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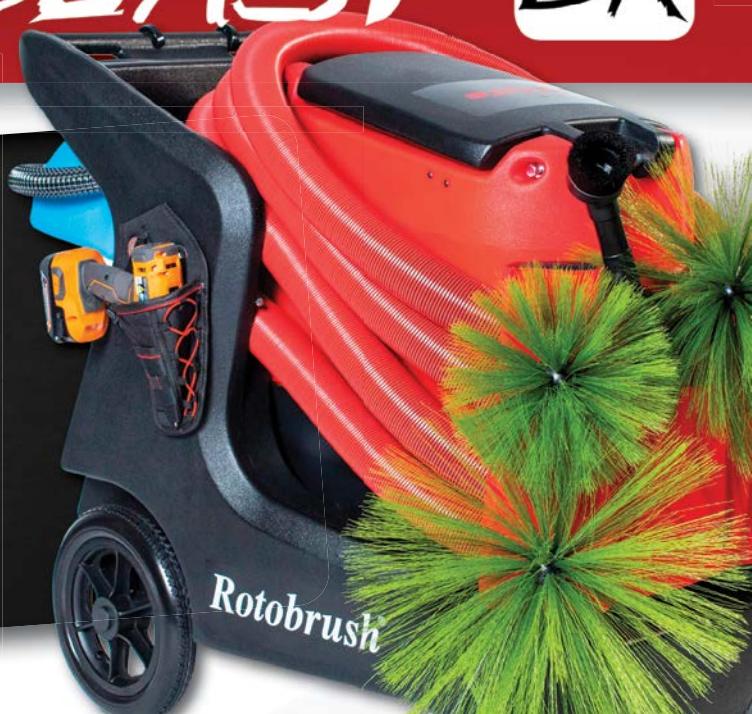
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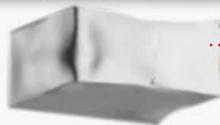
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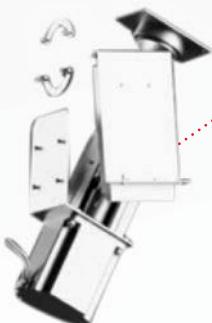
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Lead pipe replacement projects prioritized, p. 8

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Everything is Marketing



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- Beware of Illegal Refrigerants, p. 27
- Ductwork Due Diligence, p. 32



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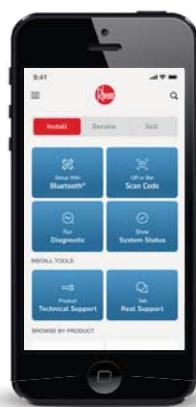


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CSRs, dispatchers, technicians, support. People and processes must mesh together to keep the business running and prosperous.

HVAC HALL OF FAME CLASS OF 2022

20 Tom Casey, Jr.: Entrepreneur, Trainer, Advisor

He grew up working with his father in a successful company, where exceptional work was the rule. He then did all he could to help others succeed as a writer, speaker and consultant.

22 Joe Cunningham: Trainer Beyond Compare

He was one of the first to sell \$1 million in HVAC replacements. This led to his legacy as an in-demand teacher of sales skills and technical protocols. At age 70, he's still going strong.

24 Stan Johnson, Jr.: Champion of Contractor Excellence

He "held the flashlight" for dad in the 1960s, and helped out during his high school years. He would ultimately work side-by-side with Stan Sr., and became a leading proponent of installation documentation, an ACCA leader and Service Nation co-founder.

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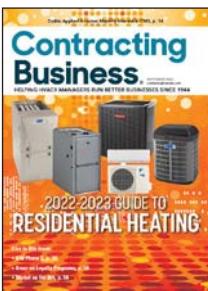
It's Hard To Stop A Trane.



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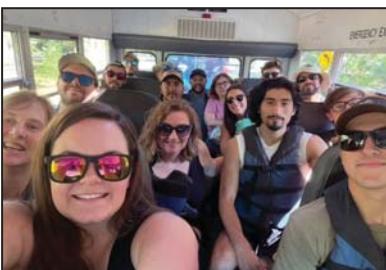
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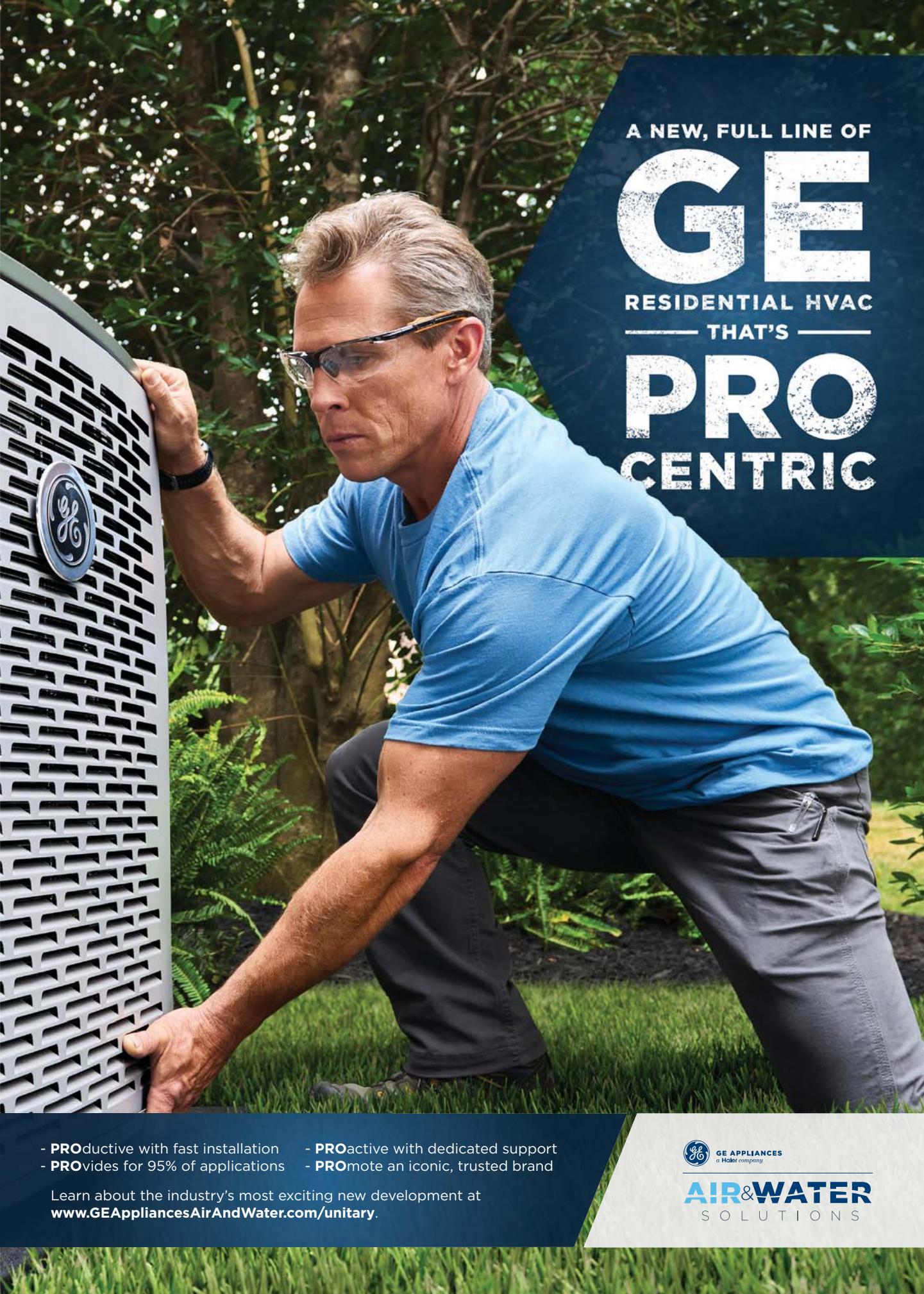
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Welcome Tom, Joe and Stan

This is our Hall of Fame issue, and we are pleased to welcome three greats who have devoted their professional lives to the HVAC industry. Our inductees are: contractor/business owner/author/consultant Tom Casey, Jr.; business owner/contractor/consultant/trainer Joe Cunningham; and previous business owner/coach/author and lifelong advocate for quality in HVAC installations, Stan Johnson, Jr.



Tom Casey, Jr., with his father Tom Sr. and brother Todd, was a third-generation owner of Climate Partners, Milford, Connecticut, which was founded in the 1930s by his grandfather, John T. Casey, as Casey Fuel, Ice & Coal. He relocated about five years ago, and currently owns and operates Griffin Service in St. Johns, Florida. Climate Partners was the 2001 Contracting Business Residential Contractor of the Year, was a perennial winner of our annual Quality Home Comfort Awards, and a model of managerial excellence. Tom's career has included consulting, presenting at industry events, and writing for industry publications. Tom believes any HVAC company can be "legendary" by adhering to high standards of service and installation excellence, customer communications, and pin-point marketing that cuts through the communications clutter consumers receive each day.



Joe Cunningham was among the industry's first "comfort advisors," and one of the first to reach \$1 million in annual sales. He made his name as one of the HVAC industry's greatest sales trainers, first for Carrier ("Texas Tough") and later for Service Experts and Future University. A self-made man if ever there was one, Joe founded Success Track Network, the Technical Arts Academy and "Your Air Conditioning Company." Joe has also served and continues to serve as a consultant-coach for Service Nation.

Stan Johnson, Jr. "held the flashlight" for his dad while a youngster in the early 1960s, at Stan's Heating & Air Conditioning in Austin, Texas. After college, he was drawn to the business once again, and he and Stan Sr. built a solid company together. There were

problems later due to the Texas banking crisis, but he eventually put the business back on solid ground.

Stan was a major contributor to the rewrite of ACCA Manual J, chaired the rewrite of Manual J8 version 2, and later helped with the rewrites of Manuals S, T and D. Stan was a founding member and past president of



Texas ACCA and a past chairman of ACCA national.

Stan never let his success blind him to the HVAC contractor's need for business and technical training, and he was pleased to be a founding member and founding investor in Service Nation. He currently serves as facilitator of the Service Nation Alliance Group and as an Alliance Coach. Read these HOF stories beginning on page 20.

The Hall of Fame induction ceremony will be held during Service Nation's Service World Expo, October 18-21 in Tampa, Florida. Information on the show can be found at www.serviceworldexpo.com.

HOF Criteria

Men and women business owners who are nominated to the HVAC Hall of Fame must have been willing to step out and help fellow owners be better, and have made significant contributions to the methods and standards of HVAC business management and industry development. Those who have served as consultants must have exhibited a devotion to improving the prospects of many clients. To nominate someone, write to me at tmciver@endeavorb2b.com.

Technician Salary Survey

We are currently running an HVAC technician salary survey, and we invite digital viewers who are owners or managers to vote now, rather than wait for their print edition to arrive in the mail. For accuracy, please designate one person at your company to take the survey.

We want to know if you've increased technician salaries to support recruiting and retention, as a response to COVID walk-aways who have not returned, or as a response to rampant inflation.

Find the salary survey here:

<https://contractingbusiness.com/21250995> **CB**

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Climate Partners
Griffin Service



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Pioneer Heating & AC

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DiFilippo's Service Co.

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HVAC Profit Boosters

DOMINICK GUARINO
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Lead Pipe Replacement Projects Prioritized

by Rob McManamy

As the Mississippi state capital entered its second month of an emergency boil order for unsafe drinking water this September, the bitter battle between its governor and the city mayor intensified over federal infrastructure funding that the state had previously turned down. Meanwhile, local residents, schools, businesses, and municipal services all scrambled to adjust their fall planning now to focus on short-term survival in addition to longer-term solutions.

But as stark as the City of Jackson's fate had become, seemingly overnight, it was ultimately not all that different from recent drinking water crises that had previously struck and continue to concern the aging cities of Flint (MI), Milwaukee, Chicago, New York, Boston, and others. In fact, Mississippi's latest Infrastructure Report Card from the American Society of Civil Engineers (ASCE) gave its drinking water systems a grade of 'D' in 2020 and warned then that the state needed to increase related investments drastically.

On Sept. 7, national ASCE President **Dennis Truax**, himself a Mississippi resident, said, "My heart goes out to all of those impacted in Jackson. No one should be without safe drinking water in the 21st Century."

He added, "All of the utilities in Mississippi are doing what they can to protect the citizens they serve. However, with very limited resources, these systems have become increasingly susceptible to water main breaks, treatment facility problems, and other infrastructure failures. Funding from the bipartisan Infrastructure Investment and Jobs Act (IIJA) is providing significant resources to the state's drinking water systems—\$429 million over five years."

Nationally, of course, ASCE has been sounding the alarm for decades, ever since launching its overall U.S. Infrastructure Report Card in 1998 and re-issuing grades every four years in 16 categories, ranging from transportation and energy to water systems and waste management. Ironically, the most recent report card in 2021 actually raised the national grade for drinking water systems from 'D' to 'C-.' But that assessment was made well before the latest disastrous failures in Jackson.

Even so, the 2021 ASCE Infrastructure Report Card pulled no punches in reiterating its dire warnings for the U.S. drinking water sector:

Our nation's drinking water systems face staggering public investment needs over the next several decades. ASCE's



Brand Diverse Solutions Steven Barber / iStock / Getty Images Plus

2020 economic study, "The Economic Benefits of Investing in Water Infrastructure: How a Failure to Act Would Affect the U.S. Economic Recovery" found that the annual drinking water and wastewater investment gap will grow to \$434 billion by 2029. Additionally, the cost to comply with the EPA's 2019 Lead and Copper Rule is estimated at between \$130 million and \$286 million. Drinking water utilities also face increasing workforce challenges. Much of the current drinking water workforce is expected to retire in the coming decade, taking their institutional knowledge along with them. Between 2016 and 2026, an estimated 10.6% of water sector workers will retire or

transfer each year, with some utilities expecting as much as half of their staff to retire in the next five to 10 years.

The positive turn taken last November in the enactment of the new Bipartisan Infrastructure Law (IIJA) finally promises actual progress. As a result, the federal government is providing some \$55 billion to support capitalization projects through the Clean Water and Drinking Water State Revolving Fund (SRF) programs, including \$15 billion specifically for lead service line replacement projects. EPA estimates there are 6 to 10 million lead service lines still in the ground across the country. In May, EPA announced that it is making available \$7.28 billion in new federal grant funding for the Drinking Water State Revolving Fund (DWSRF). This funding can be used for loans that help drinking water systems install treatment for contaminants, improve distribution systems by removing those lead service lines and improve system resiliency to natural disasters such as floods.

EPA said it would also develop a new proposed rule, the Lead and Copper Rule Improvements, to help to implement and complete the replacement projects "as quickly as is feasible." EPA also intends to consider opportunities to strengthen tap sampling requirements and explore options to reduce the complexity and confusion associated with the action level and trigger level, with a focus on reducing health risks in more communities. Those communities are Toledo, Ohio; Pittsburgh, PA; Buffalo, NY; Elberta, MN; Linwood, KS; the Anson Madison Water District in Maine; and Columbus County, NC.

Read more at HPAC Engineering online, at <https://www.hpac.com/21250429>.

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Twin City Fan's EPFN plenum fans are used in field-fabricated and factory-built air-handling units to pressurize the entire surrounding air plenum. This allows the discharge ductwork to be directly connected to the air handler from any direction. The design also saves space by eliminating the fan housing, transitions and diffusers within the unit. With airflow impeller. Plenum fans are designed for general HVAC applications where large volumes of clean air are required at low to moderate pressures. The EPFN has airflow to 280,000 cfm, and static pressure to 10 inches w.g. www.tcf.com



Greenheck introduces its QEID Upblast direct-drive, mixed-flow fan, available in a roof-mounted exhaust or upblast configuration for discharging clean air or fume exhaust up and away from a building. It eliminates belts, pulleys and fan shaft bearings, and a factory-programmed, variable-frequency drive enables easy adjustment and control. A fully welded, heavy-gauge curb cap eliminates leaks and allows for quick mounting to a roof curb. Butterfly dampers provide backflow protection and prevent rain penetration, while a windband protects the dampers from debris and keeps the damper blades closed when not in operation. The fan has performance capacities from 800 to 88,000 cfm and up to 10 in. wg. www.greenheck.com



Fresh-Aire UV®, Jupiter, Fla., a leading manufacturer of indoor air quality (IAQ) products, has added the APCO-X to its APCO product line of combination ultraviolet (UV) technology and activated carbon media catalyst air treatment for HVAC systems. The APCO-X continues the performance tradition of the original APCO, which won the 2011 AHR Expo Innovation Award in the IAQ category and is currently the HVAC industry's most advanced combination UV/activated carbon media air treatment system, sources report. APCO-X IS UL 2998-validated as zero-ozone producing. APCO-X offers

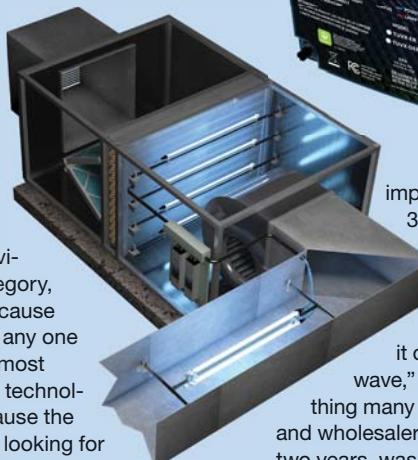


Engel

redesigned V-Twin Cell Matrix incorporating lifetime ceramic cells infused with Fresh-Aire UV's new proprietary Carbon Catalyst for enhanced IAQ performance and a 65-percent increase in adsorption surface area compared to the original APCO system. The substrate's catalyst agent treatment also prevents potential microbial growth. Like the original APCO system, APCO-X comes with a lifetime warranty.

Aaron Engel, vice president, business development for Fresh-Aire UV, spoke with *Contracting Business* to share observations on the change in

attitudes towards indoor air quality and UV technology since even before the COVID pandemic. "We experienced strong year-over-year growth between 2015 and 2019. We believe indoor air quality was steadily gaining momentum and attention as far as contractor awareness. When COVID happened, it brought exponential awareness to the IAQ market," Engel said. "We became so much more aware of air quality, and contractors gravitated to the category, not so much because they believed in any one product for the most part, or any one technology. It was because the end-users were looking for means to improve their air.



improved performance, and 30 percent more efficacy than the first APCO product.

"That came out at the perfect time because it did not ride the COVID wave," Engel explains. "One

Up to 2019, most of the IAQ organic growth was [generated] on the contractors' side, promoting IAQ technology—in our case, UV—to homeowners, who probably had little awareness besides an HVAC filter. Now, homeowners are looking for ways to improve their air because of what is happening in the marketplace. Commercial use experienced exponential growth as well."

APCO-X is a refined version of the original APCO, with a longer lamp life,

The image shows a black rectangular APCO-X FRESHaire UV air purifier. The front panel features the brand name 'APCO-X' in large white letters, with 'FRESHaire UV' written above it in a stylized font. On the left side, there is a blue triangular graphic with a lightning bolt inside, and a small green square icon with a white 'i' symbol. On the right side, there is another blue triangular graphic with a lightning bolt inside. The top of the unit has a blue pleated filter. The bottom right corner of the unit has a small circular hole.

improved performance, and 30 percent more efficacy than the first APCO product.

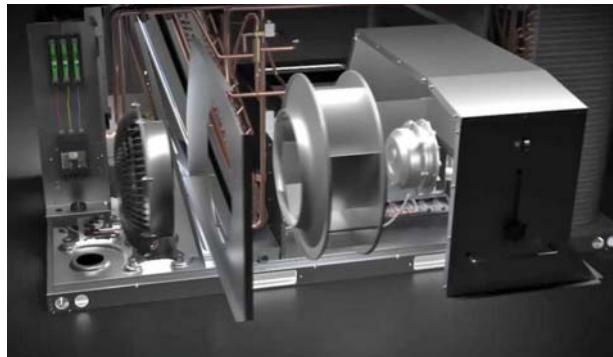
"That came out at the perfect time because it did not ride the COVID wave," Engel explains. "One

thing many end-users, contractors and wholesalers lost sight of in the past two years, was to become so hyper-focused on viral neutralization and interim disinfection, that the market lost track of the fact that one of the worst contributing factors to poor air quality is the condition of the HVAC system itself, particularly the coil. Coil microbial growth affects occupants' health and well-being. And [microbes] continue to get reintroduced into the living space through air circulation. APCO-X keeps the coil clean and sterile and addresses moving air," Engel said. www.freshaireuv.com

>EDITOR'S NOTEBOOK: PRODUCTS

The DirectPlus blower from Lennox comes in 3-ton to 12.5-ton models for Model L rooftop units. It is equipped with a direct-drive, variable-speed blower that eliminates maintenance and service costs associated with traditional belt-drive motors. It features a high-efficiency motor with direct-mounted, backward-curved impeller.

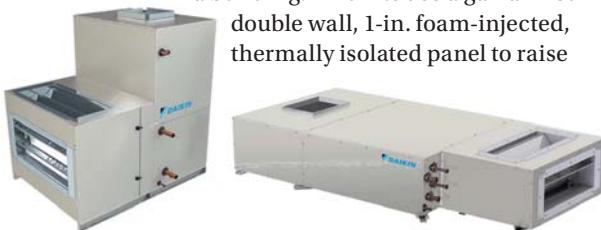
www.lennoxcommercial.com



The New York Blower Co. compact pressure blowers are designed for small- and low-pressure industrial processes such as glove boxes, combustion air, dust collection, fume control, carbon systems, quench cooling, oven exhaust and conveying. They offer stable pulsation-free performance from wide-open to closed-off. The open radial wheel design makes it suited for both clean air and material-handling applications. Variable-wheel widths/diameters and a choice of four outlet sizes and six inlet sizes enable efficient fan selection across a wide range of volumes and pressures. Pressures to 23 in. w.g., capacities to 4,000 cfm, and temperatures to 600° F. www.nyb.com



Daikin Applied's PreciseLine air handlers are available in both vertical and horizontal configurations to condition air at precise levels up to 5,000 cubic feet/minute (cfm). Its compact footprint gives system designers and contractors design capability when faced with tight space restrictions. It uses a series of smaller units to efficiently deliver fresh, conditioned air to dedicated spaces within a building. All units use a galvanized double wall, 1-in. foam-injected, thermally isolated panel to raise



the cabinet's thermal resistance to R-6.5. This thermal resistance is more effective at keeping air cold when in cooling mode and hot when in heating mode. www.daikinapplied.com

Aspen Mfg's LEM Series air handlers are shipped in the upflow or horizontal right position, and field-convertible to downflow or horizontal left applications. The fully insulated, galvanized-steel cabinet has less than 2 percent air leakage when tested in accordance with ASHRAE standard 193. Constant torque ECM speeds and torques are controlled by software embedded in the motor. Motors are preprogrammed with speeds and torques at the factory. Direct-drive blowers circulate air quietly and efficiently; rail-mounted blowers provide easy removal for service and maintenance. ETL-listed for use with either R22 or R410a when a proper metering device is used. High-efficiency rifled aluminum tubes and enhanced aluminum fins provide maximum heat transfer.

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The Hyperion communicating air handler from Trane features ComfortLink II communicating technology that connects all key system components, and all-aluminum, epoxy-coated coils. The Vortica blower and fully insulated cabinet provides homeowners with reliable, ultra-quiet operation, sources report. The residential system's double-wall cabinets ensure quiet, energy-efficient performance, while minimizing airborne dust and condensation that can cause mold and mildew. The unit allows the addition of either hydronic or electric heating without changing the cabinet. www.trane.com



The ThermaPANEL hydronic radiant heating/cooling system from Therma-HEXX is a modular solution for new and refurbished residential, commercial and industrial applications. Evenly distributed heating/cooling is achieved through low-profile panels located in the ceiling, or in the floor when used for heating-only applications. Coupled with a high-efficiency electric heat pump, hydronic fluid is evenly distributed throughout the individual panels in integrated, thermoformed micro-channels that enable even cooling and heating. www.therma-hexx.com

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From Daikin Applied, the Rebel Applied™ is the only rooftop HVAC system to meet ASHRAE's standard for leading performance in airflow design. The system also features a high-efficiency motor, compressor and other components. Rebel Applied is the first packaged rooftop system to achieve an ASHRAE Standard 111 Class 6 air-leakage rating at +/- 6 inches or 0.5 percent at design airflow. www.daikinapplied.com



The Johnson Controls series of 27.5 – 50 ton commercial rooftop units designed with simple, smart controls to deliver class-leading performance and efficiency, and extended equipment life. Select rooftop units from Johnson Controls feature a prepackaged Smart Equipment controls platform with a full array of user-adaptable parameters, and the units integrate seamlessly with the Verasys building controls system for maximum system control. Select rooftop units are offered alongside the award-winning Johnson Controls Premier platform to provide a complete and competitive offering in this tonnage range. Select rooftop units exceed aggressive Department of Energy (DOE) 2023 energy efficiency standards by up to 22% while surpassing current DOE 2018 levels by up to 39%. In addition, the units offer up to 31% greater part-load efficiency (IEER) than competitive models and up to 15% greater IEER than the Millennium™ legacy product. Coming later in 2020, the four-stage IntelliSpeed™ models will bring even higher efficiencies, with energy costs reduced to industry-leading levels. <https://on.jci.com/3R0jdyV>

Lennox Model L™ rooftops feature the revolutionary Lennox® CORE Unit Controller and advanced variable-speed technology to maximize energy savings. Premium diagnostic features reduce installation, service and maintenance to provide the lowest total cost of ownership in the industry. Learn about the premium features



including the Lennox® CORE Service App which replaces a traditional built-in user interface and provides guided setup menus for install, test and balance, and network integration. www.lennoxcommercial.com



The commercial Renaissance™ Line from Rheem®, which includes 7.5 – 12.5 Ton Gas Electric and AC package units and 7.5 – 10 Ton Heat Pump package units, provides commercial specifiers with customizable solutions to suit their exact needs and is 30 percent more inside the building to the outside. In heating mode, a reversing valve changes the flow of energy to bring heat from outside of the building to the inside. The heat pump moves heat using a compressor, rather than simply generating heat. This technique can make heat pumps up to three times more energy-efficient than other forms of electric heating. <https://bit.ly/rheemrenaissance>

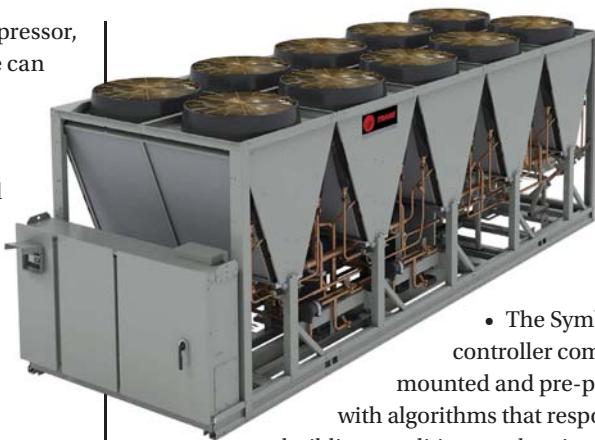
Trane's Ascend air-to-water heat pump model ACX combines chiller and heat pump technology to both heat and cool a building using electricity. In cooling mode, the model ACX moves heat from inside the building to the outside. In heating mode, a reversing valve changes the flow of energy to bring heat from outside of the building to

the inside. The heat pump moves heat using a compressor, rather than simply generating heat. This technique can make heat pumps up to three times more energy-efficient than other forms of electric heating.

As a result of its boiler-free heating, the model ACX achieves high energy efficiency for cooling and heating. The unit's heating efficiency exceeds ASHRAE® standard 90.1-2019: 2.77 COP for heating and a cooling requirement of 9.215 EER.

The Ascend model ACX can help builders and operators meet current HVAC regulations, attain certifications, or achieve a net-zero energy building with its all-electric functionality and other energy-efficient features.

- Air Conditioning, Heating, and Refrigeration Institute (AHRI) compliant.
- Variable-speed fans, variable speed permanent magnet motors, intermediate discharge valves on the compressor, and braze plate evaporators enhance efficiency.
- Dual expansion refrigerant flow valves optimized for heating and cooling modes enable system reliability.
- The heat pump generates hot water temperatures up to 140 degrees Fahrenheit and operation down to zero degrees ambient.



- The Symbio® 800 unit controller comes factory-mounted and pre-programmed with algorithms that respond to building conditions and maintain efficient chiller plant operations. It also enables secure remote connectivity and open standard protocols for seamless integration with a Building Automation System (BAS) such as Tracer® SC+.
- A scroll compressor makes electrification more affordable and practical without compromising efficiency or sound.
- The fin and tube coil support a smaller footprint; transverse "V" condenser coils are easy to access for cleaning and service. <https://bit.ly/traneascendcb> **CB**

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**BIG ASS
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Everything is Marketing

No single element in your company can be removed from the whole. People and processes must mesh together to keep the business running and prosperous.

by Tom Casey, Jr. Part 4 in a Series

Everything your business does is marketing. Every, single thing! Your company's actions and policies will either build up or tear down your marketing efforts. It's "cause & effect" personified. Your ultimate brand and brand equity is more than just fancy logos, truck wraps, or a website. Sure, you need incredibly strategic logos, truck wraps, and website, but they are just the tip of the real marketing iceberg.

Marketing is Marketing

Here are examples of what must continue:

- **Digital:** SEO (no it's not dead yet), PPC (stop paying-stop playing), LSA, GMB and map packs, social media (emphasis on social), email, plus third party lead aggregators.
- **Media:** Radio, TV, billboards (including building signage), voice drops, plus truck wraps (aka rolling billboards).
- **Direct Mail and Print:** Radius mailers around installations,

client retention, prospecting, Thank You cards, business cards, referral cards, yard signs, valve tags, equipment stickers, plus certain print media.

Every single thing is marketing, and all are reflections of your brand. You can't completely outsource it. Sure, you can hire marketing agencies, brand consultants, graphic designers, and more, but YOU need to tie it all together with your culture and operations.

Superb CSRs

Your customer service reps (CSR) are part of your marketing too. Despite being literally the first live, human impression once a client decides to call your company, CSRs are usually the most underpaid, undertrained, underappreciated team members on your staff. These amazing folks can make or break your call board. Their conversations can either set the technician or advisor up for success, or they can dig a hole that they'll have to dig out of to rebuild trust and regain credibility.

Dedicated Dispatchers

Your Dispatchers (DSR) are also part of your marketing. These incredible humans hold perhaps the most crucial role in winning or losing the day, every day. The constant reviewing, prioritizing and reprioritizing, shuffling, and updating clients can make or break your profitability. Effective dispatching for dollars is absolutely crucial to your marketing return on investment.

Don't believe me? If the DSR sends the wrong tech to the wrong call because he's closest or the client has been waiting the longest, and the tech doesn't generate a lead that a better qualified opportunity tech most likely would have, and you subsequently miss out on an \$8500 average sale, doesn't that lower your ROI?

Tremendous Technicians

Your field technician team is also part of your marketing. They're where the rubber meets the road in terms of brand alignment with reality. Are they friendly? Are they clean and fresh? Are

Important Intangibles

What about all the intangibles in your business? These include:

- Equipment stickers—do you make it easy for customers to find your name & number when they have an issue? Do you brand the whole house?
- Valve tags—do you make it easy for customers to know what valves/pipes do what, so if they have an issue they can at least turn it off until you can get there?
- Yard Signs—do you put out mini-billboards on all projects?
- Service Club Memberships—do you have a way for customers to put their systems on cruise control, so they don't have to worry about or remember what to do when?
- Facility—can customers easily find you if they want or need, and will they be greeted and welcomed? Is your facility clean and organized?
- Training—do you have a training program to ensure your

staff is up to date on the products and services you provide, so you can deliver WOW service?

- Community—do you participate in your local community? Are you a good corporate citizen of your market?
- Education/Communication—do you stay in front of your customers, and not just to constantly be selling them something? Do you remind them of important things or events at the appropriate times for your geographic location and housing stock?
- Problems—do you have a process to resolve issues and guarantee 100% satisfaction, really? Is it just me, or do you look at 1-2 star reviews first too?
- Culture—do you actually have one that consistently aligns with your brand or just fancy words and slogans? Does everyone on your team know it, live it, and empowered to deliver it?

they professional? Is there consistency in their process to always deliver and exceed expectations? All the slogans or mission statements go out the window if the primary folks delivering on them drop the ball.

Techs drive trucks, which are your rolling billboards. The way they drive and park, the cleanliness of the vehicle inside and out, even their behavior while driving matters. Do they let cars into traffic or block them from merging? It all matters to either build-up or tear down your marketing efforts. For technicians, the main way they impact your marketing is by their thoroughness of getting the job done right the first time. Nobody wants a service call, but they hate having to do it all over again even more.

Astounding Administrators

Admin and other internal support team members are also part of your marketing. How easy are client interactions with your company? Do your processes align with your brand promises? Are they friendly or is dealing with customers "not their job"? Are they responsive or "too busy" to help a client now and will have to get back to them? We're all customers of lots of companies too, and we draw conclusions about those firms based on everyone we deal with, including and especially the back-office folks when we have an issue.

The Admin/Support team also has a tremendous influence on your internal customers, especially your techs, whether they get built-up or torn down.

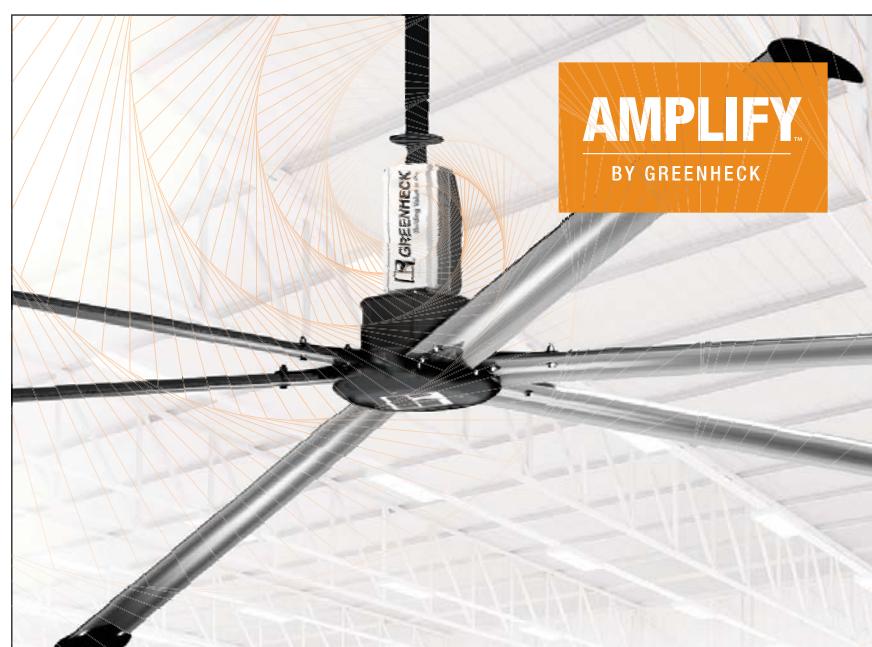
Part of the Formula

Marketing tactics themselves are not a cure-all. Marketing is a big gear in your business machine, but it's not the only one. Every key area of your company is a gear that must align and mesh with all the other gears to drive your business machine forward. Everything is interdependent.

The customer experience that aligns with your branding to build brand equity is your ultimate marketing message. Your entire business machine is your marketing strategy. It's easy to be

distracted by the "shiny object" tactics of specific types of marketing and lose sight of your business machine as a whole. The more efficient and powerfully your business machine runs, the more effective your marketing and brand equity will be, and the more referral-worthy your company will be. **CB**

Tom Casey, Jr. is chief quality officer at Griffin Service, Jacksonville, Fla. He was previously the CEO of Casey's Climate Partners, an industry leader for decades. Tom is also a member of the Contracting Business HVAC Hall of Fame, Class of 2022. He can be reached at tom@comfortjedi.com / 518-732-JEDI.



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Welcome New Inductees

From industry professionals:

“ All of Tom's years of experience, knowledge of best practices gathered from his friendships and sharing of wisdom around our great country over the years are on display here daily at Griffin as we grow into his vision.”

—Shane Olsen,
Griffin Service
Operations
Manager

“ Tom helped me transform a newly acquired HVAC business through his expertise of operating metrics and how to successfully drive strong earnings.”

—George Godfrey,
CEO, Super
Home Services/
Super Heat and
Air

“ Tom has always sought to take his businesses and those he interacted with, and the people to be better versions of themselves. His legacy is the impact he has had on those people and businesses, which are forever better off as a result of Tom's tutelage.”

—Drew Cameron,
HVAC Consultant

Tom Casey, Jr.: Entrepreneur, Trainer, Advisor

Tom Casey, Jr. grew up in the HVAC industry. He began his apprenticeship with his father in the family HVAC service company, Climate Partners, Milford, CT. They worked together, building a company that specialized in Design/Build systems. He worked during summer breaks from junior high school, and took adult education classes in his late teen years. When Casey graduated from high school two years later, he also completed all his apprenticeship technical training.

“My dad had a mission of moving me to a higher level than he ever obtained,” he says. “In addition to training, he also loaned me out to other people while he paid my salary. For example, I worked in a metal fabrication shop for a couple of months, but we didn't do sheet metal fabrication. But he said I needed to know how to do it.”

The family work ethic was two-fold: don't ask employees to do what you wouldn't be willing to do yourself; and as long as we're going to do it, we're going to do it right, and we're going to be the best at it.

Know Your Purpose

Casey says contractors should understand who they are and why they are in business.

“It's got to be genuine; a story you're telling, but it's not a lie,” he explains. “It's not a made-for-TV story; it's the story of who you are. That's the first part of marketing that everyone gets wrong. We talk about branding. We talk about all the online, direct mail, billboards, TV and radio tactics. However, none will be successful until we fully vet out who we are. Then we can craft our story and message around it.”

Seeking to retire and relax in a new environment, Tom and his family—wife Dana, daughters Abby and Jenna, and son Deklin—moved to Florida. Tom did some consulting on the side,



but soon realized he was traveling more than retiring. After some family discussions, it was decided another business was in order. So Casey built Griffin Service in Ponte Vedra Beach, Fla. from the ground up, and after six years, he's looking at 2022 revenue to be more than \$12 million. He serves the business as Chief Visionary Officer.

Defining the home services company as “legendary,” Casey and his team set out to look for their customers in private neighborhoods and those associated with golf course complexes.

“We visited all the country clubs to find out their messaging,” he explains. “We picked up the magazines and looked at all the ads. And we crafted our message around what it meant to be serving and being appealing to these people who wanted 'legendary'.”

His advice for marketing tactics is contracting businesses should be in all the areas where they've identified their customers.

“I'm a strong believer that marketing from an expense perspective is an investment just like your 401k or any other investment portfolio,” Casey says. “It should be balanced. So, don't go all-in on Google, because if it changes its rules, you lose all your customers and your new marketing. Don't go all-in on radio or TV. Don't go all-in on direct mail. However, you should have some of each thing in your marketing investment portfolio.”

Casey attributes his success to his work ethic: “You get up every day, go to work, and bust your ass. Honestly, there's no substitute for consistency around those things or what my why is. It's showing up and doing the work.”

“And to have like recognition by *Contracting Business* and its Hall of Fame is the cherry on top that validates that you did things right and they didn't go unnoticed.”

—Kelly L. Faloon

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Contracting Business

From industry professionals:

For over thirty years, Joe Cunningham has selflessly given of his experience and expertise to raise the level of professionalism and competence within the HVAC industry. I am honored to call him a friend."

—Steve Miles,
president/CEO,
Jerry Kelly Co.

Joe was the first consultant I worked with. Our relationship has spanned over 35 years. He helped my staff and me with all of my companies. No other trainer or consultant has done more or worked with more companies than Joe. He is at the top of my list when I have industry questions."

—Ben Stark, HVAC entrepreneur and a trainer for Go Time Success Group.

For the last 10 years, Joe has been our most popular and highly-rated trainer. His impact on our members and on the HVAC and plumbing industries at-large, has been immeasurable."

Bob Viering,
Vice President,
Programs for
Service Nation,
Inc.

Joe Cunningham: Trainer Beyond Compare

A "consummate professional." "Integrity." "Honesty." "Deep industry knowledge."

These words were used to describe Joe Cunningham, as a candidate for the *Contracting Business* HVAC Hall of Fame.

"Training has always been part of Joe's DNA," the nominator continued, with fine examples how Joe Cunningham has indeed devoted his life to instructing HVAC business owners and technicians in the ways of excellence in sales, management, leadership and technical proficiency.

Born in Washington, D.C., and raised in Cape Girardeau, Mo., Joe Cunningham's professional career began in home improvement sales. Before long he returned to the DC region, where the economy was stronger and work more plentiful. But, in the 1980s, when the DC economy was struggling, Joe took the advice of a friend from Houston, who couldn't say enough about work opportunities in the booming Texas town. He set up four interviews, received four offers, and picked the one he thought was best.

He worked as a home improvement contractor for another eight months and started subbing out air conditioner installations. Soon, he was exclusively into AC sales. He sold \$1 million of HVAC system replacements in one year, which got the attention of distributors and OEMs. Carrier hired Joe to train two struggling dealers in the art of selling, and later hired him to teach sales to its distributors in Texas, Oklahoma, Oregon and Louisiana, through a program known as "Texas Tough." He was also a key contributor to Carrier's "Value-Added Selling" and "Value-Added Service" training programs.

After two years, Joe joined Brandon Reed at retrotec. He built a selling program for retrotec blower doors, and then ran a retrotec distributorship that covered much of the eastern and southeastern United States.

Next came training stints with Contractor Success Group, owned by Jim Abrams and John



**Joe Cunningham
has helped
thousands of
business owners
become more
profitable and
successful.**

Young. Abrams and Young next hired Joe to run their new training venture, Future University in St. Louis, followed by Service Experts.

Many Beneficiaries

Cunningham says he stopped counting the number of people he's trained once it reached 30,000. "It's hard to find anybody that's been in business for awhile that doesn't know me or hasn't been to my training programs," he said.

Tired of all the travelling for Service Experts, Abrams and Young offered a change, and soon Joe was teaching the HVAC industry's first regularly broadcast TV training program, out of a studio in Tyler, Texas. "After about six or eight months of

that, I ran a couple other centers for them and fixed some issues there. After that, they wanted me to move to Nashville, which just wasn't in the cards for me," he said.

Cunningham went back into business for himself in 1998 by starting SuccessTrack Network, which continues to this day. His training for technicians improves sales, profitability, improves technician working conditions, provides better outcomes for homeowners and reduces call back visits.

His Technical Arts Academy provides a course of study that turns someone with no HVAC experience into an entry-level maintenance technician in nine days.

In 2008 Cunningham came calling at the door of Service Nation/Service Roundtable, for an informative show-and-tell of his methods. Service Nation's leaders Matt Michel and David Heimer were impressed. Heimer set Joe up as the headliner in a limited series of sales training road shows, which were ultimately expanded across the country. He continues today as a Service Roundtable "Coach-Consultant."

Joe Cunningham was Honorary Chairman of the President's Small Business Council under President George W. Bush.

—Terry McIver



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From fellow Hall of Famers:

I didn't know Stan when he helped fund the start of Service Nation. He got involved because he believed the program we were creating was good for the industry and good for contractors. As I got to know Stan, I found him to be a man of good character, with the heart of a servant, as well as an accomplished businessman and great family man."

—Matt Michel

In Texas, we have a saying, 'He is the type of man you would ride the river with.' He's a good friend, father, husband and businessman. I am honored to support his nomination."

—Larry Taylor

Stan Johnson was an excellent business planner with above average understanding of the complex elements required to resolve building needs. Stan was loved by his co-workers, appreciated by code enforcement and respected by his clients."

—Steve Saunders

Stan Johnson, Jr.: Champion of Contractor Excellence

The year was 1954. Stan Johnson, Sr., was working in a two-man company in Austin. He learned all he could, and in a few years, started Stan's Service & Installation out of his garage. It came to be known later as Stan's Heating & Air Conditioning (now Stan's Heating Air & Plumbing).

As a youngster, Stan, Jr., would hand his dad tools and hold the flashlight, but he never thought it would go beyond that. During college, he figured he'd get a degree, and work for his father in the summer. After college, the Viet Nam war escalated, but his attempt to join the Air Force was denied due to a technical glitch that wrongly disqualified Stan and others. Wanting to serve in some way, he worked in a communications post for the National Guard in Fort Polk, La., followed by a marketing position at Houston Light & Power.

Back to HVAC

Stan, Jr. and his wife Delaine each had college degrees, hers in teaching and Stan's in marketing. But his dad needed help, so Stan and Delaine moved back to Austin in 1972. Father and son worked the business together from 1972 to 1987, as president and vice president.

"It went from being a service business to new construction, because Austin was a boom town, and still is," Stan said. "For 10 years, we took out over half of the air conditioning permits issued each year by the city of Austin. We were doing 5,000 to 6,000 houses a year. Among our customers was President Lyndon Johnson, at the LBJ Ranch."

Then, a shocker: the Texas oil industry bust hit, followed by the Texas savings and loan housing crisis of 1986, followed by a great reduction in new housing starts and bankrupt home builders. It vaporized the company's new construction work.

"We lost other trades, builders, and banks. By then, my dad had left the company, and said to put it into bankruptcy if that's what you want to do," Stan shares. Instead, he worked with the banks for an extended line of credit, and family members helped out, too. "In 1992, we had paid off the banks and got out from bankruptcy.



"It took me to 2000 to really get us back into just decent financial condition, but we kept the company going and built the business back," he recalled. He also noticed the proliferation of other small HVAC companies that needed help with business management.

Seeking Better for All

Stan Johnson's legacy is as one who was tireless in his efforts to improve the business and technical proficiency of both new and well-established HVAC business owners. "I was convinced that the HVAC industry was underpaid, underappreciated and undereducated, as far as getting to the top of what we needed to know to do the business," He says. "I also needed to make more money, but couldn't unless everybody could make more money. My goal forever after that was to do what I could to increase contractor connectivity in the air conditioning industry and their education and understanding of the business side."

In the early 1970s, before the housing crash, Stan and a group of contractors from across Texas had already started to establish licensing, because there was protectionism going on in communities surrounding the bigger cities, that required licensing to acquire a permit. A licensing law passed in 1981, when Stan was president of the Texas ACCA. He continued to run the business, assisted the state of Texas in establishing the licensing department, and helped start the Austin chapter of ACCA.

In 1982 Stan stepped away from industry activities to help care for their three year-old daughter Tara, who was undergoing many years of cancer treatments in St. Jude's hospital. She eventually recovered, and now works in the medical field.

Stan Johnson served on the board of the Texas ACCA, the national ACCA board for 12 years, was a national ACCA chairman, and helped to rewrite ACCA Manual J and other energy and comfort related documents and procedures.

Stan Johnson was a founding member and investor of Service Nation and currently serves as a facilitator of Service Nation Alliance groups and as an Alliance Coach. He helped form the "Excellent" MIX Group for ACCA.

—Terry McIver

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Digital Compression Improves Energy Efficiency

Submitted by Emerson Copeland

Operational efficiency of refrigeration systems is a major concern for convenience store chains, especially when it comes to reducing energy consumption and limiting downtime due to equipment failures. A major convenience store chain operates four separate walk-in coolers, each powered by an individual refrigeration condensing unit. The smaller condensing units cycle frequently on and off to maintain temperatures. It was determined that a larger, modulating condensing unit would be capable of handling the load of several smaller condensing units and precisely maintain temperatures in each walk-in. A one-year field test was proposed to compare identical sites.

Solution

Precise **temperature control** and significant energy savings are now available with the Copeland digital outdoor refrigeration unit, X-Line Series. Sources report that the digital X-Line delivers superior cooling and energy efficiency for walk-in coolers and remote display cases — helping owners and operators to manage refrigeration and food safety needs. The contractor of choice installed two, five-horsepower units that can each modulate down to 20 percent capacity and precisely match the refrigeration load in all four coolers.

Digital modulation enables owners to maintain much more precise setting and tight control of temperatures. This helps operators to minimize temperature deviations in refrigeration

Sources from Emerson Copeland report the digital X-line unit will save the test store an estimated 27 percent annually in electricity compared to legacy units.

tion fixtures so that food is kept safe and at maximum quality. The digital X-Line combines compression technology with variable speed fan motor control, large-capacity condenser coils, and smart protection and diagnostics to meet today's challenging refrigeration requirements.

Sources from Emerson Copeland report the digital X-line unit will save the test store an estimated 27 percent annually in electricity compared to legacy units. Built-in compressor electronics technology allows operators to take action to minimize **product loss** from equipment downtime. Errors



can be quickly communicated to service technicians, and the system can make changes to protect against faults that might otherwise cause a compressor failure. Operators can expect improved reliability, an extended compressor lifespan and greatly reduced lifecycle costs, sources report.

The slim profile, lightweight design and wall-mount option of the Copeland digital outdoor refrigeration unit, X-Line Series give operators **flexibility** to install the units, even in locations with significant space constraints. In fact, digital X-Line units are so unobtrusive they are often mistaken for AC mini-split units. This helps operators to lower installation costs, eliminate the need for costly crane rentals, and avoid expensive system design workarounds and/or relocation issues. The digital X-Line can even be applied to systems featuring multiple evaporators.

Operators located near residential areas or noise-restricted zones benefit from using the quietest standard unit available. Under most expected operating conditions, the units produce less sound than a normal conversation. In most applications, noise from the digital X-Line Series is practically undetectable. The units are discrete and allow more mounting options where the sound produced by traditional units might prevent their use, such as customer-facing locations near entryways, patios or even indoors. **CB**

HFC Phasedown Highlights Need to Beware of Illegal Refrigerants

Activities of an illegal nature may increase as the phase down progresses.

by Brandon Marshall

Thanks to a network of responsible influencers, advocates, original equipment manufacturers and end users, the heating, ventilation, air conditioning and refrigeration (HVACR) industry has paved the way for a smooth transition from hydrofluorocarbon (HFC) refrigerants to the more environmentally friendly hydrofluoroolefin (HFO) refrigerants. Unfortunately, other parties are creating bumps in the road by introducing **illegal refrigerants** to the market.



Examine all refrigerant packaging for an anti-counterfeiting security shrink sleeve.

As demand for HFCs puts pressure on a decreasing supply, prices may rise—opening doors for unethical trades offering “too good to be true” prices for HFC refrigerants.

Activities of an illegal nature—initiated by the phase down of HFCs, which started under the American Innovation and Manufacturing (AIM) Act on January 1, 2022—in the U.S. and Canada may increase as the phase down progresses. As the law of economics tells us, as demand for HFCs puts pressure on a decreasing supply, prices may rise—opening doors for **unethical trades** offering “too good to be true” prices for HFC refrigerants.

The potential for increased illegal activities has two solid foundations. The industry saw an illegal market blossom in the late 1980s, when the Montreal Protocol phased out the production and importation of virgin chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs)—so we can cite the axiom of history repeating itself. Secondly, we find a “case study” in the European Union, which experienced an influx of **black-market HFC** imports after implementing HFC phase-down regulations following the 2016 Kigali Amendment and the implementation of F-gas.

Why you should care

Risks that come with purchasing illegally imported refrigerants include:

- **Safety.** Illegal refrigerants may contain unknown flammable contents or impurities that create significant safety risks for technicians and customers, plus equipment damage.
- **Fines and penalties.** Violation of the AIM Act, including import, distribution, and/or sale of illegally imported HFCs, is subject to federal enforcement and penalties, including confiscation, imprisonment, and fines. For a list of examples of previous EPA enforcement actions, visit: <https://bit.ly/EPAenforcements>.
- **Eroding your bottom line.** Legally manufactured and reclaimed HFC refrigerants sold in the U.S. meet AHRI 700 standards to ensure purity and quality. Illegal refrigerants can severely compromise the performance and life of systems, as well as energy efficiency—all of which can negatively impact your customer relationships and repeat business.
- **Defeating the ecological purpose.** Illegal imports of HFCs work to slow the adoption of new-generation refrigerants. Chemours estimates that using illegal HFCs has the greenhouse-gas equivalent of putting another 20 million vehicles on the road.



Make sure each single-use recyclable cylinder has an IZON® security label. Ensure packaging authenticity by scanning the QR code on the IZON® label or visiting GenuineRefrigerants.com and entering the seven-digit code on the label.

What you can do

First, only purchase refrigerant from a trusted source and be wary of unusual pricing or deals. It's important to pair this practice with the following:

- Examine all refrigerant packaging for an anti-counterfeiting security shrink sleeve.
- Make sure each single-use recyclable cylinder has an IZON® security label.
- Ensure packaging authenticity by scanning the QR code on the IZON® label or by visiting [www.GenuineRefrigerants.com](https://GenuineRefrigerants.com) and entering the seven-digit code on the label. **CB**

Brandon Marshall is North America Marketing Manager, Thermal & Specialized Solutions, The Chemours Company

BY CHARLIE GREER

Easy Employee Incentive Programs That Work

According to HR University

- 90% of the highest performing companies use incentives and monetary rewards to retain and encourage employees.
- 99% of employees have unique reward preferences, which make incentives a good alternative to a traditional reward system.
- 80% of employees prefer strong incentives over a bigger paycheck.
- 78% of employees are willing to remain with their current employment due to the competitive benefits of employee incentive programs.

Here some employee incentive programs you can implement.

Name on company vehicle

After an employee, who drives a company vehicle, has worked for you for a period of, let's say, two years, you can have their name stenciled on the driver's side door like a fighter pilot.

Keep your truck after it depreciates

Getting a brand new service vehicle is in itself quite an honor. I worked with one contractor who, after the vehicle has been fully depreciated, gives it to the service technician as their personal vehicle. You can believe that kept technicians on board.

Time off/paid time off

Maurie Backman wrote in The Motley Fool that, "Fifty-eight percent of workers would agree to a salary reduction if they could get extra vacation time." Time off gives employees the chance to maintain work-life balance and can greatly increase motivation. Encourage them to take the paid leave they have only 35%



How about a bonus for staying with the company?

of employees actually use all the PTO they earn and offer extra vacation time and flexibility if employees meet certain goals.

Paid vacation trips

I worked for Ron Smith. Every year Mr. Smith would book a large block of rooms on a cruise ship or a resort. Everyone in the company, from the warehouse people, to installers, to salespeople and service techs, to office personnel, could qualify for one of these trips just by doing their job. I can't tell you how much I appreciated them and the loyalty they generated.

Different color uniform shirt

I worked with a very successful company that started new service technicians in a light blue, pin-striped shirt. After their sales went up to a certain level, he got them new solid blue shirts. Once they hit \$1,000,000 in annual sales they were issued solid white shirts. People really wanted those white shirts.

Recognition or plaques

This is a low-cost way to allow everyone to express their gratitude for other team members. Even a simple thank you can be enough to keep someone motivated. Harvard Business Review found that when workers' strengths were recognized by managers, it resulted in happier workers and a 14% to 29% increase in profit. McKinsey discovered that companies can achieve a 55% improvement in engagement by offering social recognition.

Bonus for staying with the company

Sign-on bonuses are common. How about a bonus when they stay?

Seek and Destroy

We paid incentives to service techs for sales and generating leads. The bonuses were simply added to their paychecks. The problem with that is their spouses would take their paychecks and they weren't getting the emotional high one gets when getting paid a little extra for not much work.

One month I implemented a promotion I called, "Seek and Destroy." Our office personnel kept me informed me as soon as anyone sold anything. I immediately got into my vehicle and drove to wherever they were and handed them the cash. That was a record-breaking month. (Note: Check with your CPA to make sure you're doing it right.)

Fitness club membership

Another reason I loved my time as Ron Smith's company was that he paid for a fitness club membership for anyone that wanted it. I didn't have the money for that, so I really appreciated it. So did a lot of my co-workers.

Handwritten note

There's nothing like a handwritten note to get people to love you.

Scratch-off lottery tickets

People love 'em, and every now and then somebody's going to hit it big. You might find people working harder for lottery tickets than they do their commissions.

Referral Bonus

Paying a referral bonus to existing employees for new employee referrals is one of the most effective ways of recruiting potential employees. **CB**

Charlie Greer has been voted "Favorite Industry Sales Trainer," and "HVAC Consultant-of-the-Year." Charlie can train your technicians and salespeople via Zoom. For more information on Charlie's products and services, call 1-800-963-HVAC (4822), or go to www.hvacprofitboosters.com. Email your questions on sales to charlie@charliegreer.com.

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PS Form 3526-R, July 2014

Why Don't You Include Ductwork in Your Maintenance Agreements?

Do you want to learn a simple way to differentiate your HVAC business by including the duct system in your maintenance agreements? I will reveal this process later in this article. Before I do, it's important to review why and how to include static pressure and airflow measurements on every service visit and installation.

Air distribution systems have been the red-headed stepchild of the HVAC service and replacement industry for as long as I can remember. They remain mostly ignored and relegated to be dealt with only if they have to be.

A big part of my mission for the past three decades has been to increase awareness of the importance of air — the A in HVAC. Unfortunately, our industry still has a long way to go in understanding how airflow impacts every part of an HVAC system.



Think of testing against baseline as the first thing that happens when you go for a medical checkup: the nurse measures your body's temperature and 'static pressure.'

Air is more than just the medium that delivers comfort to a home or building. The amount of air that moves across a coil or heat exchanger determines whether the equipment will work properly, break down early, or be energy efficient. Yet, for some reason, most of our industry either doesn't understand or chooses to ignore this truth.

Newer, more energy-efficient furnaces and Direct Expansion (DX) systems are more dependent than older systems on an exacting volume of air to transfer heat effectively and efficiently.

If there is too much or too little airflow across a coil or heat exchanger, both capacity and efficiency can drop dramatically.

The number one reason for most early equipment failure is poor installation practices, not defective parts. Improper airflow is the main reason compressors and heat exchangers fail. Still today, most installers and service techs are not properly trained, nor do they have the tools to verify that static pressures and airflow are within manufacturer specifications.

The good news is we have much better tools, instruments, and processes today to help techs quickly and precisely take the correct measurements and enter them into your customers' records.

How to Cover Ductwork in a Maintenance Agreement

Step 1: Establish a Good Baseline.

Before including the ductwork, you must bring static pressures and airflow at the equipment up to manufacturer specifications. A typical spec would be Total External Static Pressure (TESP), no higher than .5-in. of water column, and airflow at 400 CFM per ton. An example is having 200 CFM at the blower for a three-ton system. This can vary, so always check manufacturer recommendations for the specific equipment.

Once you've first measured the baseline and/or fixed the system, be sure to record the final static pressure and measured airflow in the customer's file. Also, measure and record the final temperature drop (DeltaT) across the coil or temperature rise across the heat exchanger (hopefully, you are already doing this part).

Step 2: Measure Equipment TESP and DeltaT on Every Maintenance Visit.

By measuring these two key performance indicators and comparing them to the established baseline above, you will have verified that nothing has changed with the duct system and equipment.

You can effectively include the duct system in your agreements when you perform these tasks on every visit. There are, of course, other benefits besides differentiating your agreements from your competition. If these two key performance indicators change at any time, something is off, either with the equipment or the air distribution system.

With some additional diagnostics, you should be able to easily pinpoint the issue and offer the right solution to your customer.

Imagine if testing these parameters was the first thing your service and maintenance techs did on every visit. It could significantly eliminate wasted time and get them quickly focused on solving problems. Think of it like the first thing that happens when you go for a medical checkup: The nurse measures your body's temperature and "static pressure."

This one small step can make a world of difference towards higher customer satisfaction, technician productivity — and your bottom line. Do it right, and everyone wins! **CB**

Dominick Guarino is President & CEO of National Comfort Institute (NCI) (www.nationalcomfortinstitute.com), the nation's premier High-Performance training, certification, and membership organization focused on helping contractors grow and become more profitable. His e-mail is ncilink.com/ContactMe. For more info on Performance-Based Contracting™, go to WhyPBC.com or call NCI at 800/633-7058.



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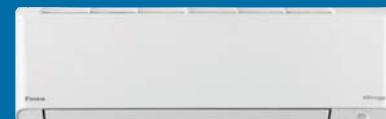
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