because of the numerous different certification programs offered by various HVAC organizations, it can often be difficult for contractors to decide which ones suit their company needs best.

"We based our decision on our local utility provider's programs," Contreras said. "I feel the main difference with NCI is the hands-on training approach we receive from them. Their training center and field coaching are invaluable assets for us." Campbell has a different strategy, which, in fact, includes getting them all.

"As an HVAC contractor, NCI is imperative and NATE is important, but more for internal use as a way to incentivize technicians to continually train and learn their trade. A technician in our company is not allowed to touch a combustion appliance without NCI CO certification. And, if you are involved in home performance to any degree, BPI certification is a must."

NADCA's Air Systems Cleaning Specialist Certification (ASCS)

Set Yourself Apart From the Competition



The Air Systems Cleaning Specialist (ASCS) is NADCA's globally-recognized certification for knowledge in HVAC inspection, cleaning and restoration procedures.

This certification program is open to any HVAC system cleaning specialist, technician, or related industry professionals regardless of experience in the field:



Learn the ins and outs of the globally-recognized ACR Standard for proper HVAC cleaning and restoration



Qualify for specialized contracts and bids that require this industry-leading certification



Increase your marketability to customers and employers



DOWNLOAD THE
**ASCS CANDIDATES
GUIDE**

**Learn more about becoming
ASCS-certified and find out how
you can prepare for your exam.**



ASCS

**NADCA CERTIFIED
AIR SYSTEMS
CLEANING
SPECIALISTS**