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NOVEMBER 2020

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**NEWS**

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## New Products

What's new? What's improved? Find out here as ICN takes a look at the latest offerings in the HVAC/R/SM industry.

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## Indoor People

ICN puts the spotlight on the movers and shakers in the heating and air conditioning industry.

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## COVID-19 Update

### Amid Pandemic, New Study Shows IAQ a Top Concern Among People Returning to Work

Americans are worried about their health and safety when returning to work, especially the cleanliness of indoor air at their workplace, according to a new study released by Aeroseal, LLC.

The study includes insights from 710 respondents and explores how, in light of COVID-19, Americans feel about their eventual return to the workplace. A majority of survey

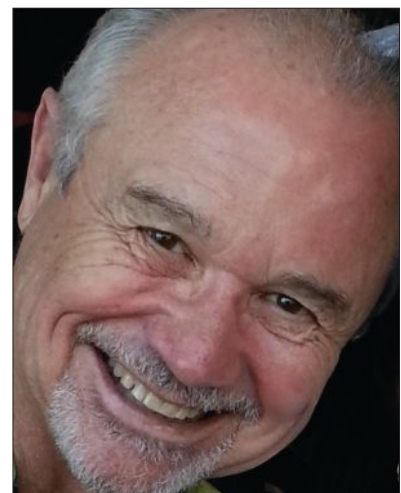
participants, who work in a range of environments including large and small offices, hospitals, schools, retail, and other small business spaces, believe their workplace's indoor air quality is the most important component in protecting their health and safety.

Survey respondents are, however, skeptical whether that quality, or cleanliness, will exist at work – 89

percent report that they believe the air in their homes is cleaner than at work. In fact, they are more concerned with the cleanliness of the air at work than they are with the cleanliness of surfaces in bathrooms, meeting rooms, and elevators.

"It's understandable that Americans are worried about indoor air quality,"

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### Industry Vet Gustavson Passes Away

The HVAC industry lost a leader and friend to many in the energy management field with the passing of Dale Gustavson on September 28, 2020.

Born August 11, 1947, this 73-year-old dedicated his entire energy career to recruiting, motivating, training, and conserving California's energy resources. Many worked with Gustavson through the Western HVAC Performance Alliance (WHPA), representing more

than 250 member organizations in 24 member categories. The goal was to implement California's Energy Efficiency Strategic Plan, and he worked tirelessly to execute changes beneficial to the environment. Through his serious illness, it is said that Gustavson demonstrated unwavering courage and faith. He is survived by his attorney daughter, Lara Gustavson, and his beloved wife, Bonnie Gustavson, whom he constantly referred to as his rock.

## ICN SPOTLIGHT EDITION

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- 96% AFUE rating
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- Two-Stage variable speed ECM motor



### U802V Ultra® Series

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### R801C Achiever® Series

- 80% furnace
- Constant torque



### R801T Achiever Plus® Series

- 80% furnace
- X-13 motor



### R802T Achiever® Series

- 80% Two-stage furnace
- X-13 motor

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### R801V Achiever® Plus Ultra-Low NOx Series

- 80% Up/Hz furnace
- PlusOne™ Diagnostics
- PlusOne™ Ignition System
- ECM motor – constant CFM for single and two-stage



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- 80% Up/Hz furnace
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- Constant torque ECM motor

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All P-Series models meet the NOx emission limits of 14 ng / J for South Coast (SCAQMD) and San Joaquin Valley Air Quality Districts (SJAPCD) in California.

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# Industry News



## CALIFORNIA



### Brody Pennell Wins Carrier Award for 14th Straight Year

**Los Angeles, Calif.** – Brody Pennell was recognized once again as one of the most outstanding dealers in the nation with the 2020 President's Award from Carrier. Brody Pennell is one of only two contractors in North America to be recognized as a winner of this award for all 14 years of its existence.

President Mike Carson accepted the award during a ceremony held in Colorado Springs, Colo. on March 6. "It was a special honor to be recognized last in the group with a standing ovation from our peers," said Carson, who is also a Board of Directors member for the Institute of Heating and Air Conditioning Industries, Inc. (IHACI) in Glendale, Calif.

The Carrier President's Award is an annual award presented to a select group of Carrier Factory-Authorized Dealers who achieved the highest scores based on a list of qualifications and standards established by the Carrier brand. These include a strong focus on leadership and management, brand recognition and industry expertise.

For more information on Brody Pennell, visit the company's Facebook page at <http://www.facebook.com/pages/Brody-Pennell-Heating-Air-Conditioning-and-Electrical-Contractors-Inc/112437372104176?ref=nf>.

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### CoolSys Creates Relief Fund to Support Employees

**Brea, Calif.** – CoolSys has created a relief fund to provide financial support for employees during the pandemic and other unexpected life challenges. Initially created to help employees who were furloughed due to COVID-19, the CoolSys Cares Employee Relief Fund has now been expanded to assist employees



*Brody Pennell President Mike Carson accepting the Carrier President's Award.*

who are financially impacted by a natural or manmade disaster or unexpected military deployment.

"At CoolSys, our greatest asset is our employees. Throughout these challenging times, we've been touched by the resilient and supportive spirit of our team which is one of the qualities that makes CoolSys so strong," said Adam Coffey, CEO of CoolSys. "As a company, we felt compelled to do more, so we launched and expanded this fund to help employees and their families."

The CoolSys Cares Employee Relief Fund was established with a donation from Ares Management. CoolSys plans to contribute to the fund on an ongoing basis. The fund will also accept tax-deductible donations from employees, customers, and suppliers. CoolSys has partnered with the Emergency Assistance Foundation. The amount of financial assistance for each recipient varies depending on the details related to their specific situation.

## ARIZONA



### Wrench Group Acquires Collins Comfort Masters

**Phoenix, Ariz.** – Wrench Group LLC announced the acquisition of Collins Comfort Masters in Gilbert, Ariz. This is the firm's sixth acquisition in 2020.

Collins Comfort Masters has been providing cooling, heating,

plumbing, and drain cleaning services to customers in the Phoenix metropolitan area since 1985. Wrench Group already has an established footprint in Phoenix with its flagship location Parker and Sons and newly acquired All About Water.

"It is an incredible time at Wrench as we continue to expand our footprint in the Phoenix market," said Paul Smith, Wrench Group chief operating officer. "We are committed to partnering with the best companies in the home services business, and Collins is an exciting addition to the organization."

Collins will continue to operate out of their Gilbert location, providing HVAC and plumbing repair and replacement services to consumers and businesses.

"Collins prides itself on superior customer service with a commitment to prompt response times and open communication," said Collins Owens, president, Collins Comfort Masters. "We are excited to partner with Wrench and to continue delivering on our long standing commitment to customer satisfaction."

## TEXAS



### Grundfos Breaks Ground on New Regional Center

**Houston, Texas** – Grundfos, a global leader in water technology, is pleased to announce the groundbreaking of its Americas Regional Center, located in Brookshire, Texas.

The 45,000 square-foot facility is expected to be completed during the Spring of 2021. Grundfos is currently seeking to achieve LEED Platinum certification. The new offices will house company sales, operations, engineering, HR, finance, and other support functions.

"To better serve the market, the new Americas Regional Center will strengthen our proximity between important sales areas and production hubs in North and South America, while fostering creativity for innovative applica-



*An artist's rendering of Grundfos' new Americas Regional Center located in Brookshire, Texas.*

tions and solutions," said Eric Boutot, Grundfos Americas vice president of regional operations.

With its sustainable green building design by PGAL, and construction by Harvey Builders, the structure will be made of locally sourced building materials verified to have been sourced in a responsible manner. Solar photovoltaic panels mounted on the roof will offset 20 percent or more of the building's energy costs. A chilled water energy storage system will reduce energy consumption. And a rainwater harvesting system will support chillers and gray water use.

Sustainability is a major priority for Grundfos. In addition to manufacturing energy- and water-efficient pumping solutions, the company tightly focuses on making a difference on the United Nations' Sustainable Development Goals, particularly SDG 6 (water) and 13 (climate change). This focus allows the company to help other companies be more sustainable and reach the goals together.

An official ribbon-cutting ceremony, with officials from the Houston area and executives from the company's Denmark-based headquarters, will take place during the grand opening.

"Houston has been the home of Grundfos colleagues for many years, including myself, having moved here in 2018," said Dieter Sauer, Grundfos Americas regional managing director. "The city is rapidly growing with a fast economy and large talent pool. With the new Americas Regional Center and our strong market position, we expect to attract the competencies that will keep us in front of the industry."

Grundfos, based in Bjerringbro, Denmark, is a global leader in water pump technology. The

company's purpose – pioneer solutions to the world's water and climate challenges and improve quality of life for people – inspires an operations, sales and service staff of over 1,200 across North America to deliver the world to the next generation in a better state than we inherited. For more information about the company, visit [grundfos.us](http://grundfos.us).

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### RectorSeal Opens Online Academy for HVAC E-Learning

**Houston, Texas** – RectorSeal has launched the RectorSeal Academy of self-directed e-learning courses for U.S. and Canadian trades people, service technicians, contractors, distributors, and manufacturer's representatives.

The RectorSeal Academy is powered by the BlueVolt learning management system (LMS) platform. The curriculum offers more than two dozen RectorSeal-produced, product knowledge online video subjects, such as condensate management, surge protection/voltage monitoring, plumbing/appliance leak detection, firestop, coil cleaning, tools, and other topics. The cloud-based platform operates easily on all computer devices and smartphones regardless of the operating system, browser, or preference settings.

Participants can access the free courses immediately after a brief online registration at [www.rectorseal.com/academy](http://www.rectorseal.com/academy). Most course videos are less than 15 minutes long and completion is at the student's own pace. Product and platform navigation help requests get linked to the

**Continued on Page 6**



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*Not all brands available at all locations*



Continued from Page 4

RectorSeal product's website pages, or to BlueVolt customer service, respectively. Each course requires a short survey for future facilitation improvement. Some courses require a short test, knowledge check, and other interactive elements. A certificate is emailed afterward. Some courses qualify for North American Technician Excellence (NATE) Continuing Education Unit (CEU) accreditation.

Besides educating trades people and service technicians, the RectorSeal Academy offers new opportunities for distributors to train their front-line counterpeople on the latest product trends and technology. RectorSeal anticipates interfacing its academy with distributors, buying groups, and trade school curriculums compatible with the BlueVolt platform.

One of the most requested educational video subjects is the PRO-Fit Quick Connect. Other popular courses are videos on RectorSeal's Safe-T-Switch product line and TripleGuard.

The RectorSeal Academy supplements the recently-developed On-Demand Training with RectorSeal. On-demand training, [www.rectorseal.com/](http://www.rectorseal.com/)

class-registration, is led by Jerry Myren, inside sales manager and NATE-certified product trainer, and Michael Emerick, global ductless manager.

## NATIONAL



### Greenheck Continues Teaching at Education Center

**Schofield, Wisc.** – In a typical year, Greenheck hosts hundreds of people from around the world at its Schofield, Wisc., campus for the company's extensive HVAC University training programs. In 2020, COVID-19 quickly put a temporary halt to that. However, the pandemic did not prevent Greenheck from providing industry training.

"The need for quality, professional industry education remained," said Ron Wendorski, director of the Bernard A. Greenheck Education Center. "Our team quickly shifted gears to

reimagine our traditional, in-person HVAC University program and transition to a virtual offering."

Greenheck revised 12 of its most popular classes for virtual learning.

"We added high-definition video of our product demonstrations and product galleries to enhance the online classes," Wendorski said. New software provided a stable platform to ensure consistent delivery of best in industry live, online classes.

For the 12 classes offered in July through August, 2,274 attendees took part in an average of four classes each and were issued 6,099 personal development hour (PDH) certificates.

Virtual HVAC University classes will continue through the end of the year, with in-person classes scheduled to return in 2021. The classes are open to contractors, building owners, and engineers, however space must be reserved through your local Greenheck representative. For more information, visit [www.greenheck.com/resources/education/hvac-university](http://www.greenheck.com/resources/education/hvac-university).

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### Clearent Buys Wintac

**St. Louis, Mo.** – Payment-solutions provider Clearent has acquired Wintac, a field-service-management software solution primarily targeting residential contractors providing

HVAC, plumbing, electrical and other home-repair services. Purchased from Dundee, Ill.-based Davisware, LLC, Wintac will become part of FieldEdge, a wholly owned subsidiary of Clearent. Financial terms of the transaction were not disclosed.

Clearent announced the move as the latest example of its effort to grow market share in the mechanical contractor/field-services-management (FSM) segment. The addition of Wintac will help FieldEdge expand its current market-leading position as a provider of FSM solutions.

"We are happy to welcome Wintac customers to the FieldEdge family," said Connie Certusi, president of FieldEdge. "We look forward to engaging with these customers in the coming year to understand their needs as they relate to managing their field-service organization, to address those needs through FieldEdge, and to offer a cost-effective and smooth transition to FieldEdge when they are ready."

Both FieldEdge and Wintac are considered to be pioneers in the FSM space with a combined 72 years in business (the Wintac brand dates back to 1988, and FieldEdge to 1980). FieldEdge's market leadership and depth of experience serving mechanical contractors in HVAC, plumbing, electrical and other home-repair-service industries was a key reason Davisware, LLC, opted to sell the brand to Clearent Software Holdings.

"In Clearent and FieldEdge, we found the right home for our Wintac customers," said Jennifer Davis, CEO & Cofounder of Davisware, LLC. "I felt it was important that we match our loyal Wintac customers with software purposefully built to serve residential contractors and technicians. FieldEdge's growing list of features, coupled with Clearent's cloud-based payment solutions, will give Wintac's customers the tools they need to grow and thrive. The Wintac transaction also enables Davisware to focus on its core segments and customers outside residential contractors with Davisware's industry-leading GlobalEdge and Vision solutions."

Originally founded in 1980 to help its founders run their own HVAC contracting business, FieldEdge has experienced tremendous growth and overall success in the service management software

industry. With this acquisition, the Field Services division within Clearent services nearly 100,000 users – ranging from small and mid-sized businesses up to enterprise level organizations with a focus on home/residential services – helping them achieve increased sales performance and workforce productivity. FieldEdge has experienced hyper double-digit growth since its purchase in March 2018. FieldEdge continues to grow organically and through acquisition, and Clearent continues to seek additional acquisitions in FSM and other vertical markets.

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### DOE Announces \$80M for Innovative Tech and Practices

**Washington, D.C.** – The U.S. Department of Energy (DOE) announced the Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) 2020 Funding Opportunity Announcement (FOA). This funding opportunity will provide up to \$80 million for projects that enhance energy demand flexibility across buildings and the electric power grid.

"Improving energy efficiency in our nation's buildings and homes enables American businesses and families to efficiently consume energy without compromising comfort or performance," said Deputy Secretary Mark W. Menezes. "By advancing innovative technologies that enhance building design, materials, equipment, and operations, we are building a more resilient energy future."

Residential and commercial buildings account for nearly 40% of the nation's total energy demand – more than America's industrial (32%) or transportation (28%) sectors. Buildings also account for roughly 74% of all electricity use in the United States and an even greater share of peak power demand in some regions.

The DOE Office of Energy Efficiency and Renewable Energy's (EERE) overall goal is to use energy more productively and efficiently. These projects will help improve the energy efficiency of America's building stock, which consists of over 119 million homes and 5.6 million commercial buildings – more than half of which were constructed before 1980.

"Projects funded under this FOA will help advance innovative buildings technologies to move

Continued on Page 8

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The Residential HVAC Program is funded by California utility customers and administered by Southern California Gas Company (SoCalGas®) under the auspices of the California Public Utilities Commission, through a contract awarded to CLEAResult. Program funds will be allocated on a first-come, first-served basis until such funds are no longer available. This program may be modified or terminated without prior notice. SoCalGas makes no warranty, whether expressed or implied, including warranty of merchantability or fitness for particular purpose of selected goods and services. California customers who choose to participate in this program are not obligated to purchase any additional services offered.

CLEAResult is a SoCalGas authorized contractor responsible for administering the Residential HVAC Program through December 31, 2020.

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Continued from Page 6

toward a new generation of building energy technologies,” said Daniel R. Simmons, Assistant Secretary for Energy Efficiency and Renewable Energy. “These projects will further U.S. leadership in advanced building science and technology.”

The 2020 BENEFIT FOA broadens DOE’s investments in cutting-edge, energy-saving building technologies, systems, and practices that will impact various segments of the buildings industry.

Topics in this FOA include:

- Thermal storage research;
- Advanced heating, ventilation,

and air conditioning systems, which can provide demand flexibility services to the grid;

- Next generation refrigeration technologies;

- Advanced appliance research in areas such as improved compressor design;

- Next generation lighting;
- Whole building electric load optimization;

- Advanced and more efficient building construction;

- Improved building retrofit technologies; and

- Workforce development.

“DOE seeks to advance both the efficiency and flexibility of buildings, while improving the comfort and productivity of American families and businesses,” said Alex Fitzsimmons, Deputy Assistant Secretary for Energy Efficiency. “This suite of technologies will not only unlock deep energy savings in buildings, but also enable buildings to provide innovative services to the grid with which they’re connected, enhancing the resilience of America’s energy system.”

## DiversiTech Buys SPIN Tools from Cimport

**Duluth, Ga.** – DiversiTech Corp., a leading aftermarket manufacturer and supplier of highly-engineered components for residential and light commercial heating, ventilating, air conditioning and refrigeration (HVAC/R), announced today that it has acquired SPIN®Tools from Cimport, a Brazilian company with over 20 years experience in the HVAC Market. The acquisition was completed on September 30, 2020.

Introduced to the HVAC/R market in 2014, SPIN Tools feature an innovative technology to flare or swage copper tubing in seconds. Known for being ten times faster than conventional tools, SPIN Tools were designed to use a high temperature method for shaping metal materials without changing the underlying properties of the copper. The SPIN Tools product is sold through HVAC/R wholesalers globally.

For more information about DiversiTech, go to [diversitech.com](http://diversitech.com).

## HARDI Begins New Initiative to Support Mexican Food Bank

**Columbus, Ohio** – Heating, Air-conditioning & Refrigeration Distributors International Mexico (HARDI Mexico) has begun a new initiative to support the Mexican Food Bank system.

Over 40 million people in Mexico depend on the 55 food banks in the country. Mexico has

plans to build 30 more locations and needs to ensure they are built as efficiently and professionally as possible. HARDI Mexico distributors will connect skilled contractors to the food banks to help reach this goal.

HARDI Mexico’s board of directors have approved a partnership with local Mexican food banks. This program will introduce skilled contractors to local food banks, who will help construct, repair, and maintain the refrigeration facilities of the food banks, reducing their costs.

Manufacturers have pledged to provide discounts and donations; however, the main goal of the program is to help the food banks reduce operational costs.

HARDI Mexico will be holding a Zoom meeting with all members to connect local distributors with contractors and manufacturers to kickstart the program.

If you would like more information or would like to get involved, please contact Guitze Messina at [gmessina@hardinet.org](mailto:gmessina@hardinet.org).

## Hart & Cooley Acquired by H.I.G. Capital Affiliate

**Grand Rapids, Mich.** – Hart & Cooley LLC announced its ownership has transferred from Johnson Controls International plc to an affiliate of H.I.G. Capital (“H.I.G.”).

H.I.G. is investing in Hart & Cooley to make it an independent entity once again.

“We are excited that H.I.G. has committed to investing in our business,” said Jim Kaboski, chief operating officer of Hart & Cooley LLC. “They have a successful track record of adding value to companies like ours. This partnership will allow us to continue our focus on growth and innovation along with operational improvements that will provide new opportunities to serve our customers.”

Hart & Cooley will maintain its headquarters in Grand Rapids, Michigan, and continue to operate its manufacturing facilities and distribution centers throughout the United States, Canada, and Mexico.

“We are impressed with Hart & Cooley’s industry reputation and comprehensive portfolio of strong, market-leading brands,” said Todd Ofenloch, managing director, H.I.G. Capital. “We look forward to transitioning the nearly 120-year-old Hart & Cooley back into a standalone company and working with



Dan Sorenson, assistant service manager of Any Hour Services in Orem, Utah, one Malco Products Trade-Pro of the Year winners.

management to ensure the company is well positioned to be the most innovative, engaging and successful competitor in the industry.”

## Malco Products Names 2020 Trade-Pro Award Winners

**Annandale, Minn.** – Malco Products, SBC, announced the winners of its annual HVAC Trade-Pro of the Year Award program. The HVAC Trade-Pro of the Year Award recognizes and celebrates outstanding, experienced HVAC professionals who are dedicated to the industry and on-the-job safety, as well as giving back to their communities.

The program recognized five top HVAC contractors and technicians from across the U.S.:

- Pablo Estrada, installer and service technician, Infinity Heating & Cooling, Las Vegas, Nev.
- Shannon Godlewski, technician, Service Unlimited Inc., New Castle, Del.
- Tyler Norton, lead technician and owner, Tight Lines HVAC, Syracuse, Utah
- Dan Sorenson, assistant service manager, Any Hour Services, Orem, Utah
- Michael Williams, mechanics helper, TA Woods, Wilmington, N.C.

“The 2020 HVAC Trade-Pro of the Year winners are some of the finest nominees we’ve ever seen,” said Malco president and chief operating officer Mardon Quandt. “These elite contractors and technicians are making a difference in the field and in their local communities, and are continuing to advance the industry’s reputation for safety and top-quality customer service.”

“Our deepest congratulations and gratitude go to the 2020 HVAC Trade-Pro of the Year honorees,” said Eric Peterson, Malco director of sales and

marketing. “This year has been challenging for everyone, and we are proud of the hard work these HVAC professionals are putting in to help keep our communities safely up and running.”

Each of the winners will receive a Malco tool kit valued at \$1,000, awarded by their local distributor. Nominations for Malco’s 2021 HVAC Trade-Pro of the Year program will open in February 2021.

Malco donates significant quantities of in-kind products and apparel annually to a variety of skilled trade education programs, competitions, and events across the country, including high school, post-secondary technical and apprenticeship programs, regional apprenticeship contests, and SkillsUSA state and national conferences. Malco also coordinates the “Head of the Class” Student Recognition Program that partners with education programs across the country to recognize high-achieving students and entire graduating classes in the HVAC/ sheet metal, building construction, and autobody repair fields.

## Penn Foster Launches New Training Programs

**Boston, Mass.** – Penn Foster announced the launch of an enhanced training program focused on HVACR. The fully online curriculum, designed to equip learners with the skills and competencies critical for success in the field, will help meet the growing demand for HVACR professionals that has accelerated in the wake of the COVID-19 pandemic.

“The nationwide shift to remote work means that more people than ever are staying home throughout the day – and demand for HVACR services is skyrocketing as a result,”

Continued on Page 10

# STUDIO

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Continued from Page 8

said Dianna Worthington, director of training at Neighborly. “By making training in high-demand HVACR skills more accessible and affordable, Penn Foster is helping employers around the country expand their talent pipelines and enable more workers to pursue careers in the trades.”

“At a time of unprecedented turmoil in the labor market, it’s more important than ever to equip workers and job-seekers with skills that are not just in-demand, but resilient in the face of economic uncertainty,” said Dara Warn, chief customer officer at Penn Foster. “This new program is designed to meet a growing consumer need while

also enabling learners to master the skills that can lead to more stable, fulfilling careers in a fast-growing field.”

SUPCO Launches New Product Line

Allenwood, N.J. – Sealed Unit Parts Co. Inc. (SUPCO) has launched a product line brand called SUPCO TradeFox. Under the TradeFox label, SUPCO helps HVACR technicians bring their ideas to life and to the market.

The SUPCO TradeFox brand highlights the ingenuity inherent in the HVACR trade, and within it, SUPCO boasts of its unique technician-invented tools in the industry. These include the Attic Pro Utility lift, invented by a firefighter/

one-man HVAC technician who needed a way to lift furnaces into attics, and the Magnecover Magnetic Umbrella Kit, invented by a technician who tied a speaker magnet to an umbrella to stay cool while working in the heat.

“There are smart, creative inventors within the HVACR trade solving problems by using what they have on hand,” said Jim Adcox, executive vice president at SUPCO, who works personally with each inventor in bringing their ideas onboard with the company. “We’ve seen a great response to SUPCO TradeFox products because they come from within the trade in response to real scenarios technicians face on jobs.”

“Innovation is part of who we are,” said Chris Mancuso, CEO of SUPCO. “Our in-house

engineering team continuously works to conceptualize new products and improvements. We also realize an endless potential for innovative ideas can be found by tapping into those who understand the challenges of the job firsthand. For years, SUPCO has invested in and supported the creativity found within the trade and we continue to do so through the SUPCO TradeFox brand.”

As for the “Fox” in “TradeFox,” “It’s a symbolic nod to those who think on their feet,” said Melissa Bennett, director of marketing for SUPCO, who was responsible for conceptualizing the brand. “A fox is clever, quick-witted, adaptable, and resourceful. So are the technicians who’ve invented these products.”

A central component of the SUPCO TradeFox marketing

campaign will focus on the inventors and the stories behind their products. “Sharing stories and experiences is a large part of the HVACR technician community,” said Bennett. “We see the SUPCO TradeFox brand as a way to engage with technicians and let them know our inventors are just as important as the products.”

Trane, Habitat for Humanity Form Partnership

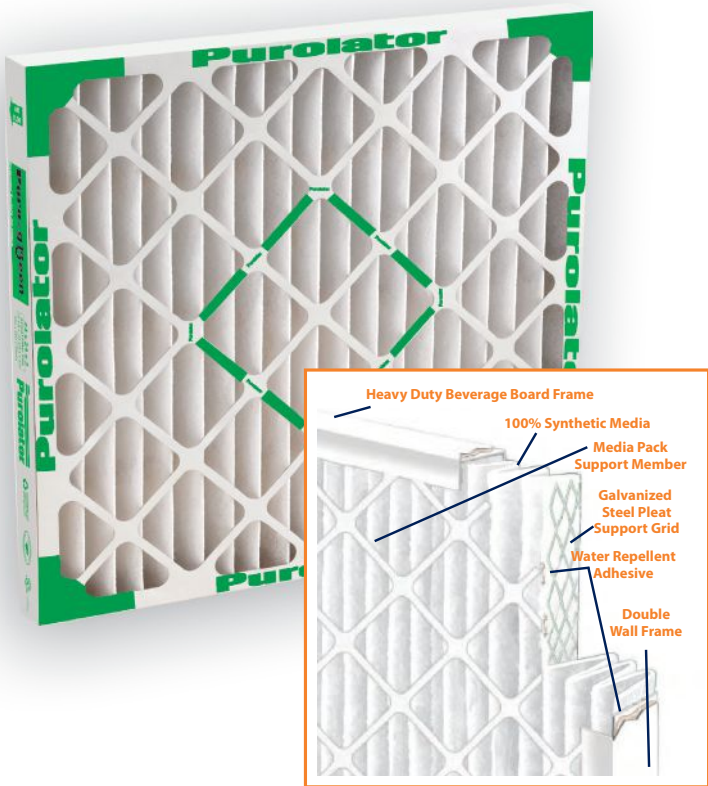
Atlanta, Ga. – Trane Technologies and Habitat for Humanity International are teaming up on a national initiative called “Indoor Climate and Maintenance Education” which will equip new Habitat homeowners with resources for maintaining comfortable, healthier, and energy-efficient homes without breaking the bank.

“Our commitment to sustainability extends to the communities where we live and work; this is why we’re partnering with organizations like Habitat for Humanity to increase economic mobility and access to safe, affordable, and healthier housing,” said Jason Bingham, president of Trane Technologies’ Residential HVAC & Supply business. “I-CLIME means empowering new homeowners to take care of their homes. The goal of this program is to help families succeed, revitalize communities and contribute to a healthier planet.”

“At Habitat, we know that an affordable home is not just about the purchase price, but also about the cost to heat, cool, and maintain the home over time,” said Julie Laird Davis, vice president of corporate and cause marketing partnerships at Habitat for Humanity International. “By partnering with Trane Technologies, we’ll be able to help more families succeed with Habitat and keep their housing costs even lower.”

I-CLIME will launch in Charlotte, North Carolina, with a series of educational resources for Habitat homebuyers focused on topics including preventative maintenance, appliance care, and warranties, as well as strategies for energy efficiency and indoor air quality. Habitat for Humanity

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# Industry News

and Trane Technologies expect the partnership to expand to additional markets in 2021 to benefit hundreds of families, helping to reduce the energy intensity and greenhouse gas emissions for those households served.

Trane Technologies employees will also volunteer with Habitat for Humanity on local home builds, as well as support fundraising and in-kind giving. These efforts are part of the company's 2030 Sustainability Commitments that include a pledge to reduce its customers' carbon emissions by 1 gigaton (2 percent of the world's annual emissions), bring its own operations to carbon neutral, and create community opportunities through investments in education and workforce development, housing and comfort, and food and wellness.

## United Enertech Buys Evergreen UV

**Chattanooga, Tenn.** – United Enertech Holdings LLC (UE) announced it has acquired Evergreen UV LLC (Evergreen).

"We are extremely excited to be part of the United Enertech family of companies," said Evergreen UV's President David Skelton. "We already can see the difference in our ability to produce and deliver products – especially in this critical COVID-19 environment – and look forward to better serving all of our customers for new and existing buildings, now and in the future."

"Evergreen UV has built an industry-leading reputation in the air purification market and is a great fit with United Enertech's manufacturing capabilities and market channels," said UE CEO Ken Trent. "They provide products that are complementary to our distribution and further expand our growing portfolio. We look forward to providing Evergreen's extensive offering to United Enertech's large, diverse customer base."

## Watts to Hold Web Panel Discussions

**North Andover, Mass.** – A broad range of allied trade professionals are invited to join a leading panel of experts – beginning Tuesday, Nov. 3 at 10 a.m. ET – during six weekly panel discussions as they address healthcare design and water safety.

Online attendees will be able to connect with their peers in a highly-interactive environment that encourages facility managers, engineers, contractors, and infection control professionals to discuss challenges and opportunities in healthcare design.

Each week, Watts will host a 1.5-hour event starting with a brief presentation, followed by an interactive panel discussion.

Events and topics include:

- Nov. 3 – What is WICRA and Why You Need One? Dr. Janet Stout, Special Pathogens Laboratory, President

- Nov. 10 – Preventing Waterborne Infections During COVID-19 Kristen VanderElzen, University of Michigan, Infection Prevention and Epidemiology Project Manager

- Nov. 17 – Lessons Learned in Ice Storage Richie Stever CLSS-HC, CHFM, University of Maryland Medical Center, Director of Operations and Maintenance

- Dec. 1 – Next Gen Facilities in a Post-COVID Health Environment Michael Roughan, AIA, ACHA - HDR, Health Principal

- Dec. 8 – Healthcare Design from a Facility Manager's Perspective John N. Ellis, MBA, CHFM - Intermountain Healthcare, System Director of Facilities Management

- Dec. 15 – Consequences of Poor Design Christoph Lohr, Healthcare Design Expert

Here's what attendees from past Watts Healthcare Symposiums have had to say:

"Thank you and I want to let you know how much my three engineers and I enjoyed the symposium. The speakers were great and super interesting!"

"What I especially liked about the group was that we were all senior plumbing folks. It was nice to be able to talk and compare notes with people having a similar knowledge base."

"Thank you for inviting me to be a part of this. It was a wonderful experience, and your colleagues are exceptional. I learned a great deal, and truly enjoyed everything."

"Thank you for the opportunity to attend, it was very productive and I made some good contacts that will be helpful in the future."

Weekly giveaways to registrants include an Apple Watch Series 5, Air Pods Pro, a virtual reality headset.

Interested professionals can register at: <https://www.watts.com/WHS>.

Founded in 1874, Watts designs, manufactures, and sells an extensive line of flow control, water safety, water filtration & treatment, and drainage products for the commercial, residential, and institutional markets. For more information, visit [www.watts.com](http://www.watts.com).

## Winsupply Acquires Avon Supply Co.

**Dayton, Ohio** – Winsupply Inc. has completed the purchase of substantially all the assets of Avon Supply Co. Details of the purchase were not disclosed.

Avon Supply Co. is located in Wakefield, Mass., and serves area contractors in Boston and southern New Hampshire with plumbing,

boilers, and hydronic heating supplies for new construction, remodeling, maintenance, and repair.

Avon Supply Co.'s previous owner, Robert Berman, will remain with the company as president and invest in substantial equity in the new entity to share ownership with Winsupply Inc., which has majority ownership.

"Avon Supply Co. has a solid reputation in both the residential and commercial markets with strong customer loyalty," said Monte Salsman, president of Winsupply Acquisitions Group. "This acquisition offers Winsupply the opportunity to expand our footprint in the greater Boston region."

Berman said he represents the second generation of ownership of the 63-year-old company and he decided to sell the assets of Avon Supply Co. during succession planning.

"I liked Winsupply's emphasis on

local service, local ownership, and the fact they would incentivize my employees," said Berman. "We're known for a deep and varied inventory, our experienced and responsive sales people, counter service, and deliveries. We ally ourselves closely with small-and medium-sized plumbing and heating contractors. We anticipate that the service level and personal attention will continue with the new ownership."

The company will do business as Winsupply of Wakefield.

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## California Expands Presumption of Workers' Compensation Liability for COVID-19 Claims

From the Law Offices of  
Atkinson, Andelson, Loya,  
Ruud and Romo

On September 17, 2020, California Governor, Gavin Newsom, signed Senate Bill ("SB") 1159, which creates a rebuttable presumption that certain employees who test positive for COVID-19 contracted the virus at work for workers' compensation purposes.

### Background

On May 6, 2020, Governor Newsom issued Executive Order N-62-20, creating a temporary rebuttable presumption that employees who were working outside of their homes and tested positive for COVID-19, could receive workers' compensation benefits. The Executive Order expired on July 5, 2020. SB 1159 represents the California Legislature's response to Newsom's Executive Order, and creates a codified framework for COVID-19-related workers' compensation claims.

### When Does SB 1159 Take Effect?

SB 1159 took effect immediately (September 17, 2020) as an urgency statute, and expires on

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**COVER BY ELBOW**  
WHEN YOU COUGHING OR SNEEZING, COVER BY ELBOW.



**AIRING THE ROOM**  
REGULARLY MAKE THROUGH AIRING THE ROOM WHERE YOU ARE.



**PUT MEDICAL GLOVES**  
IN PUBLIC PLACES, IF POSSIBLE, PUT ON MEDICAL GLOVES.



**STAY AT HOME**  
WITHOUT EXTREMELY NEEDS DO NOT LEAVE THE HOUSE. OBSERVE SELF-ISOLATION.



**TO WASH HANDS**  
WASH HANDS WITH SOAP REGULARLY AND CAREFULLY FOR AT LEAST 20 SECONDS.



**KEEP DISTANCE**  
KEEP SOCIAL DISTANCE WITH OTHER PEOPLE AT LEAST 1.5 METERS.



**WEAR MEDICAL MASKS**  
WHEN YOU LEAVE THE HOUSE, WEAR ON MEDICAL MASKS. ESPECIALLY WHEN VISITING PUBLIC PLACES.



**COVER WITH NAPKIN**  
WHEN YOU COUGHING OR SNEEZING, COVER FACE WITH A NAPKIN.



**DISINFECT OBJECTS**  
DISINFECT PERSONAL THINGS AND SURFACES THAT FREQUENTLY CONTACT.

January 1, 2023.

### Who Is Covered Under SB 1159?

First Responders and Healthcare Workers are covered regardless of employer size. Other types of employees are covered only if they work for an employer with five (5) or more employees. The following two tests apply depending on the employee classification.

### First Responders and Healthcare Workers

If the employee is a First Responder or Healthcare Worker as specified under Labor Code Section 3212.87 (i.e. Firefighters, Police Officers, Doctors, Nurses, etc.), the following two conditions are needed for the presumption to apply:

1.) The employee has tested positive for COVID-19 within 14 days after a day that the employee performed labor or services at

the employee's "place of employment" (defined below) at the employer's direction.

2.) The day referenced in paragraph (1) was on or after July 6, 2020. (The date of injury shall be the last date the employee performed labor or services at the employee's place of employment at the employer's direction prior to the positive test.)

### All Other Employees

The presumption also applies to all employees who test positive for COVID-19 during an "outbreak" at the employee's "place of employment," and whose employer has five or more employees. For the presumption to apply, the following three conditions must exist:

1.) The employee tests positive for COVID-19 within 14 days after a day that the employee performed labor or services at the employee's place of employment at the employer's direction;

2.) The day referenced in paragraph (1) was on or after July 6, 2020. (The date of injury shall be the last date the employee performed labor or services at the employee's place of employment at the employer's direction prior to the positive test); and

3.) The employee's positive test occurred during a period of an "outbreak" at the employee's specific place of employment.

An "outbreak" exists if within 14 calendar days, one of the following occurs at a specific place of employment:

1.) If the employer has 100 or fewer employees at a specific place of employment, four employees test positive for

COVID-19;

2.) If the employer has more than 100 employees at a specific place of employment, four percent of the number of employees who reported to the specific place of employment test positive for COVID-19; or

3.) A specific place of employment is ordered to close by a local public health department, the State Department of Public Health, the Division of Occupational Safety and Health, or a school superintendent due to a risk of infection with COVID-19.

A "place of employment" means the building, store, facility, or agricultural field where an employee performs work at the employer's direction. It does not include the employee's home or residence, unless the employee provides home health care services to another individual at the employee's home or residence.

### How Does An Employer Dispute The Presumption?

The employer may dispute the presumption with controverted evidence, such as:

- Evidence of measures in place to reduce potential transmission of COVID-19 in the employee's place of employment; and
- Evidence of an employee's nonoccupational risks of COVID-19 infection.

If the date of injury falls before July 6, 2020, which is subject to the rules established by Executive Order N-62-20, the claim administrator has 30 days to deny the claim. If the date of injury falls on or after July 6, 2020, the claim administrator has 45 days to deny the claim, or the injury is presumed compensable. This presumption of compensability

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# Legal Lines

remains rebuttable, but only with evidence discovered subsequent to the applicable investigation period. Unless controverted, the appeals board is bound to find in accordance with the presumption.

Note: If the injured employee is a First Responder or Health Care Worker, as specified under Labor Code Section 3212.87, the claim administrator has 30 days to deny the claim regardless of the date of injury.

## What Compensation Benefits Are Injured Employees Entitled To?

If the presumption applies, compensation includes full hospital, surgical, medical treatment, disability indemnity, and death benefits.

However, if an employee has paid sick leave benefits specifically available in response to COVID-19, those benefits shall be used and exhausted before any temporary disability benefits are due and payable. If an employee does not have supplemental paid sick leave benefits, the employee must be provided temporary disability from the date of disability (i.e. there is no waiting period).

Moreover, the date the employee has tested positive

or is diagnosed with COVID-19 determines how the employee qualifies for temporary disability benefits.

If the employee has tested positive or is diagnosed with COVID-19 on or after May 6, 2020, the employee must be certified for temporary disability within the first 15 days after the initial diagnosis, and must be recertified for temporary disability every 15 days thereafter, for the first 45 days following diagnosis.

If the employee has tested positive or was diagnosed with COVID-19 before May 6, 2020, the employee must have obtained a certification no later than May 21, 2020 documenting the period for which the employee was temporarily disabled and unable to work, and shall be recertified for temporary disability every 15 days thereafter, for

the first 45 days following diagnosis.

## New Reporting Requirements For Employers

When an employer knows or reasonably should know that an employee tested positive for COVID-19, the employer must report all of the following to their claims administrator by email or fax within three business days:

- 1.) An employee tested positive for COVID-19;
- 2.) The date that the employee tested positive (the date the specimen was collected for testing);
- 3.) The address or addresses of the employee's specific place of employment during the 14-day period preceding the date of the employee's positive test;
- 4.) The highest number of

employees who reported to work at the employee's specific place of employment in the 45-day period preceding the last day the employee worked at each specific place of employment.

Any employer who is aware of an employee who tested positive between July 6, 2020 and September 17, 2020, must report the incident to its claims administrator in writing via email or fax within 30 business days of September 17, 2020. The claims administrator will then use the information reported to determine if an outbreak has occurred between July 6, 2020 and September 17, 2020.

An employer or other person acting on behalf of an employer who intentionally submits false or misleading information or fails to


submit information will be subject to a civil penalty in the amount of up to ten thousand dollars (\$10,000) to be assessed by the Labor Commissioner.

Please contact the authors or your usual counsel at AALRR if you have any further questions about SB 1159 and how it pertains to your business.

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Ferguson HVAC / Trane is a California-based distributor of Trane residential and commercial heating and cooling equipment. Trane offers a broad range of energy-efficient heating, ventilation, and air conditioning (HVAC) systems; dehumidifying and air cleaning products; service and parts support; smart building controls and financing solutions. HVAC contractors rely on us for the best unitary equipment brand and for a wide range of HVAC products including accessories, controls, air distribution supplies, service and repair parts. Multi-trade Commercial HVAC mechanical contractors rely on us for commercial new construction, renovation, and repair markets service. We offer complete product solutions for mechanical, HVAC, PVF, commercial plumbing systems and commercial fixtures, faucets, and specialty products. Specialty services include pipe fabrication, valve automation, tailored job shipping and PVF inventory. Ferguson HVAC Branches are supported by an advanced network of local stocking and distribution centers located throughout CA and AZ. Our Sales Center supports you with a team of local product experts in your region to save you time for digital sales ordering and delivery automation. Our superior logistics system means you will find the products you need, when you need them, backed by the world-class customer service you have come to expect from us. Visit us at [fergusonhvac.com](http://fergusonhvac.com)



## GoGreen Financing

GoGreenFinancing.com is where hundreds of contractors go to find attractive energy efficiency financing options for their customers. Administered by the State of California, the Residential Energy Efficiency Loan and Small Business Financing programs help contractors increase sales through quick approvals and flexible project scopes, while customers receive competitive rates and terms. Visit [GoGreenFinancing.com](http://GoGreenFinancing.com) for details.



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## Mitsubishi Electric Trane HVAC US LLC

Formed in May 2018 Mitsubishi Electric Trane HVAC US LLC (METUS) is a leading provider of ductless, ducted and VRF systems in the United States. A joint venture between Mitsubishi Electric US, Inc. and Ingersoll Rand plc, the company provides innovative products, systems and solutions capable of heating and cooling a broad range of applications, from tiny homes to large commercial buildings.

METUS is the exclusive marketer of Zoned Comfort Solutions® and a leading marketer of Variable Refrigerant Flow (VRF) heating and cooling technology. Systems sold by METUS include a wide variety of technologically advanced products designed to deliver superior efficiency, comfort and control for every home or building type.

METUS supports a family of brands which includes Mitsubishi Electric Cooling & Heating, Trane® / Mitsubishi Electric and American Standard® / Mitsubishi Electric.

METUS has won industry-leading awards for its products and innovative practices, including a 2018 Architectural Products Innovation Award; a 2018 Global Innovation Award from NAHB; 2018 Green Innovation of the Year and Greenest Brand Awards from Green Builder Media; and a 2019 Buildings Money-Saving Product Award. In 2019, METUS was also recognized with the Large Supply Chain Pioneer Award from Partnership Gwinnett (Gwinnett County, Georgia).



# News puts the Spotlight on:



## National Comfort Institute, Inc Who is National Comfort Institute?

National Comfort Institute, Inc. (NCI) is a national training organization created to help commercial and residential HVAC contractors transform their businesses, improve their bottom line, and deliver outstanding services to their customers.

NCI accomplishes this by focusing on the delivery of true heating and cooling system performance in HVAC systems that their certified contractors design, sell, install, and service. This includes residential and commercial forced-air and hot-water systems. The organization defines an HVAC system as the entire air delivery network (ductwork) and all the equipment attached to it. They train how to measure and test these systems in the field to prove exactly how they operate and where improvements can be made.

NCI calls this type of total system measurement, "High Performance Contracting™," and believes it is the Gold Standard for HVAC Contracting both today and in the future.

In 27 years, NCI has trained and certified more than 30,000 HVAC industry professionals worldwide in more than 7,000 contracting businesses and facilities maintenance organizations. NCI trains and certifies service and installation technicians in total system performance – residential and commercial, as well as air balancing, combustion diagnostics & carbon monoxide safety, business implementation and sales.



## Pacific Systems Group

Pacific Systems Group is an adaptive partner that assists consulting engineers, distributors, mechanical contractors, and building owners in designing HVACR systems, providing efficient and cost effective indoor environmental solutions. In order to meet the specific demands of your project, Pacific Systems Group capitalizes on its strong relationship with manufactures of HVACR equipment. Our team of sales engineers has an intimate knowledge of each product design and its application. This combination of quality products, training and experience is instrumental to the success of your custom HVACR system. We represent Carrier/Bryant VRF & Ductless, Magic Aire, iAire, Zonex, Hi-Velocity and Beckett Pumps.



## Parker Hannifin HVAC Filtration Division

Parker has the broadest line of HVAC Disposable, Pleated MERV 8-16 and HEPA air filters and gas-phase adsorption filter for residential and commercial systems improving the value of your IAQ. We strongly support CA Title 24 Part 6 requirements and have become a resource center for preventing airborne pathogen transmission keeping facilities, workers, and families safer.



## R-32 Make the pending refrigerant transition ideal for you and your customers.

For HVAC distributors and contractors, there's no question that a refrigerant transition creates challenges. To capture what dealers care about most when it comes to refrigerant transitions, we asked independent HVAC contractors a wide range of questions. It wasn't surprising that 81% of respondents were "very or extremely Interested" in the characteristics of R-32 refrigerant.

### - Proven Global Standard/Accessibility

R-32 is abundant and widely available, from multiple suppliers. R-32 is a proven commodity, deployed in over 100 million units around the world.

### - You may already be using R-32.

Because of R-32's availability, low cost, and excellent performance, it is used in large quantities in R-410A and most alternative low GWP refrigerant blends.

Refrigerant	% R-32	% R-125	% Other
R-32	100%	0%	0
R-410A	50%	50%	0
R-454B	69%	0%	31.1% R-1234YF
R-452B	67%	7%	26% R1234YF
R-466	49%	11.50%	39.5% CF3I

### - Pure, not Blended

As a pure, single-component refrigerant, R-32 can be topped up and recharged in the field, in both liquid and gas phases, without changes in composition. It is easy to clean and reuse on-site, and easy to reclaim and recycle off-site with a simple cleaning

process, particularly as compared to blends with HFOs that are typically reclaimed by being distilled to their base components and then remixed.

To learn more about R-32 refrigerant, visit [www.r32reasons.com](http://www.r32reasons.com)



## Rotobrush International, LLC

Rotobrush International, LLC, is the market leader in providing contractors with packages and opportunities in indoor air quality and energy efficiency services. Rotobrush is committed to its customers' success, supporting them with training, marketing and business support. Rotobrush has more than two decades of experience and serves both residential and commercial markets.



## Russell Sigler, Inc.

Sigler and Carrier are proud to be the IAQ solutions leader. Several thousand classrooms in California will resume in-class teaching with Carrier's Opticlean air scrubber and Sigler's air scrubber sound package. Offering an unparalleled combination of high air changes per hour of proven HEPA filtered air at very low sound.



## SoCalGas® Limited Time Extra 50% Back

Not only is energy conservation good for the environment but it can also help customers to save money on their energy bills each year. And with the financial effects of the COVID-19 pandemic, SoCalGas recognizes the importance of savings on energy bills.

Now through December 31, SoCalGas is offering an additional 50 percent cash back rebate for all energy efficient appliances and equipment offered through its rebate program. Whether you're a business or residential customer, we know that finding ways to save money on energy can make a difference.

Between 2015 and 2019, SoCalGas energy efficiency programs helped customers save over \$229 million in natural gas bill costs and reduce greenhouse gas emissions (GHGs) by over 1,100,000 metric tons, the equivalent of removing nearly 238,000 cars from the road annually. In 2019 alone, SoCalGas' energy efficiency programs saved customers \$55.6 million.

To learn more about SoCalGas' programs and services, or for information on how to more efficiently manage natural gas usage and possibly reduce monthly natural gas bills, please visit SoCalGas' website at [www.socalgas.com/rebates](http://www.socalgas.com/rebates).



## TSI Incorporated

TSI Incorporated is an industry leader in precision measurement instrumentation for measuring indoor air quality, HVAC system performance, and particulates within an occupied space to ensure comfort, safety and energy efficiency. TSI provides a full line of indoor air quality monitoring equipment that gauges temperature, humidity, outdoor air calculations, carbon dioxide, carbon monoxide and airborne particles. These factors are some of the primary components that help measure occupant thermal comfort and assure a healthy indoor environment.



## US Air Conditioning Distributors

With 50 convenient locations in California, Nevada, Utah, Idaho and Arizona, US Air Conditioning Distributors is one of the largest HVAC distributors in the industry. We are a One-Stop-Shop for all of your HVAC needs - from residential to commercial to industrial offering equipment, controls, parts, supplies, and sheet metal. We offer free next-day delivery, crane lift services, real-time delivery tracking, and an incredible inventory selection of the industry's premier brands including York, Samsung, Guardian, Luxaire, Venstar, PlasmaPURE, QuietCool and more. Many locations are open on Saturdays.

## Proposed New Workers' Comp Requirements, New Laws, Staffing/Budget Issues

By Ted Rieger, Northern California Correspondent

At a meeting held via teleconference September 9, the Contractors State License Board (CSLB) voted to direct staff to pursue 2021 legislation to require workers' compensation insurance for all C-20 HVAC contractors beginning in 2022, and for all contractor classifications by 2025. The Board also discussed actions to address budget and operational issues related in part to impacts from COVID-19, reduced staffing levels, and impacts on enforcement activities.

All Board sponsored legislation for 2020 was passed by the California Legislature, and five bills of interest affecting CSLB operations were signed into law by Governor Gavin Newsom by the September 30 deadline to sign or veto bills for this year's legislative session.

### CSLB Proposes Workers' Comp Requirements for All Contractors

At its September 9 meeting, the CSLB approved a staff recommendation to pursue legislation in 2021 that would initially require three license classifications that are likely to have employees – C-20 HVAC, C-8 Concrete, and C-49 Tree Service contractors – to have and maintain workers' compensation (WC) insurance beginning on January 1, 2022. Subsequently, all licensed contractor classifications would be required to have WC, and the CSLB plans to no longer accept WC exemptions by 2025.

Reviews of licensing statistics have consistently shown that

more than half of all licensed contractors have a WC exemption on file certifying that they have no employees. Recent statistics as of June 30, 2020 show that 54 percent of the approximately 230,000 California licensed contractors representing all classifications have a WC exemption. For C-20 HVAC licensees, 55 percent had a WC exemption. Studies by CSLB staff indicate that a significant number of these contractors have filed false exemptions. However, it requires significant CSLB resources to determine if these contractors have employees and to carry out enforcement actions.

This issue has been studied by the CSLB since 2017 and industry advisory meetings have been held to develop strategies to address WC avoidance by licensees. At a recent January 2020 meeting, representatives from the three license classifications to initially be targeted, including C-20 HVAC, were present and all supported the above proposal.

### Staffing, Operations Impacted by COVID and Budget Issues

CSLB registrar David Fogt provided an update on CSLB operations in light of COVID-19. Since the initial shelter in place shutdown, and subsequent reopening, CSLB has reopened all offices to the public statewide with the exception of the Berkeley test center. Fogt said 75 percent of CSLB staff continue "teleworking" from home.

The CSLB is moving forward with an expenditure reduction plan to save \$7.1 million over the next fiscal year to address

reduced revenues and an anticipated budget shortfall. The overall CSLB budget was impacted in part by the inability to process licenses, both new and renewals, in as timely a manner earlier this year. In addition, downward trends in new license applications and renewals have resulted in revenue reductions.

Expenditure reductions include delaying the filling of currently vacant CSLB staff positions, and reductions in pay for full-time staff (required for all state employees this fiscal year) to reduce salary expenditures. CSLB has moved more processes online related to license applications and renewals. Video conferencing is being used for meetings and training, administrative hearings, and enforcement staff are doing investigations remotely to the extent possible.

Under enforcement operations, CSLB is reducing arbitration costs and expenditures for legal assistance made to the Attorney General's Office and the Office of Administrative Hearings. Enforcement functions have been impacted by staff vacancies, reduced hours and the redirection of 18 CSLB staff to serve as contact tracers for the state's COVID-19 efforts. To address the consumer complaint workload with a smaller enforcement staff, consumers are being referred to small claims court and the license bond for resolution in cases where the estimated financial injury is less than \$10,000. Enforcement activities such as sting operations and Statewide Investigative Fraud Team (SWIFT) operations have seen significant impacts. Fogt summarized, "We have basically had a reduction of 25 percent of

our workforce, so we are not as effective with SWIFT operations, and we currently don't have the staff available to work as effectively as we have in the past." Licensing and the processing of license renewals have remained a top priorities to keep contractors in business and to maintain the CSLB's primary revenue source.

### 2020 Legislation Signed into Law

The following bills related to CSLB operations were signed by the Governor and chaptered into state law:

- AB 2471 Maienschein (D-San Diego) – Senior Citizens: Rescission of Contracts Extends the right to cancel certain contracts for people 65 years of age and older from three business days to five business days that include: home improvement contracts, seminar sales contracts, service or repair contracts, and Property Assessed Clean Energy (PACE) assessment contracts. This consumer protection was written for seniors to take into consideration their increased vulnerability to financial exploitation.
- AB 3087 Brough (R-Dana Point) – License Examination Administration Clarifies CSLB's authority to contract with third-party vendors to provide license exam testing administration services. Allows the registrar to contract with a public or private organization to administer license examinations and for materials and services related to examinations. The CSLB estimates such contracting could save an estimated \$624,000

per year.

- SB 1189 McGuire (D-Healdsburg) – New Residential Remodeling Contractor Classification: Gives the CSLB authority to create a new contractor license classification as a subdivision within the General Building Contractor classification for "Residential Remodeling Contractor." Also clarifies that home improvement projects undertaken in declared disaster zones are subject to home improvement contract consumer protection laws.

- SB 1474 Senate Business, Professions & Economic Development Committee – Regulatory Cleanup Incorporates technical, non-substantive changes to contractors' state license law, including the removal of the apostrophe in Contractors' State License Law, Contractors' State License Board, and Contractors' License Fund. SB 1474 also includes in its entirety a previously separate bill – AB 2232 Grayson (D-Concord) that requires the CSLB registrar to retroactively reinstate an expired contractor's license if a completed license renewal application is received with the appropriate fees within 90 days of the license expiration date.

- SB 878 Jones (R-Santee) – DCA Boards License Application Processing Times Beginning July 1, 2021, requires each board within the Department of Consumer Affairs (DCA) that issues licenses to prominently display on its Internet website, on at least a quarterly basis, either the current average timeframes for processing initial and renewal license applications, or the combined current average timeframe for processing both initial and renewal applications.

### Board Rescinds License Reciprocity Agreement with Utah

On Sept. 9, the Board voted to rescind its license reciprocity agreement with the State of Utah. Because of new laws passed in Utah in 2019 and 2020, an applicant for a contractor's license in Utah can now obtain a license without passing a trade examination or without demonstrating four years of at least journey-level experience. As a result, the

Continued on Page 21

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Growing Green Technicians Part 133:  
Improper Transitions and Air Flow Restrictions

By Jim Johnson  
Contributing Editor

In the last segment in this series our discussion centered on the Eddy Currents that can develop in a 90-degree ELL in a supply duct system and how to minimize air flow problems in that fitting.

In this segment we'll discuss another example of an air flow problem that technicians can recognize as a pressure loss in the supply duct system, one that results from the use of an incorrect reduction fitting, such as the example shown in **Figure One**.

This illustration shows the Eddy Currents at the abrupt 90-degree angles in the fitting and how they are effectively causing a restriction and 'stealing air' from the duct system, preventing it from accomplishing the proper volume and velocity of air flow, resulting in an improper TESP.

In this case, accomplishing the correction of the problem fitting requires that it be removed and replaced with an alternate fitting that will promote smoother air flow from the large section of ductwork to the smaller run of duct. (See **Figure Two**)

When it comes to a higher-than-normal resistance to air flow in an HVAC distribution system, it is common to find that the reason behind the lack of performance is an improper reduction discussed above. And, there are other issues to consider, such as:

- ....A higher than required air velocity
- ....Ductwork that is too small
- ....A higher than required air flow rate in CFM

....Ductwork that is too long, such as extra flex duct that snakes around the attic

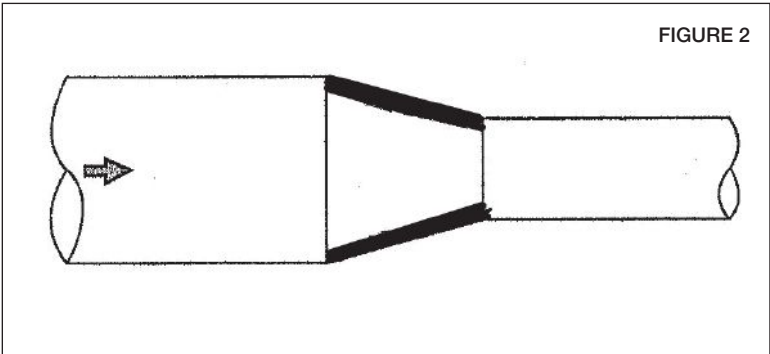
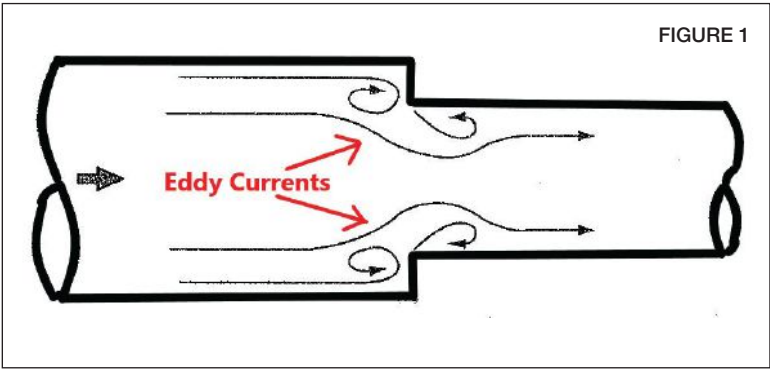
....A change in the direction of air flow, such as a direct, sharp-angle 90-degree turn

....A transition that results in a sudden expansion of the duct system

Of course, while the above factors are not something that service technicians are responsible for when they respond to a customer's complaint that their system "isn't cooling enough," or "when the system operates, it's too chilly," or that the system "runs too much" because, after all, they

weren't involved in the installation, but....the items on the list are things that a green technician can accept some responsibility about.

And, as we've said before, with some fundamental knowledge about potential ductwork problems, careful observation of the duct system when possible, and accomplishing basic static pressure and air flow tests, the technician can correct some situations, recommend repairs that need to be accomplished, or at least advise the customer that further testing is necessary to determine what can be done to ensure proper system performance.



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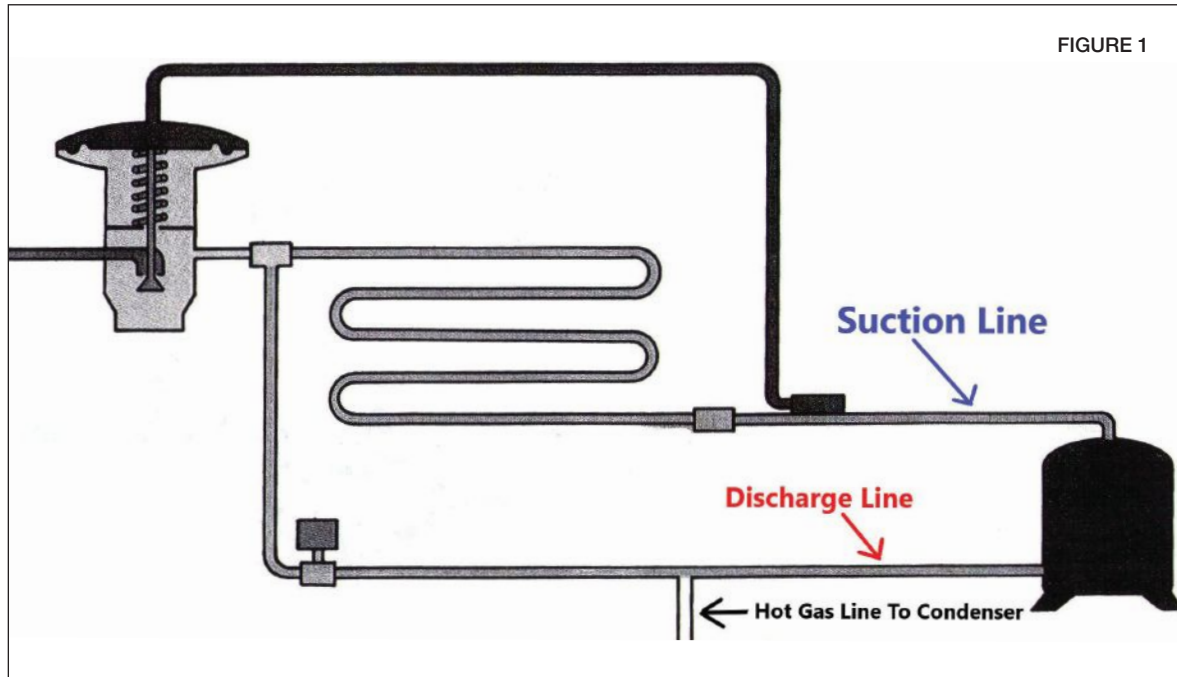
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# Troubleshooting

## A Two-Month-Old Walk-In Freezer That Seems to be Operating Erratically



By Jim Johnson  
Contributing Editor

In this troubleshooting situation you are dealing with equipment that has only been in operation for two months. And during that time frame, the customer has complained that at times the box temperature is higher than it should be, but the unit then seems to recover and freeze OK until the next time some of the items inside are found to be thawing.

The details on this freezer are as follows:

...The refrigeration system was field-designed and assembled with components purchased individually, and the condensing unit is sitting on top of the cabinet.

...The defrost system is hot gas,

employing a timer to initiate the defrost cycle.

When you arrive to evaluate this equipment, you find all refrigerant pressures to be normal and the box temperature is near 0-degrees. Satisfied that the freezing mode of the unit is operating according to specifications, your next step is to force a defrost mode.

When you do, you note that the evaporator fan motor shuts down and the hot gas solenoid operates normally. **Figure One** shows you the path of refrigerant flow during the hot gas defrost mode...from the hot gas solenoid valve, directly through the evaporator, and back to the compressor.

Near the end of the defrost mode, you find that the compressor kicks off on overload, and is not able to re-start until after an extended delay.

Your troubleshooting question: *What mistake was made during the design and construction of this system, causing the compressor to shut down?*

If you believe you have the correct answer to one of Jim Johnson's Troubleshooting Problems, please submit it by email to Jim Johnson at [icntroubleshooting@techtrainassoc.com](mailto:icntroubleshooting@techtrainassoc.com) or by U.S. Mail to: Technical Training Associates, PO Box 2259, Green Valley, AZ 85622-2259.

In your email subject line please include "Troubleshooting Answer" and indicate which month the question you are responding to was published.

Correct answers will be entered into a drawing and will be eligible to receive a copy of Jim Johnson's video "Evaluating Refrigeration Systems: Troubleshooting & Identifying Problems."

### Answer to Last Month's Question

The component that is at fault is the heat pressure control valve. Sometimes referred to as a Headmaster or mixing valve, the function of this component is to maintain proper high side pressure in low ambient conditions. When the temperature dropped, the head pressure control valve malfunction was even more apparent in the lower temperatures occurring later in the day.

The winner of last month's Troubleshooting is:

**Jim Upegui**  
Hemet, Calif.



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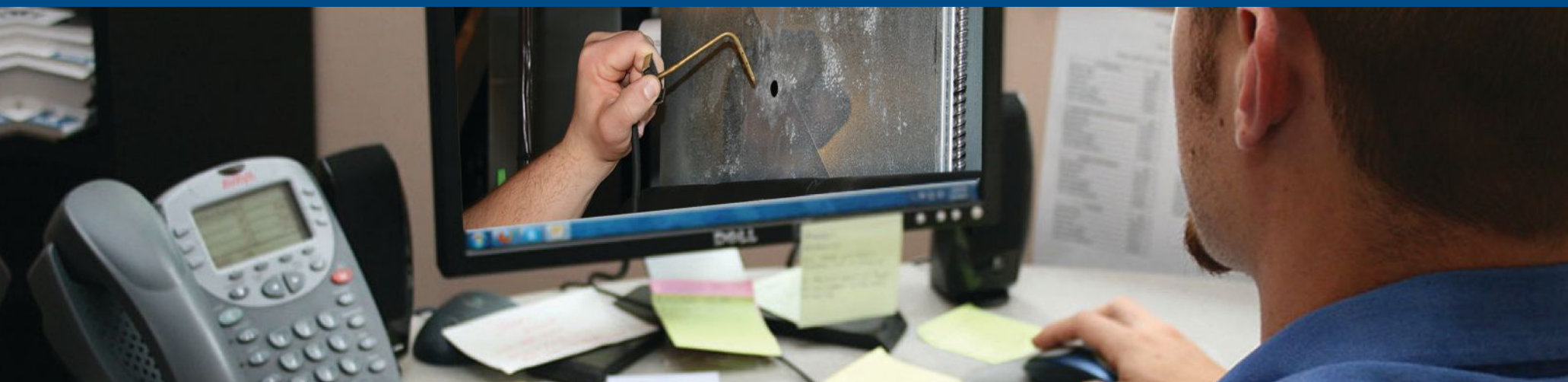
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# California Utility Hosted Online Live Training for HVAC Professionals



NCI High-Performance HVAC training is now available to HVAC professionals throughout California. Southern California Edison, San Diego Gas & Electric, and Pacific Gas and Electric have partnered with NCI to provide advanced training and certification through its online, live classes. These NCI classes also qualify for NATE (North American Technician Excellence), and BPI (Building Performance Institute) Continuing Education Credits.

### Here's how the training works:

**Certification classes:** These online, live classes are provided in 4-hour blocks. For example our Residential Duct System Optimization and Commercial System Performance classes each consist of four, 4-hour segments of training over a two week period. Students who participate in these classes will also qualify for online-proctored NCI certification exams after the training.

**Recertification classes:** NCI-certified professionals can recertify for two years by participating in these online classes taking place over two consecutive half-days. We currently offer recertification training towards NCI residential and commercial certifications.

In addition NCI is offering several technical and sales non-certification classes.

National Comfort Institute thanks the following Investor-Owned Utilities for hosting this training for HVAC professionals throughout California:



November/December California Training Calendar		
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<p><b>November 12-13, 19-20</b> 1-5 PM Pacific <b>Commercial System Performance Certification Class**</b> 16-hour training program Regular Price: \$690 Student fee: Just \$100 per student</p> <p><b>November 17-18</b> 1-5 PM Pacific <b>Combustion and Carbon Monoxide Recertification</b> 8-hour training program Regular Price: \$395 Student fee: Just \$50 per student</p> <p><b>December 15-16</b> 1-5 PM Pacific <b>Air Testing &amp; Diagnostics</b> 8-hour training program* Regular Price: \$395 Student fee: Just \$50 per student</p>	<p><b>November 5-6</b> 8-12 AM Pacific <b>Air Testing &amp; Diagnostics</b> 8-hour training program* Regular Price: \$395 Student fee: Just \$50 per student</p> <p><b>November 19-20</b> 8-12 AM Pacific <b>Residential Airside Recertification</b> 8-hour training program* Regular Price: \$395 Student fee: Just \$50 per student</p> <p><b>December 10</b> 8-10 AM Pacific <b>Explore HVAC Performance</b> 2-hour training program Regular Price: \$95 Student fee: Just \$15 per student</p>	<p><b>November 3-4, 10-11</b> 8 AM - 12 PM Pacific <b>Commercial System Performance Certification Class**</b> 16-hour training program Regular Price: \$690 Student fee: Just \$30 per student</p> <p><b>December 3-4, 8-9</b> 8 AM - 12 PM Pacific <b>Duct System Optimization Certification Class**</b> 16-hour training program Regular Price: \$690 Student fee: Just \$30 per student</p>

\* Qualifies for 8 recertification hours      \*\* NCI Online Certification Exam included

**Take an NCI Course Today! Call 800-633-7058 or visit [ncilink.com/DistLearn](http://ncilink.com/DistLearn)**

This program is funded by California utility customers and administered by SCE, SDG&E, and PG&E under the auspices of the California Public Utilities Commission.





# Industry Events

## AHR Expo 2021 Officially Cancelled

ASHRAE has announced that the 2021 AHR Expo, originally scheduled to be held January 25-27, 2021, in Chicago, has been cancelled.

ASHRAE said that the decision was taken despite exploring every alternative possibility with AHRI and the AHR Expo show management.

With the exhibition cancelled, the 2021 ASHRAE Winter Meeting will now become a virtual conference, taking place from February 9-11, 2021. This will include a mixture of live, pre-recorded and on-demand sessions.

"The board of directors has carefully considered what course of action would be best for ASHRAE members, the committees that conduct the society's business, the industry we serve and the AHR

Expo," said 2020-21 ASHRAE president Charles E. Guldge III. "The pandemic has affected everyone, requiring that we adapt to existing conditions in our personal and professional endeavours and our decision to cancel the 2021 AHR Expo is a reflection of necessary adjustments."

ASHRAE committee, council and board meetings will now take place virtually in January.

"Current health rules regarding social distancing and large gatherings makes it impossible for us to provide the experience that our attendees expect at the AHR Expo," said ASHRAE executive vice president Jeff Littleton. "As leaders in the built environment, we have a responsibility to protect health and wellbeing of attendees, exhibitors and staff. While we could not find

a path forward to host the expo in 2021, we anticipate an even greater show in 2022 in Las Vegas."

In September, the AHR Expo show organizers said it would postpone the show until at least March due to ongoing concerns over the coronavirus. This followed consultations with exhibitors and attendees who were overwhelmingly in favour of moving the event. At that time show manager Mark Stevens said he was "cautiously optimistic" that the show would go ahead. However, with current Illinois state and local restrictions prohibiting mass gatherings over 50 people, that became impossible.

"We were hopeful that March would be a feasible solution, but there are too many obstacles that are beyond our control," said Stevens. "We know how disappointing this



The 2020 AHR Expo was held in Orlando, Fla., from Feb. 3 – 5.

news is for the HVACR industry and we are disappointed too.

"We've examined every scenario and questioned every roadblock to see how we might hold an in-person event in 2021," said Mark Stevens. "Unfortunately, the pandemic continues to present unpredictable challenges and other variables

that are beyond our control. The safety of all our participants – attendees, exhibitors, speakers, employees, venue staff and everyone involved at every level – continues to be our top priority. With these barriers, along with state and local restrictions due to COVID-19, we have unfortunately exhausted all efforts to bring the Show to Chicago in 2021."

## ACCA Announces 2021 Annual Conference, Keynote Speakers

The Air Conditioning Contractors of America (ACCA) announced its lineup of keynote speakers for ACCA's 2021 Annual Conference & Expo. Held at the New Orleans Marriott in New Orleans, La., The ACCA 2021 Conference will run from Feb. 21 – 24, 2021.

"ACCA has planned a worthwhile, and must-attend conference experience," said Barton James, ACCA president and CEO. "We are taking all the necessary steps and following CDC guidelines to ensure a safe conference experience. We are looking forward to seeing members and providing ACCA quality content that event attendees come to expect from us."

Due to COVID-19, ACCA's 2020 Annual Conference was canceled. However, ACCA thought conference participants would benefit from the knowledge and expertise of last year's keynote speakers. Those keynote speakers will speak at this year's conference.

### Gerry O'Brien | What Big Brands Know

Becoming the #1 Choice in a Crowded Market

As a marketing guru and author, O'Brien translates big brand strategies into knowledge that any business can use to win in the marketplace. O'Brien's presentations drive growth with

companies of all sizes, from small businesses to billion-dollar brands. His experience includes working with Procter & Gamble, Coors Brewing Company, Quiznos restaurant chain, and most recently, Red Robin Gourmet Burgers. O'Brien built his career growing big brands and distills that experience into creating strategies and real ideas that are actionable immediately.

### Jacob Schick | CEO of 22Kill One Tribe. One Fight.

A passionate and fearless leader whose quick wit and stories of intestinal fortitude have a profound impact on everyone he meets, Schick is currently the CEO of 22KILL. This organization has created a community that raises awareness and combats suicide by empowering veterans, first responders, and their families through traditional and non-traditional therapies. Schick has become a staunch advocate for maximizing the potential in people from all walks of life and shares his story and the effects of being severely wounded at public speaking engagements throughout the country, motivating people to be better tomorrow than they were today, and raises awareness to the epidemic of the 22 warriors that die by suicide every day. He has appeared on James Gandol-

Continued on Page 28



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# Features

## Lennox International Launches Building Better Air Initiative to Improve IAQ

Lennox International (LI) is launching the Building Better Air initiative to improve the indoor air quality of commercial spaces. This initiative combines the company's product line and building services to provide IAQ solutions for various commercial applications.

"Over the past six months, we've all experienced change in the way we work, shop, and socialize," said Elliot Zimmer, president and chief operating officer, Lennox Commercial. "The COVID-19 pandemic has highlighted the key role that HVAC plays in healthy building environments and Lennox is making sure that our customers have access to the right products and services to get back to business safely."

Lennox International offers a variety of commercial HVAC

products that, when paired with a comprehensive maintenance plan, enable businesses to improve indoor air quality. Air purification, ventilation, and humidity control technology can be applied to HVAC systems to improve the safety of building environments for employees and customers.

"The Building Better Air initiative is structured to help business and building owners evaluate the current state of their HVAC systems, recommend a comprehensive indoor air quality solution tailored to the building, and identify a maintenance plan to ensure ongoing effectiveness," said Bobby DiFulgentiz, vice president, Product Management and Marketing, Lennox Commercial.



There are three steps to Building Better Air:

### EVALUATE

Indoor Air Quality Survey – A Lennox representative will offer services to assess the equipment currently serving the building to identify ways to improve indoor air quality. This assessment will evaluate the general condition of the HVAC equipment, verify proper ventilation, and detail the status of current air purification capabilities to create

a baseline for the building's current indoor air quality.

### SOLVE

Indoor Air Quality Solutions – After studying the details from the assessment, a Lennox representative will then walk through available options to improve indoor air quality. Focusing on air purification, ventilation, and humidity control, a comprehensive IAQ solution will be created that is tailored to the needs of the building and application.

### MAINTAIN

Preventative Maintenance – Indoor air quality is an ongoing priority and it is critical that a maintenance plan is established to

ensure the IAQ upgrades to the HVAC system remain effective. A Lennox representative will lay out a comprehensive maintenance schedule that will help keep the indoor air quality of the building at the recommended level.

For more information about Building Better Air, visit [lennoxcommercial.com/buildingbetterair](http://lennoxcommercial.com/buildingbetterair).

Lennox International Inc. is a global leader in the heating, air conditioning, and refrigeration markets. Lennox International stock is listed on the New York Stock Exchange and traded under the symbol "LI". Additional information is available at: [www.lennoxinternational.com](http://www.lennoxinternational.com).

## CSLB Update

Continued from Page 16

current reciprocity agreement between the CSLB and Utah's licensing agency no longer complies with the requirements of the California Business and Professions Code. The CSLB continues to maintain reciprocity agreements for certain license classifications with the states of Arizona, Nevada and Louisiana.

### Strategies to Increase Licensure of Women Contractors

Board member James Ruane, a C-specialty contractor member of the Board from San Bruno and the new chair of the Licensing Committee, said a goal of the committee is to increase the presence of women in construction and the number of women contractors. Based on information from the National Association of Women in Construction, women make up less than 10 percent of the construction industry, and one-third of them are in administration and sales positions.

Ruane asked CSLB staff to develop strategies to recruit more women contractor applicants and to examine the current application process to identify and eliminate any barriers that may exist for women in applying for licenses and becoming contractors.



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# Features

## Carrier Launches Healthy Buildings Program to Help Customers with Occupant Health

**Advanced solutions deliver healthy, safe, efficient and productive indoor environments for commercial buildings, marine and more.**

As people around the world adjust to a new normal, the health of our buildings – and how they influence personal health – is critically important. Recently, Carrier introduced its Healthy Buildings Program, an expanded suite of advanced solutions to help deliver healthy, safe, efficient and productive indoor environments across key verticals including commercial buildings, healthcare, hospitality, education, retail and marine. In support of this, Carrier today also launched Corporate. [Carrier.com/HealthyBuildings](http://Carrier.com/HealthyBuildings) to help customers consult with

Carrier's experts to take advantage of the broad range of industry-leading healthy building technologies. Carrier Global Corporation (NYSE:CARR) is a leading global provider of innovative heating, ventilating and air conditioning (HVAC), refrigeration, fire, security and building automation technologies.

"COVID-19 has reinforced the important role that buildings play in ensuring and protecting public health," said Dave Gitlin, President & CEO, Carrier. "As people return to work, hotels greet guests, schools welcome back students and stores reopen, indoor air quality and safe buildings are of paramount importance. For the economy to successfully recover, people need to have trust in the safety of the buildings they are entering. New technologies like

microscopic filtration systems and touchless building controls have gone from nice-to-have conveniences to must-have protections. The Carrier Healthy Buildings Program can help enable healthier and safer indoor environments as we get back to our new normal."

As a founding member of both the U.S. Green Building Council and the International WELL Building Institute, Carrier has long been an industry leader in enhancing building health to promote personal health. Now, it's essential that the world have the solutions and services that enable healthy environments.

"The company that invented modern air conditioning is uniquely positioned to deliver healthy building expertise," said Rajan Goel, who leads Carrier's Healthy Buildings Program as the head of Carrier's Building Solutions Group. "Through

the Healthy Buildings Program, Carrier's experts will work closely with customers to not only design but operate, maintain and upgrade buildings that protect what's most important – the health of those inside."

Carrier's Healthy Buildings Program will draw from a comprehensive suite of solutions and services designed to help improve indoor air quality (IAQ), increase outside air ventilation and enable touchless interactions. These include, but are not limited to, the following:

### Carrier Healthy Building Services

Carrier offers expert services such as consultation, implementation and continuous monitoring. These services can enable customers to restart, operate, maintain and upgrade their buildings safely and efficiently. These include:

Safe Start Service helps ensure that buildings are ready for occupancy through a rigorous recommissioning of HVAC equipment and the implementation of best practices, which may be executed remotely.

IAQ Assessment to test air quality and develop and implement upgrades to help ensure optimal filtration, ventilation, airflow, controls, etc. Carrier experts can also develop and implement corporate-wide IAQ engineering standards.

Remote Airside Management provides continuous validation of IAQ parameters, periodic checks of equipment health and continuous airside commissioning, enabled by a 24x7 Command Center.

Wellness Services include helping customers to achieve the International WELL Building Institute's WELL building standard certification, which implements strategies that can help improve a building's features – air, water, thermal, lighting, acoustics, etc. Carrier also conducts WELL performance testing to help ensure continued high-performance operations and to upgrade certification levels in support of companies' increased concerns regarding public health.

Remote Energy Management connects HVAC and other building systems to provide advanced cloud-based analytics that help optimize energy efficiency, equipment uptime, occupant comfort and opera-

tional productivity.

Emergency Assets support building needs with a wide variety of HVAC equipment on demand to meet building system upgrade requirements to reopen quickly and safely in the current environment.

Advanced Access Services helps to improve control site density by setting limits on the number of people allowed in a specific space and can prevent access once that number is met. Customers can also set up alerts for attempts to access blocked areas or generate reports for contact tracing. Carrier also provides remote monitoring and other custom solutions to meet the new challenges of today.

Security Services provide solutions and upgrades to help ensure increased resilience and a healthier and safer working environment. These solutions include contactless management, temperature screening and video analytics supported by connected services, remote monitoring and remote diagnostics.

### Carrier Healthy Building Technologies

In addition to Carrier's comprehensive HVAC, fire, security and controls product offering, Carrier's Healthy Buildings offering includes:

Filtration technologies, available in new equipment and for retrofits, include various MERV filters, HEPA filters for particulate matter and the Infinity electrostatic filters for airborne pathogens. Carrier also offers devices using UVC light, which are intended to target viruses, and UV photocatalytic oxidation to help remove volatile organic compounds and improve IAQ.

OptiClean Negative Air Machine cleans contaminated air and creates pressure to prevent air from spreading to different sections of a building. If negative pressure is not required, the machine can be used as an air "scrubber" to pull air in, remove contaminants and discharge cleaner air back into a room.

ActivAir hybrid hydronic air terminal delivers increased ventilation and outside air – key infection control strategies – in an energy-efficient way with low noise.

Environmental Index in our building automation platform enables building operators to manage temperature, humidity and CO2 levels in a way that identifies and addresses healthy building

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NEBB (#3465)  
CHEERS (#RCN13487)  
CalCERTS (#CC2005644)  
EPA (Universal)



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Continued on Page 28



# INSTITUTE OF HEATING AND AIR CONDITIONING INDUSTRIES, INC. (IHACI) PRESENTS 2020 TRAINING CLASS SCHEDULE

CALIFORNIA QUALITY INSTALLATION, QUALITY MAINTENANCE AND QUALITY SERVICE (CAQI/QM/QS)  
& NORTH AMERICAN TECHNICIAN EXCELLENCE (NATE)

Due to COVID-19 restrictions, the training class schedule is changing. All remaining classes have been converted to Webinars.  
We encourage students to verify class offerings/schedules with the IHACI office or IHACI and/or Utility websites.  
We look forward to your continued participation when classes are available.

## SOCALGAS, ERC, DOWNEY

### NOVEMBER

 NATE Training

(Four-Night webinar Class)

Instructors: John Dalton / Mike Griffin

Wed., Nov. 4 – Part 1

Thurs., Nov. 5 – Part 2

Wed., Nov. 18 – Part 3

Thurs., Nov. 19 – Part 4

NATE Exam • TBD • Further information to follow

## SAN DIEGO GAS & ELECTRIC, ENERGY INNOVATION CENTER (EIC)

### NOVEMBER

Boiler Module

(Two-Night Webinar Class)

Instructors: John Dalton / Mike Griffin

Tues., Nov. 3 – Part 1

Tues., Nov. 10 – Part 2

Refrigeration Module

(Two-Night Webinar Class)

Instructors: John Dalton / Mike Griffin

Tues., Nov. 17 – Part 1

Tues., Nov. 24 – Part 2

### DECEMBER

 NATE Training

(Four-Night Webinar Class)

Instructors: John Dalton / Mike Griffin

Wed., Dec. 2 – Part 1

Thurs., Dec. 3 – Part 2

Wed., Dec. 9 – Part 3

Thurs., Dec. 10 – Part 4

NATE Exam • TBD • Further information to follow

## PACIFIC GAS AND ELECTRIC COMPANY, ENERGY TRAINING CENTER, STOCKTON

### NOVEMBER

 NATE Training

(Four-Night Webinar Class)

Instructors: Mitch Bailey / Jeff Painter

Tues., Nov. 24 – Part 1

Wed., Nov. 25 – Part 2

Tues., Dec. 1 – Part 3

Wed., Dec. 2 – Part 4

NATE Exam • TBD • Further information to follow

## SOCA EDISON, ENERGY EDUCATION CENTER, IRWINDALE

### NOVEMBER

 NATE Training

(Four-Night webinar Class)

Instructors: John Dalton / Mike Griffin

Wed., Nov. 4 – Part 1

Thurs., Nov. 5 – Part 2

Wed., Nov. 18 – Part 3

Thurs., Nov. 19 – Part 4

NATE Exam • TBD • Further information to follow

## SOCA EDISON, ENERGY EDUCATION CENTER, TULARE

### NOVEMBER

 NATE Training

(Four-Night Webinar Class)

Instructors: John Dalton / Mike Griffin

Wed., Nov. 4 – Part 1

Thurs., Nov. 5 – Part 2

Wed., Nov. 18 – Part 3

Thurs., Nov. 19 – Part 4

NATE Exam • TBD • Further information to follow

## TRAINING CLASS LOCATIONS

Southern California Gas Company  
Energy Resource Center (ERC)  
9240 Firestone Boulevard  
Downey, CA 90241-5388  
seminars.socalgas.com

Southern California Edison  
Energy Education Center - Irwindale  
6090 No. Irwindale Avenue  
Irwindale, CA 91702  
www.sce.com/workshops

Southern California Gas Company  
9400 Oakdale Avenue  
Chatsworth, CA 91311  
seminars.socalgas.com

San Diego Gas & Electric  
Energy Innovation Center (EIC)  
4760 Clairemont Mesa Blvd.  
San Diego, CA 92117  
seminars.sdge.com

Southern California Edison  
Energy Education Center - Tulare  
4175 S. Laspinas St.  
Tulare, CA 93274  
www.sce.com/workshops

Pacific Gas & Electric Company  
Energy Training Center - Stockton  
3136 Boeing Way  
Stockton, CA 95206  
www.pge.com

Register at [www.ihaci.org](http://www.ihaci.org) (Training)

Note: When registering for a training class please make sure you honor your commitment. If you have to cancel your reservation, please call 818-551-1555. Thank you.

COSPONSORED BY: Institute of Heating and Air Conditioning Industries, Inc., Southern California Gas Company, San Diego Gas & Electric, Southern California Edison, Pacific Gas and Electric Company, and Sacramento Municipal Utility District



Class 6:00pm • 2020 Training Class Schedule (Subject to Change)

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# New Products

## Continental Fan UBV



**Continental Fan's UBV** Upblast Roof Ventilators provide aerodynamically efficient performance with airflow capacities to 61,000 cfm. This rugged ventilator is constructed with a heavy duty welded steel base, galvanized butterfly exhaust damper section and a spark resistant cast aluminum airfoil axial impeller. The UBV belt drive upblast roof ventilator has its motor located outside the air stream, and is ideal for hot or contaminated air streams. Suitable applications for the UBV include general ventilation, moisture laden air, and exhaust for heat or smoke fumes.

Continental Fan provides unique fan designs that are quiet, efficient and performance driven.

- Features and benefits:
- Standard upblast weatherproof closure for vertical air discharge
  - V-belt drive for low speed operation
  - Spark resistant, cast aluminum airfoil axial impeller
  - Factory set adjustable pitch blades
  - TEFC motor located outside of airstream
  - Adjustable motor base with self-aligning pillow block ball bearings
  - Completely sealed belt tube to protect V-belt drive
  - Extended lube lines
  - Heavy duty welded steel

- construction
- Weather-tight steel curb panel
  - Baked polyester powder coat finish with zinc rich primer
  - Rugged galvanized damper section with butterfly damper blades
  - Damper rods turn in nylon bearings and require no lubrication
  - Diameters from 18" to 60"
- More information:** [www.continentalfan.com](http://www.continentalfan.com).

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## Daikin SmartSource Compact

**Daikin** announced the expansion of its SmartSource Compact water source heat pump (WSHP) product line, adding a horizontal configuration to make the technology a fit for a broader range of applications.

SmartSource Compact heat pumps are designed to provide commercial contractors and facility managers with a low-cost alternative to more expensive and larger WSHPs. Now with vertical and horizontal configurations, the compact WSHPs are ideal for new construction and retrofits where space and budgets are limited. They can be configured for boiler tower or geothermal applications that are often found in schools, offices, lodging, condominiums and retail facilities.

"Building owners shouldn't have to sacrifice high-quality features when they need a low-cost option," said Al Youker, product manager, Daikin Applied. "SmartSource Compact WSHPs not only con-



serve capital and space, they include the same features and options as premium-tier models, such as dual-level vibration isolation, two-stage compression, dehumidification and waterside economizers."

The expanded line of WSHPs includes several innovations to deliver high efficiencies and optimize indoor air quality. For applications where maintaining low humidity is crucial, Daikin's Smart De-humidification technology senses when the space reaches the desired temperature and then diverts hot refrigerant gas to the reheat coil located downstream of the cooling coil. This prevents overcooling and maximizes moisture removal for improved comfort.

"Beyond comfort, superior quality air has never been more important to customers as they face new challenges," Youker said. "So SmartSource Compact is available with 2-inch-thick MERV 8 and 4-inch-thick MERV 13 filters to help reduce pathogens and contaminants." The heat pumps also come with a double-sloped polymer or stainless-steel drain pan to deter microbial growth.

When water loop temperatures are cool enough, SmartSource Compact's waterside economizer reduces energy consumption by using the loop water to condition a space without engaging the compressor. EC motors with adjustable airflow settings also boost airflow performance and enhance energy savings.

Both horizontal and vertical configurations are now available, and factory stocked for quick delivery.

**More information:** [www.DaikinApplied.com](http://www.DaikinApplied.com).

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## FabricAir Smart Air Solutions



**FabricAir**, Lawrenceville, Ga., the original manufacturer of fabric HVAC duct, has released the 2021 version of "Smart Air Solutions" a fabric air dispersion and accessories catalog/design guide for North American architects, designers, engineers, HVAC contractors and facility managers. The publication is now available for free download at <https://www.fabricair.com/catalogs>.

The 76-page publication is both a comprehensive catalogue of FabricAir's custom product solution capabilities, and a design guide featuring installation ideas for education, agriculture, hospitality, retail, hospital, industrial and other commercial applications with open architectural ceilings. More than 200 color photos and illustrations help detail air dispersion solutions to tough project challenges facing today's HVAC engineers, architects and contractors.

Smart Air Solutions includes FabricAir's newly-added innovations: Internal 360° Hoops for duct shape retention; VarioDuct—uniform heating and cooling out of the same duct; Colors & Prints—surface printing on fabric duct with custom colors, repetitive patterns and graphics; Screen-Printed Artwork Logos; and

Defrost Duct. The PDF-formatted publication is easy to navigate with four major sections: Duct Profiles—shapes and retention devices for full inflation; Fabric Types—good, better, best fabric options for any application; Flow Models—air flow options ranging from gentle flow permeability to high velocity including a variety of orifice styles, sizes and patterns; and suspension systems.

FabricAir dispersion systems allow for aesthetic expression and comprehensive design to create a clean and attractive appearance, free from joints, corrugations, duct sealant, paint streaks and inconsistencies. The solutions are custom designed using proprietary 3D software and CFD analysis of performance is available. Fabric duct has a variety of indoor air quality advantages as a metal duct alternative, including condensation prevention, energy-savings, uniform air distribution, hygienic properties and simplified maintenance.

**More information:** [www.fabricair.com](http://www.fabricair.com).

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## Goodway Technologies BioSpray-10-C



As COVID-19 and other seasonal viruses continue to drive demand for effective cleaning and sanitation solutions, **Goodway Technologies** is expanding its line of surface sanitation systems with the addition of BioSpray-10-C. The newest surface sanitation system is a portable, lightweight system that is ideal for facility and commercial use, such as classrooms, office buildings, and clinics.

"There continues to be extremely high demand for sanitation solutions that improve the safety and well-being of the occupants and it's coming from every industry," says Tim Kane, President and CEO of Goodway Technologies. "We want to make sure everyone has the ability to effectively clean and sanitize with their facilities,

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# New Products

which is why Goodway offers a variety of systems to help meet the different types of applications for businesses and organizations.”

Professionals responsible for the maintenance of facilities like school office buildings, health-care environments and more can reduce overhead, chemical, and labor costs with BioSpray. When compared to trigger-spray bottles or wipes, the BioSpray-10-C delivers sanitizer faster, and with better coverage while reducing the overall volume of sanitizer needed. The technology reduces labor time by up to 63 percent while applying up to 88 percent less product, as validated by independent lab testing and certifications.

BioSpray-10-C and BioSpray® D2 quick drying alcohol based sanitizer are safe for use around water-sensitive equipment and machinery. The patented system provides faster and more effective sanitation in any environment. The system uses an innovative CO2 delivery technology to safely and effectively apply EPA-registered BioSpray D2 sanitizer in a lab calibrated stream for full coverage that reaches smaller cracks and crevices.

**More information:** [www.goodway.com](http://www.goodway.com).

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## Google Nest HVAC Monitoring System



Google Nest announced the launch of its new HVAC monitoring system, which will be deployed to all Nest thermostats. The new feature looks for potential issues with a home’s HVAC system, and will send an alert to the homeowner when something’s not right and connect them with their local pro.

Nest is also unveiling its most affordable smart thermostat option to date – the Nest Thermostat – an easy to use, energy-saving thermostat that you can control from anywhere with the Google Home app, all for just \$129.

These products come with several new benefits for Nest professional installers:

- Lower-cost devices allow pro-installers to offer a Nest thermostat to more customers than ever before.
- HVAC monitoring offers more value to customers and allows installers to book more jobs during shoulder seasons. Licensed HVAC pros that are part of Google Nest’s network will receive local, pre-qualified leads as part of the new HVAC monitoring service. Nest’s partnership with Handy makes scheduling service simple. Customers can also reach out to Nest Pros directly.

In addition to these new offerings, the Nest Thermostat E will soon become an exclusive Nest Pro product.

**More information:** <https://nest.com/>.

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## LG Air Conditioning Technologies USA Rebate Center Tool

LG Air Conditioning Technologies USA has expanded its online residential LG Rebate Center tool to now include commercial HVAC products – the first in the industry to include rebates for Variable Refrigerant Flow (VRF) systems.

Custom-designed for LG products, the tool enables residential and commercial customers alike to search for local and national rebates and incentives related to the purchase of LG residential, light commercial and commercial HVAC systems.

Representing 7.6 percent of commercial building energy consumption, commercial space cooling is among the most prioritized areas for energy-efficiency programs. To encourage business owners, building managers, architects and contractors to choose energy-efficient systems, LG delivers simple and convenient access to

rebate offers directly through the LG website. Users can search for rebates and incentives related to product purchases in a one-stop shop manner, by simply entering their zip code.

The program was created in collaboration with EcoRebates, the leading provider of incentive and rebate tools for energy-efficient products and green home solutions. LG is the first company to collaborate with EcoRebates to provide rebates and incentives on a broader suite of commercial HVAC products. VRF is now added to the general categories of boilers, water heaters and heat pumps that include both residential and commercial offerings.

**More information:** [www.lghvac.com](http://www.lghvac.com).

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## YORK Residential Package Equipment

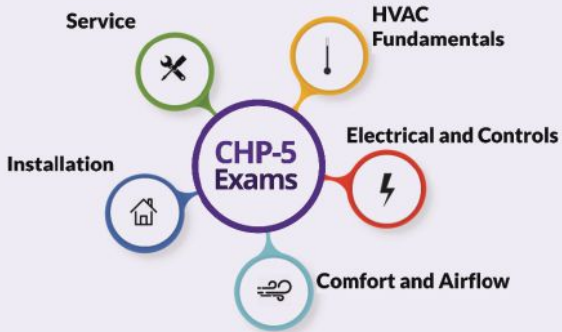
The YORK brand of Johnson



Controls, the global leader for smart and sustainable buildings, is driving greater efficiencies in residential and light commercial markets with its launch of the next generation of YORK Residential Package Equipment. The comprehensive AC and heat pump range is offered in both 14 SEER and ENERGY STAR® certified 16 SEER efficiencies with electric or gas heating, providing affordable performance and reduced energy use compared to older models. YORK Residential Package Equipment works alongside other Johnson Controls HVAC prod-

ucts and solutions to help make buildings more safe, secure and sustainable. The redesigned blower was engineered to bring quicker comfort and advanced air distribution to improve indoor air quality and enhance wellness. In addition, the advanced fan design and vibration-reducing technology minimize noise to provide quiet comfort year-round. These units are also thoughtfully designed with individual access panels and front-facing connections, simplifying installation and maintenance. Units also offer industry-leading warranties with a lifetime limited heat exchanger warranty, 10-year parts and compressor limited warranties, and a one-year labor limited warranty. **More information:** [www.york.com/Residential-Equipment/Heating-and-Cooling/Residential-Packaged-Equipment](http://www.york.com/Residential-Equipment/Heating-and-Cooling/Residential-Packaged-Equipment).

# CERTIFIED HVAC PROFESSIONAL (CHP-5)



## LEARN AT WORK

With the **Certified HVAC Professional (CHP-5)**, technicians can **earn their NATE certification** while training in the field. The CHP-5 certification pathway is a series of 5 short exams that NATE created to mesh **technician's on-the-job training** with their test preparation.

## STUDY ONLINE

NATE has partnered with **HVACRedu.net** and **Interplay Learning** to provide technicians with online courses and virtual reality trainings that prepare technicians for each CHP-5 exam.

## CERTIFY AT HOME


Technicians can choose to take their exams from home at a time that fits their schedule using NATE's remote **Live Online Proctored Exams**.

Register your technicians at:  
**[www.NATEX.org](http://www.NATEX.org)**


NATE is the leader in **developing** and **recognizing** professional HVACR technicians. North American Technician Excellence (NATE) is the largest non-profit certification organization for heating, ventilation, air conditioning and refrigeration technicians.

CUSTOMER SERVICE: 877-420-6283 | EMAIL: [asknate@natex.org](mailto:asknate@natex.org)





LG Rebate Center tool now includes residential and commercial HVAC products



Residential Commercial

Search for products (ESC to clear)

Englewood, NJ 07531 Update ZIP Locate

102 products found Filter

Multi V S (Ducted Indoor Units)

View Product

\$500 in rebates

Multi V S (Non-Ducted Indoor Units)

View Product

\$500 in rebates

Discover rebates in your area: [rebates.lghvac.com](http://rebates.lghvac.com)



Fifty-five Students Awarded Scholarships Through the PHCC Educational Foundation

The Plumbing-Heating-Cooling Contractors – National Association (PHCC) Educational Foundation announced the winners of 2020 scholarships awarded through the Foundation. Thirty students were awarded a total of \$55,500 in scholarships funded by the Foundation, Gerry Kennedy, Steve & Isabella Schaeffer, Anne Williams, the McGlame-Wordell Scholarship Committee, the PHCC Auxiliary of Texas, the PHCC Auxiliary of Massachusetts, and PHCC’s Past National Officers. The students, their schools and studies are listed below. An additional 25 students have received 2020 scholarships thanks to \$56,500 in funding

provided by A.O. Smith, Bradford White Corporation, Delta Faucet Company, RIDGID, State Water Heaters and Viega. The winners of these awards will be announced under separate releases. The top Foundation scholarship winners for 2020 are:

- James Clair from Franklin, Ind. was awarded \$5,000. He is studying Plumbing installation, service, & repair at Mechanical Skills Inc.
- Riley Ristich from Buena Park, Calif. was awarded \$5,000. She is studying Plumbing installation, service, and repair at PHCC of ORSB Apprenticeship School.
- Aaron Zicarelli from Madison, Wis. was awarded a

\$5,000 Charles Hiley Memorial Scholarship. Zicarelli is studying Plumbing installation, service, & repair at Madison Area Technical College. The following students have been awarded scholarships funded by the PHCC Educational Foundation:

- Ashton Buller from La Crete, Alberta was awarded \$2,500. He is studying Mechanical Engineering at University of Alberta.
- Macy Long from Belmont, N.C. was awarded \$2,500. Long is studying Business Management at University of North Carolina at Charlotte.
- Isaac Youngblood from Sacramento, Calif. was awarded \$2,500. Youngblood is studying

Plumbing installation, service, and repair at PHCC of Sacramento Academy.

- Jack Bauer from Cincinnati, Ohio was awarded \$1,000. He is studying Plumbing installation, service, and repair at Cincinnati MPA Apprentice Program.
- Michael Casteneda from Santa Ana, Calif. was awarded \$1,000. He is studying Plumbing installation, service, and repair at PHCC of ORSB Apprenticeship School.
- Karla Cortez from San Leandro, Calif. was awarded \$1,000. Cortez is studying Business Management at San Francisco State University.
- Ryan Gross from Bethlehem, Pa. was awarded \$1,000. Gross is studying Plumbing installation, service, and repair at Lehigh Career

Technical Institute.

- Jordan Hefner from Escondido, Calif. was awarded \$1,000. Hefner is studying Plumbing installation, service, and repair at PHCC of San Diego Academy.
- Lauren Jacoby from Knoxville, Tenn. was awarded \$1,000. Jacoby is studying Business Management at University of Tennessee Knoxville.
- Gregory Lambert from MIAMI, Fla. was awarded \$1,000. Lambert is studying HVACR installation, service, and repair at Florida Career College.
- Dayne Louaillier from San Diego, Calif. was awarded \$1,000. Louaillier is studying Plumbing installation, service, and repair at PHCC of San Diego Academy.
- Avinash Madhu from Calgary, Alberta was awarded \$1,000. Madhu is studying Construction Management at Purdue University.
- John McCuen from Broomall, Pa. was awarded \$1,000. McCuen is studying Business Management at Bryn Athyn College.
- Kai Mousseau from St. Andrews, Manitoba was awarded \$1,000. Mousseau is studying Construction Management at Red River College - Winnipeg.
- Nathan Nickles from Sandusky, Ohio was awarded \$1,000. Nickles is studying Construction Management at Bowling Green State University.

- Thomas Whitney from Las Vegas, Nev. was awarded \$1,000. Whitney is studying Plumbing installation, service, and repair at PHCC of Las Vegas.

Other scholarships awarded by the Foundation and funded by PHCC members and organizations were (partial list):

- Joseph Mouna from Anaheim, Calif. was awarded a \$2,500 Jim Finley Memorial Scholarship. Mouna is studying Plumbing installation, service, and repair at PHCC of ORSB Apprenticeship School. Scholarship sponsored by Steve & Isabella Schaeffer.

- Hanna Whalen from Raleigh, N.C. was awarded a \$2,500 Patty Jones Memorial Scholarship. Whalen is studying Business Management at North Carolina State University. Scholarship sponsored by Bill Jones.

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MATTHEW TOONE

Bacharach has announced the appointment of **Matthew Toone** as CEO. Toone joins Bacharach from Emerson, where he served as vice president of sales, service, and solutions for Emerson's Cold Chain Platform. The company said Toone will be responsible

for the further integration of the Parasense and Neutronics brands and setting the company's strategy as it moves into its next chapter of market expansion and growth.

"The board of directors selected Matt because of his leadership qualities, proven track record leading an international business, and extensive knowledge of refrigeration and IoT solutions for the HVACR, food retail, and healthcare markets," said Martin Carter, chairman of Bacharach and CEO at Laurel Solutions. "We believe that Matt is the right person for the job. He has demonstrated the ability to foster a culture of innovation and we're excited to bring him on board."

Toone comes to Bacharach with

more than 15 years of experience in HVACR industry. Prior to his time with Emerson's Cold Chain Platform, Toone was vice president and general manager at Cooper Atkins, a temperature management company focused on the food service, food retail, industrial, and healthcare markets. While there, he led the integration of recent acquisitions and positioned the company to deliver significant growth from their Internet of Things (IoT) software-enabled solutions.

"I'm excited to be joining a globally-recognized organization like Bacharach with its 110 year legacy of innovation," said Toone. "I'm looking forward to working with our partners and customers around the globe as we continue to drive value with connected gas detection and analysis solutions."

.....



ALEX JEFFRIES

Western Specialty Contractors proudly announces the appointment of **Alex Jeffries** of Ballwin, Mo. as its Safety Director.

Jeffries will be responsible for directing, developing and overseeing the general health and safety policies of the organization, plus ensuring compliance with OSHA and other state, local and industry-specific regulations.

Safety is a top priority at Western Specialty Contractors, which

is recognized nationwide for its industry-leading safety ratings.

"Safety will never be compromised for any reason at Western," said COO Tom Brooks. "Our line of work often requires workers to be hundreds of feet in the air on suspended scaffolds, underground or perched on rooftops, bell towers or monuments. We work hard to ensure that every employee returns home safely to their families every night. Alex, who is a tremendous asset to our company, has the experience, leadership and conviction needed to maintain our extremely high standards for safety."

Jeffries has had a successful 16-year career in construction safety, having previously held the title of Director of Safety at Clayco, Murphy Company and Haberberger Mechanical; and Safety Engineer at McCarthy Building Companies, all in St. Louis.

He is a member of the Ameri-

## Cover Story

Continued from Page 1

said Dr. Mark P. Modera, director of the UC-Davis Western Cooling Efficiency Center, and advisor to Aeroseal. "Air is not something they can see or easily clean, like your hands, a doorknob, or a table. Even before COVID-19, we were spending 90 percent of our time indoors, so indoor air quality is an important issue."

Key findings from the study include the following:

- 57 percent of people surveyed believe they'll return to work by the end of the year;
- 42 percent will work in an office building, school or

healthcare facility;

- 64 percent are worried about their health and safety when returning to work;
- 32 percent are concerned about indoor air being clean and fresh compared to surfaces in bathrooms (27 percent), meeting rooms (15 percent), and elevators (9 percent).

### Proper Ventilation is Key to Clean, Healthy Air

As these concerns come to light, scientists are stressing the importance of proper building ventilation in preventing the spread of COVID-19, citing it is as important as social distancing, wearing masks, and washing hands

regularly. A building's HVAC system – the air conditioner, furnace, and ducts – must be working properly to prevent the spread.

The HVAC system cannot establish proper airflow and ventilation with leaky ducts. And according to the Department of Energy, the majority of ductwork leak. Leaky ducts take longer to remove contaminated air from a room. And by staying in the room longer than it might otherwise, this contaminated air increases the risk of an infection spreading.

The study was commissioned by Aeroseal LLC and conducted by Quartr, a community-driven mobile research platform.

## ACCA Conference

Continued from Page 20

fini's HBO special "Alive Day Memories: Home from Iraq," as well as "60 Minute Sports." He has also been featured in roles in Clint Eastwood's productions of, "American Sniper" and "The

Mule," and appeared in Bradley Cooper's production of "A Star is Born."

"I am looking forward to the 2021 ACCA Conference," said Brian Stack, president of Stack Heating Cooling and Electric, ACCA events committee chairman, and vice chairman of ACCA's board of directors. "After

this challenging year, it will be nice to have a sense of normalcy, and to be able to take advantage of ACCA's wonderful educational sessions. I am glad to hear that Gerry O'Brien and Jacob Schick will finally be able to speak. Their stories will empower the next generation of leaders in the HVACR industry."

## Carrier Program

Continued from Page 22

performance issues.

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# Indoor People

can Society of Safety Professionals (ASSE) and Associated General Contractors (AGC). Jeffries has a Bachelor of Science in Safety Management from Central Missouri State University.

“My goal is to develop systematic processes to collect data and analyze the causes of injuries,” said Jeffries. “I plan to initiate safety initiatives aimed at reducing and preventing injuries on the job, occupational illnesses and exposure to long-term health hazards.”

.....



DERRICK PAUL

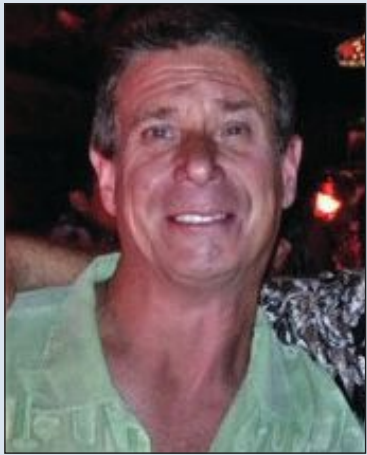
Fujitsu General America, Inc., based in Pine Brook, N.J., has announced the promotion of **Derrick Paul** to director of sales, VRF Products.

Paul will lead the sales efforts of Fujitsu General America’s Airstage VRF systems throughout North America by managing a team of Sales engineers while establishing strategies for short and long-term initiatives to increase sales revenue and market share.

With more than 10 years of sales experience in the HVAC industry, Paul’s background is in engineering and distribution. He began his tenure with Fujitsu in 2011, and was an integral part of the Airstage VRF product line launch in 2012. More recently, he has served as the Southeast Sales Engineer. Paul has a BS in Mechanical Engineering from the University of Alabama.

“We look forward to Derrick’s leadership to navigate our growth of VRF business in North America,” said Dennis Stinson, VP of sales at Fujitsu General America. “Derrick’s long tenured experience with Fujitsu will continue to be a great asset in support of our short and long term strategies.”

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**In Memoriam**  
**Craig Campbell**  
April 1, 1966 –  
September 4, 2020

Craig Campbell was born in

Santa Ana, Calif. He was 54 years old when he passed in Upland, Calif., where he resided with his father, Ken Campbell. Craig suffered from lung cancer for the past five years.

He is survived by his father; his mother, Donna Campbell, of Irvine, Calif.; his sister, Jill Kightlinger, and her husband, Scott, and nephew Adam and niece Jessica of Irvine, Calif.

Craig grew up in Huntington Beach, Calif., where he surfed, participated in Little League, was a Boy Scout and excelled at playing Soccer for AYSO and Club Soccer as well as playing soccer for Marina High School, where he graduated in 1984.

After graduation, Craig attended

Universal Technical Institute (UTI) in Phoenix, Ariz., where he learned the basics of what was to become his passion: HVAC.

After graduating from UTI, Craig held numerous positions in the industry, with several different companies. Along the way he started his own company, performing maintenance of commercial and residential heating and air conditioning systems using maintenance schedules he created and implemented. All the while, Craig was attending one certification course or another learning everything he could about the industry he had chosen.

Along the way, Craig became associated with the Institute of Heating and Air Conditioning

Industries, Inc. (IHACI), in Glendale, Calif., where he became an IHACI Education Committee Member / Instructor. He was involved with Curriculum Presentation for HVAC personnel and IHACI attendees at various public utility venues throughout California, since 2012.

Most recently, Craig was employed at Precise Air Systems of Glendale, Calif. as a manager of system design, installation, service and maintenance.

Craig was respected and beloved by family, friends and associates. RIP, Craig. You will be missed.

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1. Instructors should have a minimum of twenty (20) years of actual field experience in the HVAC/R/SM industry.
2. Instructors should have recognized HVAC/R/SM industry certifications.
3. Instructors should have the ability to teach face-to-face, HVAC/R/SM material as determined by the IHACI Education Committee (typical 80 to 160 seminar attendees).
4. Instructors should have minimum computer skill sets to present existing and future formatted IHACI curriculum.
5. Instructors should be able to pass HVAC/R/SM work history and security background checks.
6. Instructors should be able to travel as needed to the different training venues.
7. Instructors must be able to attend required education and training meetings.

Interested instructor candidates should submit their resumes to the IHACI office for review and evaluation by IHACI's Education Committee. Please send resumes to: [s.evans@ihaci.org](mailto:s.evans@ihaci.org) or fax to 818-551-1115.

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