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JULY 2022

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Industry Education

Ferguson Grant Program Aims to Help Build Next Generation of HVAC Techs

The Explore The Trades Skills Lab, Built by Ferguson grant recipients have been announced. The Explore The Trades Skills Lab, Built by Ferguson pilot grant program is designed to expose students to plumbing, heating, cooling, and electrical (PHCE) careers that they might not otherwise know about. Grant funds will be used to create new plumbing and HVAC classrooms in high schools and post-secondary consortiums throughout North America.

Explore The Trades is a non-profit focused on bridging the technical talent gap to the PHCE service trades. Ferguson is committed to strengthening the communities in which their branches are located. Together, both organizations are dedicated to building the next generation of plumbers and HVAC technicians.

"The plumbing, HVAC, and



electrical trades have created such a legacy in our country," said Explore The Trades Executive Director Kate Cinnamo. "We are thrilled to continue that impact with the first-ever recipients of an Explore The Trades Skills Lab, Built by Ferguson award. We are appreciative of Ferguson's generous investment of \$300,000 worth of equipment and products. With this gift, students will learn the technical building blocks of this industry and go on to serve our

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Features

World Refrigeration Day Celebrated

This year's June 26 theme was "Cooling Keeps Food Fresh."

World Refrigeration Day is an international initiative that raises awareness of cooling's benefits and inspires development and adoption of innovative and sustainable cooling solutions by the public, governments, industry, and practitioners for the wellbeing of future generations. It was celebrated on June 26, which is the birthdate of the Scottish scientist William Thomson, known as Lord Kelvin, who formulated the first and second laws of thermodynamics.

To celebrate World Refrigeration Day this year, United Nations Environment Program OzonAction, Chefs4thePlanet, and Global Food Cold Chain Council partnered to explain cooling's essential role in protecting human health and the planet. The Cooling Keeps Food Fresh campaign describes why cooling is necessary for food

**COOLING
KEEPS FOOD FRESH**

safety and how it supports nutritious diets that sustain our health, help reduce food loss and waste, and protect the environment.

Leading chefs from around the world signed on to the campaign. They described how cooling is necessary for their locally inspired cuisine. The chef's recipes were accompanied by tips educating consumers on the cooling choices they can make in their home to save money, prolong the life of products, and understand how food waste and loss contribute to climate change.

Bacteria exist everywhere in nature. They are in the soil, air, water, and in the foods we eat. In favorable temperatures, they grow rapidly, increasing in numbers to the point where some types of bacteria found in food can cause illness. Bacteria grow most rapidly

in the range of temperatures between 40° and 140°F, the "danger zone," some doubling in number in as little as 20 minutes. But the cooling provided by refrigerators in homes, restaurants, and supermarkets slows bacterial growth, thereby keeping food safe.

The contributions of cooling to our health and the environment extend much further, however. Freezing allows fruits and vegetables to be picked at peak ripeness, often frozen within hours, locking in nutrients and flavor. And cooling reduces one of the largest contributors to climate change, the emission of greenhouse gases from food that is lost due to spoilage and waste. Reduc-

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INDOOR COMFORT NEWS

2023 COMMERCIAL MINIMUM EFFICIENCY CHANGES

What The Regulations Mean to You and Your Customers



WHY THE CHANGE

Starting on January 1, 2023, all air conditioning and heat pump equipment from 65,000 btu/h will require additional 15% efficiency increase from the existing ratings set in 2018. Combined with the efficiency requirements implemented in 2018 this will result in 30% increase over the six-year period. Additionally, all gas-fired commercial air conditioners will be required to meet an 81% gas efficiency rating. In 2023, there will not be any changes to the testing procedures mandated for commercial air conditioners and heat pumps great than 65,000 btu/h.

KEEPING YOU READY FOR NEW EFFICIENCY REQUIREMENTS

In response to the new standards, Ferguson HVAC / Day & Night® is committed to keeping you continually informed and prepared. Our teams can help you understand what you need to know about:

- 2023 Minimum Efficiency Standards
- DOE New Efficiency Standards by Region
- M1: A New System of Measurement
- Navigating Regional Standards
- Understanding Compliance in Your Region
- Enforcement
- On the Horizon for 2025 – Refrigerant change to make ratings comparisons more apparent

M1 TRAINING: KEEP YOUR TEAM TRAINED AND READY FOR WHAT'S NEXT

Our Technical Service Advisors provide the following training services for you and your teams. You can find current M1 training by contacting your Territory Manager or Branch Manager or use the link below to view all training in the Contractor Learning Management Center.



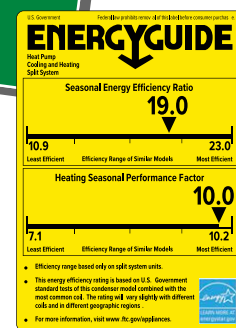
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<https://www.danddealerresourcecenter.com/2023-doe-regional-standards/>

SIZE	PKG AC	PKG HP	SPLIT AC	SPLIT HP
Small ≤ 65,000 BTU/H < 135,000 BTU/H	14.8 IEER	14.8 IEER, 3.4 COP	14.8 IEER	14.1 IEER, 3.4 COP
Large ≤ 135,000 BTU/H < 240,000 BTU/H	14.6 IEER	14.6 IEER, 3.4 COP	14.2 IEER	13.5 IEER, 3.4 COP
X-Large ≤ 240,000 BTU/H < 760,000 BTU/H	13.2 IEER	N/A	13.2 IEER	12.5 IEER, 3.2 COP

2023
(effective January 2023)
Pre-2023 Test Procedure



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2023 D.O.E. SERVICES GUIDE



KEEPING YOU READY FOR WHAT'S NEXT

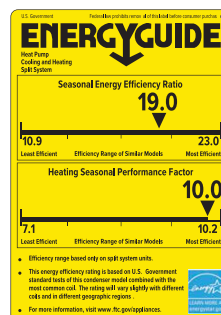
Every six years, the Department of Energy reviews energy use of certain home appliances and mechanical systems in an ongoing effort to reduce overall energy consumption in the United States. If it is determined that an increase in energy efficiency requirements is justified, higher requirements are put into effect.

- Visit Ferguson HVAC / Trane® M1 Resource Services Guide: <https://www.tranedealerresourcecenter.com/2023-government-regulations/>
- Visit Trane: <https://www.trane.com/residential/en/resources/doe-efficiency-standards-need-know/>

WHAT YOU NEED TO KNOW

In response to the new standards, Ferguson HVAC / Trane is committed to keeping you continually informed and prepared. Our teams can help you understand what you need to know about:

- 2023 Minimum Efficiency Standards
- DOE New Efficiency Standards by Region
- M1: A New System of Measurement
- Navigating Regional Standards
- Understanding Compliance in Your Region
- Enforcement / 2025 Refrigerant Changes



- For equipment match-ups, orders and general equipment questions, please contact your Territory Manager.
- For technical HVAC questions, please contact your local Technical Service Advisor.

M1 TRAINING: KEEP YOUR TEAM TRAINED AND READY FOR WHAT'S NEXT

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TO VIEW TRAINING INFORMATION, PLEASE VISIT:
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Industry News



CALIFORNIA



Fieldpiece Awards Scholarships to SkillsUSA Students

Orange, Calif. – Fieldpiece Instruments, a provider of HVACR test tools for more than 30 years, has awarded \$2,500 #MasteroftheTrade

scholarships to 10 SkillsUSA students committed to studying for a fulfilling career in the HVACR industry. The grant awarded by Fieldpiece is intended to support aspiring HVACR techs in their continued education and will be used to pay for college or postsecondary HVACR technology program tuition.

The Fieldpiece #MasteroftheTrade Scholarship, in partnership with SkillsUSA, was designed to support the next generation of up-and-coming HVACR professionals, with a concurrent aim to close the skills gap in the U.S. labor market for the heating, ventilation, air-

conditioning, and refrigeration trade.

Through the partnership with SkillsUSA, Fieldpiece Instruments aims to give back to the industry as well as do its part to address 80,000 jobs that are currently vacant and in need of being filled. Without HVACR pros energy is wasted, food goes bad and people's comfort and safety are at stake. HVACR is a stable, great-paying trade that offers freedom, hands-on work and the chance to make a big impact on the environment and the community.

"We thank Fieldpiece Instruments for supporting the HVACR industry and America's future skilled workforce," said Chelle Travis, executive director at SkillsUSA. "It is exciting to see these students pursue further

education in HVACR. They have demonstrated a true passion for the industry, and we are thrilled they will receive these scholarships."

SkillsUSA students and recipients of the Fieldpiece #MasteroftheTrade Scholarship are:

Alabama: Josh Parson, Beville State Community College, Hamilton Campus

Florida: Johnny Hammonds, Pinellas Technical College

Maryland: William "Billy" Coughlin, Career and Technology Center

Missouri: Cole Hamby, Northland Career Center

Minnesota: Becca Thorstad, Hennepin Technical College

Oklahoma: Josh Parish, Kiamichi

Technology Center

Oklahoma: Leslie Plemons, Moore-Norman Technology Center

Tennessee: Jack Ely, Tennessee College of Applied Technology, Chattanooga Campus

Texas: Dave Jentis, Western Technical College

Texas: Manuel Ramirez, Western Technical College

"Selecting the ten winners was no easy task, as we received many applications from promising, talented, and committed individuals," said Fieldpiece Instruments Director of Marketing, Rachel Newport. "Fieldpiece is proud to support the next generation of HVACR professionals. We congratulate this year's winners and hope to continue empowering industry professionals by providing scholarships, training resources like our innovative Fieldpiece University program and the most advanced and cutting edge tools available on the market today – developed by HVACR industry pros for HVACR industry pros – to keep them ahead of the curve as masters of their trade."

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Rooter Hero Expands in L.A. Territory

Los Angeles, Calif. – Rooter Hero Plumbing & Air, a plumbing and HVAC company serving residential and commercial locations in California and Arizona, announced it has purchased Velavi Heating & Cooling, Inc., a home services company in Norwalk, California, in an effort to expand its HVAC offerings into the greater Los Angeles area.

The expansion will allow Rooter Hero to offer heating, ventilation and air conditioning services to Los Angeles residents in addition to the plumbing repair, installation & drain cleaning services the company currently provides.

In 2019, Rooter Hero purchased four locations in the Phoenix area, allowing the plumbing company to enter into the HVAC market. The company expanded again in 2021 with the purchase of Allied Aire Service, Inc. in San Jose to provide HVAC services in the California Bay area.

"Rooter Hero has been

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known for our exceptional plumbing and drain services for more than a decade,” said John Akhoian, co-founder and CEO of Rooter Hero. “With the success of our Phoenix and San Jose locations, moving into more HVAC markets has been a priority for us. The Velavi purchase allows us the ability to offer this service to the people of Los Angeles.”

Akhoian said Velavi has built an excellent reputation in Los Angeles since its inception in 2017. He said Rooter Hero will continue to use the Velavi name for several months before transitioning the company under the greater Rooter Hero umbrella.

Velavi’s co-founder, Jose Veliz, will remain with the company as the installation manager for the Norwalk Rooter Hero location.

“Joining the Rooter Hero team will allow Velavi to have access to the tools of a large organization while allowing me to continue to help run the business,” Veliz said. “We’re excited about joining the Rooter Hero family. By using their established administrative infrastructure, we will be able to better recruit and maintain the best talent and provide our customers with the latest HVAC technology.”

Since 2011, Rooter Hero has been committed to providing the best in plumbing and drain services. With more than 90 years of plumbing experience, the Rooter Hero team prides themselves on creating a memorable experience for each customer.

For more information, please visit <https://rooterhero.com>.

.....

NexGen Joins Wrench Group

Anaheim, Calif. – Wrench Group announced that NexGen Air Conditioning & Plumbing, a home services company in Southern California, has joined the Wrench family of brands. This is Wrench’s first expansion into the nation’s second-largest market. The company now operates in 21 markets nationwide, including a presence in six of the ten largest markets in the U.S.

NexGen was started six years ago by Founder and President Ismael Valdez, who launched his own business to create a next generation company. Now, the company has eight locations serving homeowners across

Los Angeles, Orange County, and Southern California.

“We’ve been looking to expand to Southern California for a while but wanted to make sure we found a partner that was the right match,” said Ken Haines, CEO of Wrench Group. “Under Ismael’s visionary leadership, NexGen has displayed the ability to post extraordinary growth while maintaining the highest levels of customer service and loyalty.”

NexGen offers heating, air con-

ditioning, plumbing, drain cleaning, and air quality services for both residential and light commercial customers. They also sell their own NexGen branded line of heating and cooling equipment. The company has locations in Anaheim, Arcadia, Laguna Hills, Ontario, Palm Desert, Riverside, Torrance, and Simi Valley.

NexGen employs more than 400 people in the area and serves more than 100,000 homeowners across Southern California. The company also demonstrates its commitment

to serving the community through Project X, which provides free heating and cooling equipment to those in need and to families of military veterans.

.....

CSLB Launches \$5M Solar Energy Restitution Program

Sacramento, Calif. – The Contractors State License Board

(CSLB), the entity charged with protecting consumers and licensing and regulating solar contractors in California, is using \$5 million in one-time funding from the California Legislature to provide compensation to consumers that have incurred an unpaid financial loss or injury after contracting for the installation of a solar energy system.

The Solar Energy System Res-

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- Part 4, 2022 California Mechanical Code
- Part 5, 2022 California Plumbing Code
- Part 6, 2022 California Energy Code
- Part 9, 2022 California Fire Code
- Part 10, 2022 California Existing Building Code (includes Part 8 Historical Building Code and Part 12 Referenced Standards Code)
- Part 11, 2022 California Green Building Standards Code (CALGreen)

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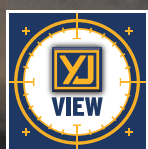
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Continued from Page 5

stitution Program (SESRP) offers reimbursement to qualifying consumers who were defrauded or financially harmed by licensed or unlicensed solar contractors. The program was created by Assembly Bill 137 in July 2021 and is administered by the CSLB. Over \$700,000 in restitution has already been awarded to eligible consumers. Restitution payments are only available as long as there are appropriated moneys available for payment.

"The Contractors State License Board takes disciplinary action against identified bad actors," said CSLB Registrar David Fogt. "The vast majority of solar contractors are honest and hard-working who provide excellent service to California consumers.

Unfortunately, a few unscrupulous operators are taking advantage of unsuspecting customers."

Restitution through the SESRP may be available to any California consumer who:

- resides in a single-family residence,
- contracted for a solar energy system on or after January 1, 2016,
- suffered an unresolved financial loss or injury as a result, and
- can establish their eligibility through any one of the available methods prescribed by the SESRP.

CSLB urges eligible consumers to complete the SESRP claim form available on CSLB's website in both English and Spanish at cslb.ca.gov. The form includes additional information about the program and some screening questions to determine eligibility for restitution.

Any questions regarding the Solar Energy System Restitution Program may be directed to CSLB at SolarFund@cslb.ca.gov.

TEXAS



Tulsa School Adds HVAC/R Programs to Texas Campus

Houston, Texas – To help address the skilled labor shortage, StrataTech Education Group's Tulsa Welding School & Technology Center (TWSTC) is adding Electrical Applications and

Electro-Mechanical Technologies (Electrical and HVAC/R-combined) programs to its offerings at its campus in Houston, Texas.

Starting this month, TWSTC will diversify its program offerings to help fill the growing demand for electricians and HVAC/R technicians. The new program offerings will provide training in electrical and HVAC/R and include a new virtual reality training component that enhances and reinforces the skills taught in the classroom and hands on labs.

The program additions come at a critical time as careers in the skilled trades continue to be on the rise with electrical and HVAC/R jobs in Texas expected to increase by 14% and 16% respectively by 2028, according to CareerOneStop.

"The new programs are one of many ways in which our school is meeting the needs of local employers and students looking for professional training to start their careers in the skilled trades industry," said Kimberly Knox, Campus President of Tulsa Welding School & Technology Center. "As there continues to be growing demand for electricians and HVAC/R technicians across Texas, TWSTC will continue to be a partner in technical education by offering technology-infused programs and providing students with career support services to help identify employment opportunities post-graduation."

Students interested in the Electrical Applications program at TWSTC will receive hands-on training guided by experienced instructors to help prepare them for job opportunities as entry-level electricians. The in-depth, seven-month program teaches students about the fundamentals of mechanical and electrical principles, residential and commercial wiring and more, preparing them for careers as residential, commercial, industrial or maintenance electricians. The annual mean wage for electricians in Houston is \$56,090*.

The Electro-Mechanical Technologies program trains students in the fundamentals of heating, ventilation, air conditioning and refrigeration technologies in nine months. Along with HVAC/R, this program teaches the fundamentals of electricity, residential and commercial wiring and comfort systems, and introduces students to solar energy technology. The hands-on training prepares students for entry-level positions in refrigeration service

Continued on Page 8



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This program is funded by California utility customers and administered by Southern California Gas Company under the auspices of the California Public Utilities Commission. Program funds, including any funds utilized for rebates or incentives, will be allocated on a first-come, first-served basis until December 31, 2022 or until such funds are no longer available. This program may be modified or terminated without prior notice. The selection, purchase, and ownership of goods are the sole responsibility of customer. SoCalGas makes no warranty, whether express or implied, including the warranty of merchantability or fitness for a particular purpose, of goods selected by customer. Customers who choose to participate in this program not obligated to purchase any additional goods offered by manufacturer, vendor, service provider, or any other third party. Eligibility requirements apply; see the program conditions for details.

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Continued from Page 6

and maintenance. According to the U.S. Bureau of Labor Statistics, the annual mean wage for a trained HVAC/R technician is \$53,450 in Houston.

StrataTech is committed to enhancing its welding-, HVAC/R-, and electrical-related programs through innovation and technology by utilizing virtual reality training to keep up with the evolution of technical skills and training. Last year, StrataTech launched OcuWeld (ocuweld.com); a virtual reality training environment for welding that utilizes the Oculus Quest 2. StrataTech also integrates the virtual environment experience in the HVAC/R and electrical-related program curriculum in its continued goal to be the leader in technical education.

The first cohort for the new electrical- and HVAC/R-related programs at TWSTC began on

June 6. For more information about the new programs, please visit www.tws.edu.

NATIONAL



Foundation Helps Paralyzed Business Owner with Vehicle Modifications

Missoula, Mont. – Jacob Scheffel and his wife are the owners of a small firm in Stevensville, Montana which installs and services waste oil furnaces and boilers throughout Montana. On



JACOB SCHEFFEL WITH THE NEW MODIFICATIONS TO HIS TRUCK, COURTESY OF THE JOSEPH GROH FOUNDATION.

June 12, 2021, Jacob incurred a T4 complete spinal cord injury while riding his dirt bike. His spinal cord injury would allow him to drive his 2019 Toyota Tundra, only he needed \$20,000 of modifications to make that a reality.

Scheffel learned of the Joseph Groh foundation through a mobility company in Missoula, and he

petitioned the foundation for assistance. The foundation was able to provide the majority of the required funding for the seat transfer system and wheelchair lift, while another foundation provided a small grant for the driving controls.

The provision of these modifications will allow Jacob to be more independent. In addition, it will allow the husband and wife duo to keep their 4WD Tundra, which is important during Montana winters.

One Source Home Service Partners with Air Force

Colorado Springs, Colo. – One Source Home Service, powered by Air Pros USA, has become the exclusive air conditioning partner of Air Force Athletics. One Source Home Service became a part of Air Pros USA, an HVAC repair and service company, in 2020.

One Source Home Service will assume this sponsorship designation with the United States Air Force Academy beginning July 1, 2022. Complementing their category exclusivity, One Source Home Service will receive brand visibility via signage and other in-game aspects at Falcon Stadium during the 2022-2023 football season.

“One Source Home Service as part of the Air Pros USA family is honored to work with the Air Force Academy to support cadets and salute servicemen and women, as well as recognize veterans for their heroism and patriotism,” said Anthony Perera, president of Air Pros USA, parent company of One Source Home Service. “We continue to look for ways to give back, dedicating ourselves to military families and their prospective communities.”

Since the company’s inception, Air Pros USA, along with One Source Home Service, has been honoring veterans and active-duty service members with donations, giveaways, and free inspections. Air Pros USA also seeks to provide veterans with additional opportunities at hiring events.

“We are pleased to bring One Source Home Service on board as our exclusive HVAC partner,” said Air Force Academy Director of Athletics Nathan Pine. “Air Pros USA has always been a proud supporter of our Armed Forces, and we look forward to them being a valued partner of Air Force Athletics.”

The agreement between Air Pros USA and the Air Force Academy Athletic Corporation (AFAAC) was secured by LEARFIELD’s Air

Force Sports Properties, the Falcons’ multimedia rights holder.

HVAC Excellence Accreditation Granted to Baton Rouge College

Mount Prospect, Ill. – HVAC Excellence announced that the HVACR training program at Baton Rouge Community College in Baton Rouge, Louisiana has been granted accreditation.

Programmatic accreditation is an independent, third-party review of an educational program, comparing it to established, industry-accepted standards. These standards are designed to ensure that the future workforce receives the quality training required for success in the HVACR industry.

Upon a thorough review of all the documentation presented by the administration, faculty, and the onsite accreditation team, the HVAC Excellence accreditation review board unanimously decided to grant accreditation of the program.

Berner Names Rep of the Year Award Winners

New Castle, Penn. – Berner International, a U.S. manufacturer of air curtains, announced that manufacturer representatives R. Williamson & Associates LLC in Skokie, Illinois and SRS Enterprises in Middletown, New Jersey received the company’s “Rep of the Year 2021” gold honors in the commission sales and buy/resell categories, respectively.

Berner International also honored two other manufacturers’ representative firms for outstanding 2021 sales achievements:

- Gold Award Commission Sales – Scott Williamson, vice president; and Rob Williamson, president; of R. Williamson & Associates, Skokie, Ill.;
- Gold Award Buy/Resell – Richard Rose, partner; and Charles Cino, sales, SRS Enterprises, Middletown, N.J.;
- Silver Award Buy/Resell – Dominic Marcotte of Vigmark Inc., Montreal, Quebec;
- Bronze Award Buy/Resell –

Continued on Page 10

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GAW14L24C21S	2.0	14	29-1/4	30	29-1/4	135
GAW14L30C21S	2.5	14	29-1/4	36-1/4	29-1/4	150
GAW14L36C21S	3.0	14	35-1/4	33-1/4	31-3/4	195
GAW14L42C21S	3.5	14	35-1/4	33-1/4	31-3/4	195
GAW14L48C21S	4.0	14	38	36-1/4	34-1/4	200
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Continued from Page 8

Ed Goodrich, president, Equipment Direct Sales Inc., Randolph, Mass.

Emerson's GO Tracker Selected as Top Innovative Product of 2022

Bangkok, Thailand – Emerson announced that the new GO real-time 4G/5G tracker was selected as one of the Top Innovative Products of 2022 at the THAIFEX Anuga Asia trade show. The product was among 42 finalists and 15 winners that were hand-picked from over 500 entries, which came from more than 1,500 exhibitors at THAIFEX Anuga Asia.

The products chosen demonstrated food and beverage trends and innovation. The Top Innovation Show Finalists were selected based on criteria ranging from their uniqueness in taste and packaging to their ingredients and creative presentation, as well as technology. The Emerson GO real-time 4G/5G tracker was the only technology finalist in the elite product group.

"Whether customers are transporting food, health care items or other valuable cargo, our technology provides real-time data, insights and intervention services that enable our customers to take meaningful action for their valuable in-transit cargo," said Ivan Fullin, director of cargo solutions Asia for Emerson. "We are pleased to be recognized by our colleagues in Asia for this honor."

Using cellular technology, GO real-time 4G/5G trackers can monitor in-transit conditions such as temperature, location, light, and humidity. The technology enhances connectivity and access to data and enables visibility to temperature, humidity, and location data, despite the ongoing transition within the cellular technology industry. To help ensure optimal connectivity around the globe, the trackers can connect using multiple modes (Cat-M, NB-IoT or GSM) and have an in-use life of 20 days of operation. Combined with Oversight – Emerson's cloud-based online software platform – trackers can be configured to notify users in real time via text or email if any deviation of temperature-sensitive conditions arise during shipment.

The GO real-time 4G/5G tracker was featured at THAIFEX Anuga Asia, from May 24 to 28. THAIFEX Anuga Asia is a food and beverage connection event and includes stakeholders from the following markets: coffee and tea; food service; food technology; drinks; sweets and confectionery; meat; frozen food; fruits and vegetables; rice; seafood; and fine food.

FabricAir Refreshes Brand Identity

Lawrenceville, Ga. – FabricAir® Inc., the original manufacturer of fabric HVAC duct, has refreshed its brand identity and image with a new logo, tagline and redesigned website that reinforces its nearly 50 years of HVAC industry experience and inspires future fabric ductwork innovation.

The modernized FabricAir logo features a peacock blue, Verdana



font with contoured letters that emulate the rounded shape of fabric ductwork, the manufacturing foundation of the business.

The new tagline, "Innovating the HVAC industry since 1973" portrays the 49-year-old company's rich history and experience in innovation. FabricAir's HVAC innovation reputation is demonstrated in its fabric duct suspension systems such as the 360° Hoops for 100% round shape retention; airflow breakthroughs such as FabFlow™, MicroFlow™ or JetFlow™; and new products such as 2022's Ceiling Diffuser that consists of a flow panel that discreetly matches most suspended ceiling tile designs. "We will continue to deliver exciting products that transform and modernize the HVAC industry as we know it," said Brian Refsgaard, CEO.

The company's redesigned www.fabricair.com website reinforces the logo and tagline persona, but more importantly offers educational tools for engineers, contractors and commercial building owners. The site sports newly-created case studies, blogs, application example photos and a selection matrix aid for specification. The monthly blogs tackle corrosion, humidity, IAQ, fabric vs. metal considerations, air comfort and other issues confronting HVAC industry members.

FabricAir's international presence includes 14 subsidiaries in 120 countries, including its US/Canada subsidiary that operates through company regional sales managers and a network of dozens of HVAC manufacturer representatives.

For more information on FabricAir, visit www.fabricair.com.

GE Manufacturing Plant Opens in South Carolina

Camden, S.C. – GE Appliances, a Haier company, officially opened its \$70 million state-of-the-art water heating manufacturing plant in Camden, South Carolina. The site will serve as the company's Center of Excellence for water heater manufacturing and was built for future expansion.

Since 2016, GE Appliances has invested \$2 billion in its U.S. manufacturing and distribution operations, adding more than 3,000 new employees and creating



OPERATOR KIM FLEMING BUILDS A BURNER ASSEMBLY FOR THE NEW WATER HEATERS BEING MADE BY GE APPLIANCES IN CAMDEN, S.C.

an additional 88,000 jobs in the nation's economy.

"Investing in U.S. manufacturing is a winning strategy for GE Appliances bringing us even closer to our customers and enabling us to serve them better," said Kevin Nolan, president and CEO for GE Appliances. "We're doubling down on innovation in high-tech products, cutting-edge, advanced manufacturing, and creating American jobs."

The plant is vertically integrated and will produce units starting from coils of steel into water heaters. The new plant includes advanced systems for metal fabrication and welding, robotics for material handling and processing, and enameling of the steel. During the construction and in preparation for launch, more than 50 team leaders and maintenance employees completed more than 5,700 hours of training in robotics, welding, and mechatronics at nearby Central Carolina Technical College (CCTC).

The plant will initially employ 140 people with the plan to get up to 300.

"We are proud that Kershaw County is home to GE Appliances' new Manufacturing Center of Excellence for water heaters. The fact that they chose South Carolina for this state-of-the-art facility is a testament to our state's infrastructure and skilled workforce that allows companies to find success," said Governor Henry McMaster. "We thank GE Appliances for their commitment to South Carolina, and we look forward to continuing our long-standing business partnership for many more years to come."

Sold under the GE brand, the RealMAX™ gas water heaters offer key performance and convenience features such as a water heater offering that holds a true 30, 40, or 50 gallons of water, delivering 82 gallons of hot water in the first hour, and a durable design with up to a 12-year warranty.

"With every water heater model

we carry, we're committed to delivering maximum performance for the professional channel and distributors," said Tom Zimmer, executive director, water heating for GE Appliances Air & Water Solutions. "South Carolina local manufacturing coupled with GE Appliances' broad distribution system assures product delivery within days, offering quick access when our customers need it the most."

In 2020, GE Appliances announced the launch of Air & Water Solutions, a channel dedicated to serving the needs of professional contractors and wholesale distributors in the HVAC and plumbing industry.

"Our entrance into the plumbing and HVAC channel is focused on professional contractors who are on the front lines and never stop creating solutions for their customers," said Jim Skaggs, vice president of sales for GE Appliances Air & Water Solutions. "We are committed to matching their passion with a broad product portfolio, winning innovation, an iconic brand, and on-demand technical support."

Johnson Controls Invests \$7.5M Into Automation

Milwaukee, Wisc. – In April 2022, Johnson Controls completed a major \$7.5 million investment into new automation equipment at the company's commercial HVAC manufacturing plant in Norman, Oklahoma. The new equipment will increase capacity, while improving product quality, safety, and assembly productivity at the 900,000-square-foot facility, known as Johnson Controls Roof-top Center of Excellence.

"Johnson Controls is committed to surpassing our customers' expectations through the continu-

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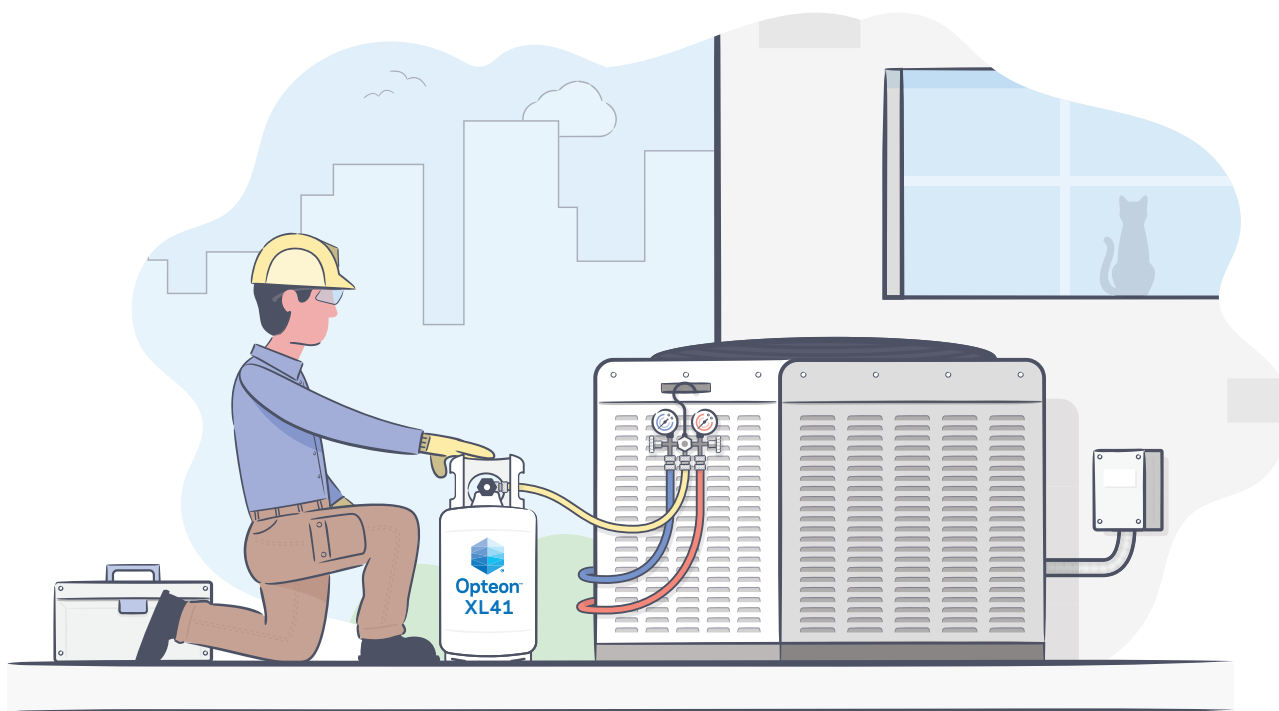
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Continued from Page 10

ous improvement of our manufacturing plants and investment into our product lines,” said Doug Schuster, vice president and general manager, global ducted systems, Johnson Controls. “We continue to invest in the improvement activities at the Norman facility to modernize and expand the plant, automate the manufacturing process, improve safety for our employees, and ensure our products are built to the highest quality standards possible.”

The new automation equipment includes the following:

- **Punch and Roll Forming Machine:** A new punch and roll forming machine will produce all base rails from coils to finished product in one process, supporting Select and Premier commercial rooftop

units. This all-in-one machine will take approximately 45 seconds of cycle time per rail, resulting in productivity gains and reduced material handling, while giving the operators an ergonomically sound process for fabricating rails. The machine also features kitting capabilities, which increases speed and reduces human error.

- **Robotic Press Brakes:** Three new robotic press brakes have been installed at the facility. The robotic arm in each machine moves parts to and from the press break before being placed on an exit conveyer. Three of these machines can be operated by one operator, resulting in productivity gains, improved quality, and repeatability.

- **Turret Laser Machines:** Two new turret laser machines

will punch and cut sheet metal for three newly installed assembly lines. Each machine features an eight-shelf loader for raw materials and finished parts, a 220-tool automatic tool changer and a part sorter. These machines will support growth plans by increasing capacity, providing redundancy for the laser cutting process and improving sorting productivity.

- **Auto Brazers:** The new auto brazers will increase output of fin and tube coils for large rooftop units and address the new coil lengths being introduced on future products.

The new equipment will increase facility capacity and streamline the manufacturing process, making employees jobs safer and more efficient, but jobs will not be impacted.

The most notable expansion of

the 50-year-old Norman facility was in April 2019. It now features nearly 400,000-square-foot of incremental laboratory and manufacturing space, which includes a two-story, 52-foot-high testing lab roughly the size of one-and-a-half football fields. The extensive laboratory allows Johnson Controls to conduct on-site development, regulatory compliance, performance, safety, and reliability testing, including the ability to test a 150-ton rooftop unit in climates ranging from -30°F to 130°F. The 2019 expansion also included renovations to more than 150,000-square-foot of office and meeting space. Today, the facility manufactures commercial HVAC systems for Johnson Controls, YORK, TempMaster, Luxaire, Coleman, and Champion brands.

REHAU Sells Its Business in Russia

Rehau, Germany – The REHAU Group will sell its business in Russia to the local management and will withdraw completely from the country. A corresponding preliminary agreement has now been signed by both parties.

REHAU had already announced on March 4, 2022, to ramp down its business in Russia in a controlled manner.

The REHAU Group has been active in Russia for around 30 years and has served the market there primarily with polymer-based solutions for the window, construction and furniture sectors.

New Standard Allows Higher A3 Charge in A/C

Washington, D.C. – A new standard, approved by the International Electrotechnical Commission (IEC), allows higher charge limits for hydrocarbons such as propane (R-290) and other flammable refrigerants in household technology, according to the Environmental Investigation Agency (EIA).

After a rigorous six-and-a-half-year process, a final draft of the new standard – officially designated IEC 60335-2-40 – was approved on April 29. Asbjørn Vonsild, the convenor of the relevant IEC working group who shepherded the safety standard through its revisions, said, “The new edition of IEC 60335-2-40 will enable R-290 [propane] to be used in many A/C and heat pump systems, which were previously blocked from using this refrigerant by the outdated version. This will enable a thousand-fold reduction in direct climate emissions compared with systems using R-410A.”

The revised safety standard allows for using a larger charge of flammable refrigerants (up to 988 grams of R-290 in a standard split air conditioning system) in new equipment designed according to certain additional safety requirements to ensure the same high level of safety as equipment using non-flammable refrigerants.

“After urging governments

Continued on Page 14



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System Diagnostics Module
(Four-Night Class, continued from Aug)**
Instructor: Mitch Bailey
Thurs., Sept. 1 – Part 2
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Thurs., Sept. 8 – Part 4

All classes are currently scheduled as Webinars held 6:00 pm to 8:00 pm. Webinars are FREE of charge and online registration is required.

You can register online by visiting: pge.com/hvactraining. Attendees must register for each night separately and registration is on a first-come, first-served basis. “PG&E” refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2022 Pacific Gas and Electric Company. All rights reserved. These offerings are funded by California utility customers and administered by PG&E under the auspices of the California Public Utilities Commission.



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Continued from Page 12

and industry to address this issue for many years, EIA is delighted to see this critical milestone reached on the pathway to net-zero and clean sustainable cooling,” said Clare Perry, EIA climate campaign leader.

The new standard was expected to be published on June 24. Countries will then be able to adopt the revisions into their national legislation.

Heatcraft, Chris Stephens Partner for Education

Stone Mountain, Ga. – Heatcraft Refrigeration Products, LLC, a manufacturer of commercial refrigeration equipment and systems, and contractor and industry educator Chris Stephens of HVACR Videos, are partnering to sponsor educational and training videos for HVACR contractors and service technicians.

Heatcraft will also work with Stephens to develop blog posts for Heatcraft’s website and feature Heatcraft subject matter experts on Stephens’ livestream podcasts.

In the first video sponsored by Heatcraft, Stephens responds to a service call for an iced-up walk-in freezer.

“Partnering with Heatcraft was an easy ‘yes’ for me because they are focused on educating the industry,” Stephens said. “I already work on a lot of their equipment and have always appreciated the improvements they make in terms of serviceability with each product update.”

Stephens grew up in the HVACR trade and has been working as a field technician for more than 20 years. Looking for a way to efficiently train his own crew of technicians, Stephens started a YouTube channel in 2017 and began recording and posting educational training videos where he diagnoses and solves equipment problems.

After receiving positive feedback, Stephens took the channel public and boasts more than 31 million views to date, making him an established and respected educator in the field. HVACR Videos covers topics and technologies such as walk-in coolers and freezers, ice machines, refrigeration, exhaust fans, tool reviews and live service calls.

“I always tell people to focus on the big picture diagnosis – to solve the problem rather than simply treating the symptoms,” Stephens said. “As technicians, we don’t always know everything, but we can strive to be our best.”

Each element of the partnership



CHRIS STEPHENS OF HVACR VIDEOS.

is part of Heatcraft’s core commitment to HVACR education and desire to give back to the industry by supporting the next generation of technicians. Additionally, the free exchange of ideas in the comments section on HVACR Videos’ YouTube channel allows Heatcraft experts the ability to connect and share knowledge directly with contractors.

“With experienced HVACR field service technicians retiring and taking critical knowledge with them, we see Chris’ work creating educational content as invaluable to ensuring the keys to the trade are captured and handed down to the next generation,” said Ashish Kapoor, chief marketing officer at Heatcraft Refrigeration Products. “HVACR Videos, along with informative blogs and podcasts, are excellent tools for training both new and seasoned technicians.”

For additional information about HVACR Videos, visit HVACRvideos.com. For additional information about Heatcraft, visit HeatcraftRPD.com.

Nortek Cooling Technology Slated for Upcoming Data Center in Manila

Oklahoma City, Okla. – Digital Edge (Singapore) Holdings Pte. Ltd., (“Digital Edge”), a leading Asian data center developer and operator, leverages StatePoint® liquid cooling technology manufactured by Nortek Data Center Cooling™, Oklahoma City, for its Manila, Philippines, colocation data center.

Using the patented StatePoint technology - an industry-leading sustainable cooling solution for hyperscale, colocation and other large scale data center formats - positions Digital Edge’s NARRA1 project as the most energy and water efficient IT facility in the Philippines.

The \$100 million (USD) joint venture with local technology and real estate company, Threadbone Group, is slated for fourth quarter 2022 completion. The 2,200-cabinet project is the first in Asia to use StatePoint technology in a commercial colocation facility. NARRA1 will be the largest carrier-neutral data center in operational capacity in the Philippines and is projected

as a paradigm for future digital infrastructure sustainability standards.

The refrigerant-free StatePoint’s cutting-edge, indirect evaporative methodology and its patented microporous membrane heat exchange process uses less than one fourth of the water needed for cooling and 20 to 30% less power compared to traditional cooling tower configurations. Nortek Data Center Cooling has deployed more than five hundred StatePoint units, cooling more than 1 million square feet of IT equipment in hyperscale and colocation data centers globally.

For more information about StatePoint technology, visit <https://www.nortekdatacenter.com/statepoint/>.

Fujitsu General Announces Premier Program Partnership

Pinebrook, N.J. – Fujitsu General America, Inc. has partnered with Service 1st Financial, LLC to offer the Premier Program® to its contractor partners. This partnership allows Fujitsu contractors to provide homeowners with a Home Comfort-as-a-Service leasing option for their residential heating and cooling needs.

The Premier Program is a worry-free service for homeowners to replace and upgrade their heating and cooling equipment for a low monthly payment, while eliminating the common pain points associated with owning, maintaining, and repairing such systems.

Delivered through a comprehensive, easy-to-use platform, the Premier Program is supported by industry-leading, on-site sales training. Contractors that utilize the Premier Program experience improved financial performance from higher close rates, increased average tickets, and profitable recurring revenue. Each Premier Program installation also features a long-term maintenance agreement that improves customer retention, secures annual cross-sell opportunities, and places the installing contractor first-in-line for the next replacement sale.

Homeowners will enjoy the most advanced home comfort systems and complete peace-of-mind knowing the installation was completed by a highly qualified and approved Premier Program contractor. Each Premier Program installation includes 24/7 priority scheduling, annual preventative maintenance, air filter replacements and covered emergency repairs while eliminating trip, diagnostic, and overtime fees.

This partnership promotes the

shared sustainability goals of Fujitsu and Service 1st. “The home comfort industry is a significant contributor to carbon emissions worldwide. It’s our responsibility to encourage consumers to make planet-friendly purchasing decisions,” said Anuj Khanna, Founder & CEO of Service 1st. “Replacing old home comfort systems earlier, making high efficiency products more financially accessible, and ensuring annual maintenance is performed are key contributors to reducing the industry’s carbon footprint. Together, Fujitsu contractors and the Premier Program can deliver on these critically important goals.”

Adding the Premier Program to your offering is fast and simple. For more, please visit www.wor-ryfreehomecomfort.com/fujitsu.

Heartland Home Services Acquires Williams HVAC

Grand Rapids, Mich. – Heartland Home Services (“Heartland”), the Midwestern leader in HVAC, plumbing and electrical home services, is pleased to announce that it has acquired Williams Heating and Cooling (“Williams”), a leading provider of HVAC services in the Detroit Metro area for over 100 years. The addition of Williams strengthens Heartland’s presence in the State of Michigan and bolsters the Company’s service offerings in the Detroit Metro area.

Williams specializes in designing, engineering, and installing complete comfort HVAC systems. They have a long-standing brand with excellent consumer loyalty.

“The partnership with Williams Heating and Cooling gives us more bandwidth to serve the dense Metro Detroit area. We are very pleased to welcome their outstanding team to the Heartland family of equally fantastic brands. Our expectations are high as we continue to partner with the best home service brands in the Midwest!” added Heartland CEO Bill Viveen.

Terms of the transaction were not disclosed.

About Heartland Home Services: Heartland is the leading technology-enabled provider of repair, replacement and maintenance services for the HVAC, plumbing and electrical markets in which we operate. The Company operates through 35 brands across 8 states including Illinois, Indiana, Kentucky, Michigan, Missouri, Ohio and Wisconsin. The Company collectively serves

over 1,000,000 customers annually with 1,600+ team members through a collection of industry-leading brands that date back to 1904. For media requests/info, please reach out to Leesa Fotis, Heartland Home Services, VP Marketing (leesa@heartlandhsc.com). Visit www.heartlandhsc.com for more information about Heartland Home Service family of brands.

Watts Awards Tester Certification Scholarships

North Andover, Mass. – Watts has selected 10 winners of a Backflow Testers of Tomorrow Scholarship in honor of the first annual National Backflow Prevention Day, held on August 16, 2021. The scholarships have been awarded to plumbers in the US seeking to obtain their initial backflow tester certification.

Each scholarship covers the cost of the backflow certification course(s) and exam. Recipients also receive a free one-year subscription to Syncta™ backflow test management software.

The winners were chosen by a committee of Watts backflow prevention professionals based on their passion to create safe water through cross-connection control and other criteria.

“We were overwhelmed with the response we received from folks looking to obtain their backflow tester certification,” said Danielle Swanson, Campaign Manager at Watts. “There were a lot of great applicants, and it was hard to narrow them down to 10.”

“I am trying to start my own plumbing business and want to be able to ensure backflow devices and methods are correctly installed and functioning,” said one of the scholarship winners. “As a veteran, I worked in a civil engineer unit where cross-connection surveys and backflow prevention were critical to the success of the mission. I want to be able to continue that in the civilian sector.”

“Our goal is to support skill building and growth within the plumbing and backflow testing industries and, more broadly, assist in the growth and longevity of trades,” said Swanson. “We congratulate these scholarship winners and all the plumbers/testers who will be tomorrow’s unsung heroes of water safety.”

For more information about National Backflow Prevention Day, go to <https://www.watts.com/backflow-prevention-day>.



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Introducing the New SMART MULTI™ Product Line

Mitsubishi Electric has launched a new product series - SMART MULTI. This line-up consolidates the quality of the PUMY line and the MXZ line into one outdoor unit. You will get the same functionality and compatibility in both standard and Hyper-Heat® models. SMART MULTI adds improved performance with higher SEER and HSPF ratings and comes with seacoast protection.



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- Requires branch box PAC-MKA[3/5]2BC

Efficiency improvements:

- SEER up to 23.0
- HSPF up to 12.5
- IEER up to 24
- COP:
 - at 47F: up to 4.19
 - at 17F: up to 2.64
- SHF: <0.79

Operating Ranges:

- Cooling: 23 to 115 °F DB
- Heating -13 to 70 °F DB

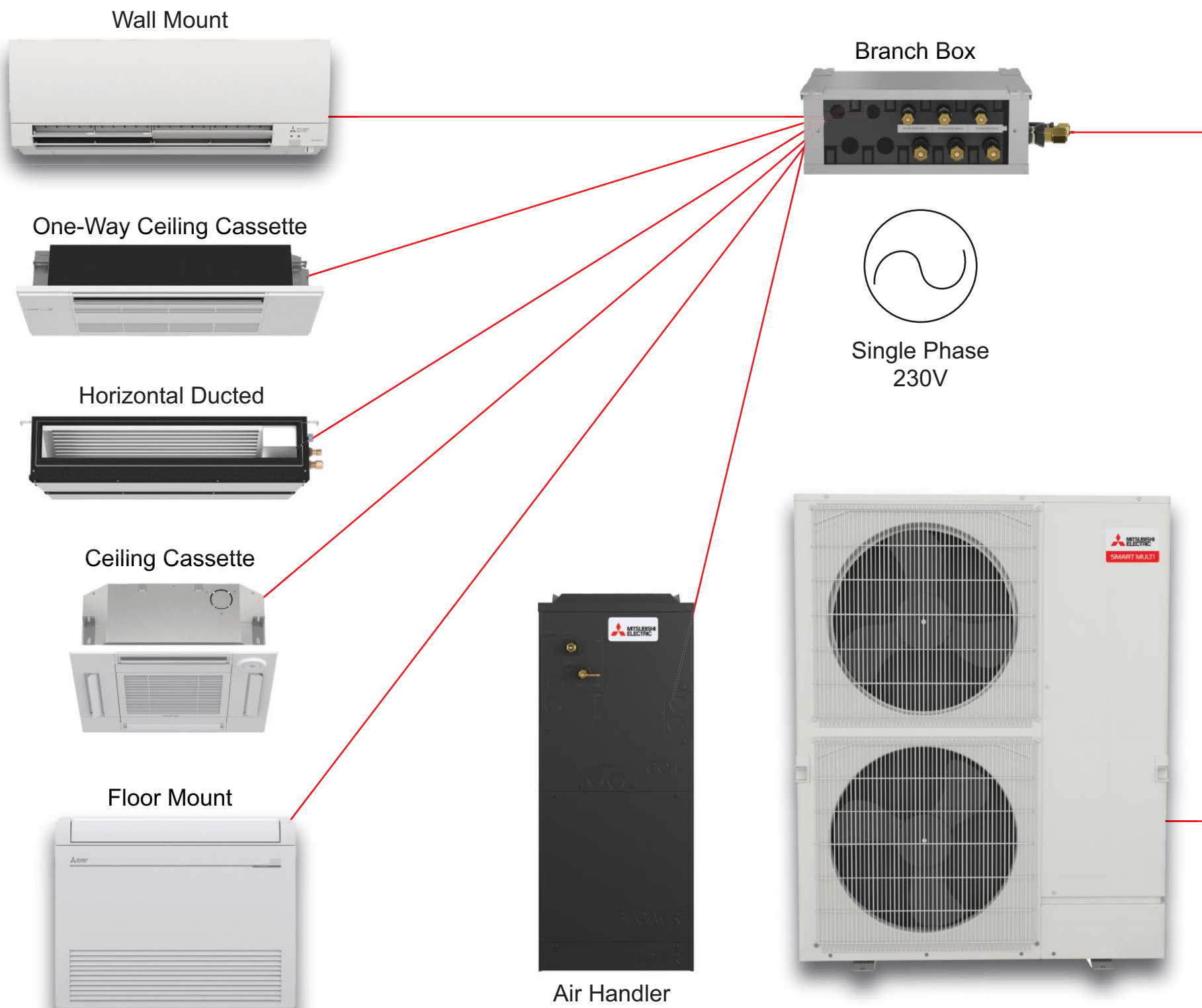
Outdoor unit enhancements:

- Seacoast protection standard on heat exchanger (Blue Fin) and base panel
- Rated for 2,000 hours in accordance with ASTM B117

Current PUMY (-BS) Models	NEW MXZ-SM Models	Current MXZ Branch Box Models
PUMY-P36NKMU3(-BS)	MXZ-SM36NAM	N/A
PUMY-HP36NKMU1	MXZ-SM36NAMHZ	MXZ-4C36NAHZ2
N/A	MXZ-SM42NAMHZ	MXZ-5C42NAHZ2
PUMY-P48NKMU3(-BS)	MXZ-SM48NAM	MXZ-8C48NA2
PUMY-HP48NKMU1	MXZ-SM48NAMHZ	MXZ-8C48NAHZ2
PUMY-P60NKMU3(-BS)	MXZ-SM60NAM	MXZ-8C60NA2

SMART MULTI™

with M & P Series Units



MXZ/PUMY	20	24	30	36	42	48	60
MXZ-SM	-	-	-	✓	-	✓	✓
MXZ-SM-h2i	-	-	-	✓	✓	✓	-
MXZ Ported-type	✓	✓	✓	✓	✓	-	-
MXZ-h2i Ported-type	✓	✓	✓	-	-	-	-



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Commercial Cooling

ClimaCool Modular Chillers



ClimaCool Modular chillers are the latest of releases of the company’s innovative products offering efficiency, flexibility and reliability. Modular chiller systems are the modern alternative to traditional chiller systems, offering innovative solutions and savings for building owners, system designers and installers. All of their modular chillers are designed, and configured for each specific project, and are suited for all commercial systems including heat recovery, heat pumps, free cooling, geothermal applications, and variable flow systems.

The compact size of the chiller module fit through a typical 36” wide doorway and onto standard freight elevators. The units have a smaller footprint than a conventional chiller, yet deliver the same capacity, making them ideal for projects where space or access is limited. Separate module electrical feed and dual independent refrigeration circuits mean built-in redundancy for 24/7 performance, even during maintenance.

Achieve energy efficiency with truly tailored turndown to your exact load requirements, all with the potential to cool and recover heat in the same machine. Your modular chiller bank can grow as the cooling and heating load demands of your facility grow or change.

- Features:
- CoolLogic Control System
 - Automatic CS Series
 - Strainer Package
 - Condenser Water Head
 - Pressure Regulating
- More information:** www.climacoolcorp.com.

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Berner International Architectural Collection

Berner International, New Castle, Pa., North America’s leading air curtain manufacturer and innovator, introduces the Architectural Elite, the debuting model of Berner’s new Architectural Collection, which has the most revolutionary and beautiful cabinet

redesigns in air curtain history. The patented Architectural Elite air curtain combines the air curtain industry’s decades-old energy savings and thermal comfort protection performance with today’s industry-leading controls platform and efficient, quiet electronically commutated (EC) motors.

The Architectural Elite design anticipates the increased demand from millennials and Gen-Z for aesthetic, high performing, quiet air curtains that support the increased sustainability goals of the built environment. The sleek and discreet cabinet design incorporates Berner’s strong engineering foundation to deliver a quiet, technologically advanced, and beautiful air curtain that performs. The design’s performance is AMCA certified and meets the vestibule exception of building and energy codes, ASHRAE 90.1-2019; ASHRAE 189.1; the IECC -2015, and the IgCC.

The Architectural Elite also features the Berner AIR™ advanced technology control platform for air curtains, which Berner developed in-house. This platform uses a wireless controller, encrypted at the processor level, to connect the Berner App 2.0 to Berner’s built-in Intelliswitch™ digital controller. The Intelliswitch can operate as a stand-alone air curtain controller, interlock with any building management system (BMS) and interface with the Berner App 2.0. It has a time clock, time delay, built-in thermostat, 10-speed fan control, and other integrated, end-user customizable features. The Berner App 2.0 allows account-based user management and lets facility managers add air curtains from different locations for air curtain programming and universal monitoring from their smartphone.

The Architectural Elite 8 and 10 air curtains use 1/5-hp and 1/2-hp EC motors, respectively, for unprecedented air curtain efficiencies and better articulated fan speed control. Both models use Berner’s patented high efficiency, low noise, articulating Pro-V Nozzle, which strategically discharges air to meet the floor a few inches outside the threshold or “break” for a total air seal.

Optional factory-installed hot water coils feature innovative hid-



den top-panel connections instead of conspicuous side input/output 5/8-inch-diameter (15.8-mm) piping. The AE08 uses a single-stage electric heater and the AE10 uses the Berner’s patented, high-efficiency Venturi open element electric heater.

More information: www.berner.com.

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Carrier WeatherExpert



Carrier is pleased to announce that its WeatherExpert® line of rooftop units now includes the variable-speed 48JC gas/electric and 50JC electric/electric models designed to vary cooling capacity down to 25% and up to 105% of normal capacity. The units boast impressive SEER ratings up to 20.0 and feature innovative EcoBlue Technology. Carrier, a world leader in high-technology heating, air-conditioning and refrigeration solutions, is a part of Carrier Global Corporation (NYSE: CARR), a leading global provider of innovative heating, ventilating and air-conditioning (HVAC), refrigeration, fire, security and building automation technologies.

The 48/50 JC units are the products of extensive research and development designed to harness the power of variable-speed technology in order to achieve the features and benefits of the WeatherExpert line. They are available in three phase voltage and come in 3-, 4- and 5-ton sizes. In addition, these new models have the industry’s smallest rooftop footprint and lightest weight for this type of equipment, furthering their ideal fit for both new construction and replacement jobs.

Most notable of EcoBlue Technology’s many features is the exclusive beltless direct-drive vane axial fan system – an industry first for rooftop units when introduced in 2018. This patented technology replaces traditional belts, pulleys, and forward curve fans with a simpler, more compact design, all with 75% fewer moving parts. The outdoor fan system’s high-density composite blade fan is also an exclusive design. Both fans are dynamically balanced for quieter operation. Other technological advances that differentiate these units include the intelligent, in-

tuitive and integrated SystemVu™ controls and coil technology that uses proven round tube, plate fin designs, increased factory options and a tool-less filter access door.

“We are excited to announce the release of the efficient variable-speed WeatherExpert line that offers customers precise comfort control in a building,” said J.B. Spillane, managing director, North America Light Commercial HVAC, Carrier. “Coupled with our EcoBlue Technology and impressive weight advantages, the 48/50 JC models will provide great value for building owners seeking an efficient HVAC solution in replacement and new construction applications.”

The WeatherExpert 48/50 JC units also features an optional patented Humidi- MiZer® Adaptive Dehumidification system that provides additional dehumidification control and standard SystemVu™ controls, which brings the benefits of a large text display, quick LED status, smarter diagnostics through ongoing, real-time information and built in i-Vu®, CCN and BACnet® capabilities.

More information: www.carrier.com/ecoblue.

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Greenheck ERV



Greenheck’s new high-performance residential energy recovery ventilators (ERVs) provide balanced ventilation that improves energy efficiency and ensures multifamily projects meet code and exceed indoor air quality expectations. Four models are available with a variety of options and accessories and all offer Home Ventilating Institute (HVI) certified airflow.

Both the ASSURE120 and SYNC110 offer a 50-130 cfm operational range in a compact low-profile design that simplifies installations with limited mechanical space such as bulkheads and drop ceilings. In addition, the SYNC110 is powered by two Electronically Commutated Motors (ECM) with adaptive, variable speed technology programmed to adapt to the static pressure associated with a dirty filter or core. The motor reacts to increased static pressure by increasing its speed

to ensure the airflow required to maintain a healthy balance. The SYNC180 and SYNC270 are cold-weather certified ERVs that when paired with the PrecisionSYNC control allow for measurement of the SYNC110 Energy Recovery Ventilator maximum airflow capacity of the installation and precisely adjust airflow to meet design and code requirements. The SYNC180 offers a 75-200 cfm operational range and features best-in-class core efficiency with a Sensible Recovery Efficiency (SRE) of 84%. The SYNC270 offers a 75-280 cfm operational range and features best-in-class core efficiency with a Sensible Recovery Efficiency (SRE) of 77%.

All models include a Total Recovery Core that transfers heat and moisture between two crossflow airstreams without allowing cross contamination. When used for balanced mechanical ventilation in humid environments, the unit helps to reduce air conditioning (AC) energy costs. In colder climates, moisture transfer is reversed and the unit helps to moderate humidity with its core acting as a highly efficient heat exchanger.

Greenheck’s multifamily products are available through Greenheck’s nationwide network of experienced mechanical representatives. Greenheck offers complete ventilation solutions for multifamily, hotels and institutional buildings including bathroom ventilation, stairwell pressurization, dampers, louvers, packaged rooftop systems (DOAS and make-up air), garage ventilation, grilles, registers, diffusers, powered roof ventilation, ceiling radiation dampers and auto-balancing dampers.

More information: www.greenheck.com/residential-ventilation/multi-family.

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Hitachi PRIMARY P300



Hitachi has introduced a new Wall Mount indoor mini-split unit as the newest addition to its PRIMARY P300 line of high-efficiency, single-zone commercial mini-split systems. This energy-efficient and cost-effective ductless heating and cooling solution is designed to meet the unique needs of small to mid-size spaces such as shops, restaurants and classrooms. “The new Wall Mount PRI-

Commercial Cooling

MAIRY indoor unit intelligently optimizes the comfort in a space while reducing sound levels and power consumption while offering ease of installation to contractors and technicians,” said Manuel DelaFuente, vice president and general manager of Johnson Controls-Hitachi North America.

The new Wall Mount unit is compact and lightweight, and the full line of Hitachi PRIMARY mini-split systems come in multiple placement options that simplifies installation for contractors. Long piping further enhances layout flexibility, and a wide capacity range means there’s a precisely sized system for every application. Indoor units come in a range of styles and types to meet customer needs and ap-

plication aesthetics. The systems have a uniquely wide temperature range, performing in low-ambient temperatures down to -13°F(-25°C) (for the 24K model) and down to -4°F(-20°C) in heating mode for all other models. The comfort needs of shops and restaurants can fluctuate based on a variety of factors, including occupancy levels. At the press of the “SMART” button, the new Wall Mount unit automatically adjusts temperature and fan speed based on the actual room temperature to provide optimal comfort, regardless of the unit being on or off. Users can also activate the intelligent temperature control

that provides ideal conditions for the space. The remote control is equipped with a temperature sensor that measures just over three feet into the surrounding temperature of the environment and transmits that information to the indoor unit every three minutes, intelligently adjusting according to the perceived temperature. Further, the unit provides nearly immediate cooling thanks to rapid inverter startup technology that allows the compressor to quickly reach its highest frequency. When occupants are shopping, sharing a meal or attending an educational course, excess noise can affect their concentration. The new Wall Mount system features advanced comfort control technology,

an innovative air duct design and a high-quality, silent DC motor, allowing the unit to significantly increase airflow and improve its distribution without generating additional sound or consuming more energy. Some PRIMARY models can achieve ultra-low sound levels. **More information:** www.hitachi-aircon.com/us. **Samsung Single Zone Systems** Samsung’s new Light Commercial (CAC) single zone systems now offer 9 types of indoor units, ranging from 9,000 to 48,000 Btu/h, to provide solutions for

almost any application. With increasing decarbonization and electrification efforts, Samsung put a strong emphasis on high cooling performance, heating capacity, efficiency ratings and features. Many systems are Energy Star® certified and qualify for numerous energy rebates and programs including NEEP. Select capacities provide 100% heating capacity at -4°F (-20°C), high heating operation down to -13°F (-25°C) and feature an integral base pan heater to promote optimal water drainage during defrost cycles. Samsung’s high-performance

Continued on Page 20

Ferguson Trades

Continued from Page 1

communities.” “We are excited about educating young people and encouraging them to embrace the artistry and ingenuity that comes from engaging their minds with their hands to build, craft, and construct the future,” said Melissa Hazelwood, director of Ferguson Cares, in a statement. “Providing students with the tools and resources they need, along with the ongoing support of highly experienced industry professionals, demonstrates our commitment to them and their craft, and sets the students up for success in the professional trades.” The grant recipients have developed partnerships with the following institutions: • Armstrong Plumbing, Air, Electric and Byron Martin Advanced Technology Center in Lubbock, Texas – Plumbing program. • Pat Plumbing, Heating & Air and Washburn Tech in Topeka, Kansas – Plumbing program. • Peaden Air Conditioning, Plumbing & Electrical and Tom P. Haney Technical College in Panama City, Florida – HVAC program • Rite Way Heating, Cooling & Plumbing and Rincon High School/Joint Technical Education District in Tucson, Arizona – HVAC Program

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Commercial Cooling

Continued from Page 19

systems paired with the robust SmartThings platform puts Samsung at the top of the list when it comes to innovation, comfort and overall user experience. Building managers can control and monitor Samsung systems through the SmartThings app. The app features an Energy Dashboard providing detailed information to help reduce overall energy consumption.

In addition, most indoor unit model numbers are compatible with Samsung's FJM (multi-zone) and Light Commercial (CAC) single zone systems to simplify the overall number of SKUs for distributors and dealers to manage.

More information: www.samsunghvac.com.



Trane Modular Commercial Self-Contained Unit

The new energy efficient Modular Commercial Self-Contained 40-to-80 ton water-cooled air conditioning unit from **Trane**, a leading global provider of indoor comfort solutions and services and a brand of Ingersoll Rand, features a cassette construction and offers the industry's smallest modular sections and footprint.



This high-performance unit is the industry's only solution that fits through a standard-size doorway and most elevator doors, facilitating a faster, money-saving installation process. This solution features variable speed compressors and fans that increase energy efficiency and sustainability while reducing operating costs.

"Building owners will appreciate how this modular, energy-saving, high-performance unit enables more rentable space and avoids wall damage or removal during installation," said Manlio Valdes, vice president, product management and marketing. "This unit is ideal for retrofits where building space or mechanical/equipment-room entry proves challenging when installing or replacing a traditional unit."

The unit's easy-to-use UC600 Trane controls provide enhanced management over building equipment to ensure continued optimized performance. Technicians can enable a customized programmable sequence of operation for these controls during field installation. The controls can be modified and supported via a connected device, from anywhere in the world.

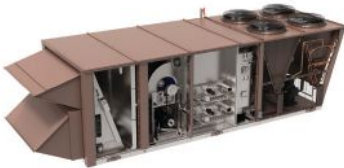
The unit's cassette construction provides cost-saving, easy accessibility to parts when maintenance or repairs are necessary,

facilitating minimal downtime and avoiding interruptions for tenants. The unit comes with Trane global expertise and local support.

More information: www.trane.com.

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YORK Sun Select



The **YORK** brand of Johnson Controls has launched a new series of commercial rooftop units designed to deliver class-leading performance, serviceability and flexibility, all in a cost-effective package. YORK Sun™ Select 27.5–50 ton rooftop units exceed aggressive Department of Energy (DOE) energy efficiency standards, reducing operational costs over the lifetime of the unit.

"The new Select commercial rooftop units were designed with the future demands of our customers in mind by offering industry leading efficiencies paired with a rich compliment of features and options," said Eric Newberg, director, Commercial Product Management, Ducted Systems, North America, Building Technologies & Solutions, Johnson Controls. "Bringing maximum value without sacrificing quality is important for our customers. SMART controls

combined with a flexible design are key to decreasing installation, maintenance and operating costs – saving more money over the life of the unit with a shorter payback window."

Select rooftop units are optimized with the latest proprietary advances in modeling technology to help preemptively identify issues, and an optional Mobile Access Portal (MAP) offers remote diagnostic monitoring for fewer trips to the job site. Single-side access to all serviceable items provides ease of service that is further simplified with accessible connections, service ports, coil cleaning hatches, hinged access panels, convenience outlets, service disconnect switches and optional service valves.

Units are supported by the new Johnson Controls Commercial Application Support organization, which provides expert pre-sale consultation, and Johnson Controls Commercial Technical Service team, which provides leading field support. These teams offer technical and field support throughout every aspect of ownership, including selection, installation, replacement and service.

Select rooftop units are offered alongside the award-winning YORK Sun™ Premier platform to provide a complete and competitive offering in this tonnage range. The new units offer up to 31% greater part-load efficiency (IEER) than competitive models and up to 15% greater IEER than the YORK Millennium™ legacy product. Energy costs are reduced to industry-leading

levels with 4-stage IntelliSpeed™ models available in 2020. In addition, Select rooftop units exceed aggressive DOE 2023 energy efficiency standards by up to 22%, while surpassing current DOE 2018 levels by up to 39%.

Select rooftop units feature easy-to-use controls that include a start-up and commissioning wizard to simplify the installation process. In addition, the units feature a prepackaged Smart Equipment controls platform for even greater efficiency and a full array of user-adaptable parameters. The units integrate seamlessly with building automation system Verasys to help maximize control for extended equipment life and reduced operating costs.

Additional features include:

- Multiple airflow strategies, including two-stage constant-volume, two-stage with IntelliSpeed™ fan control, four-stage variable-air-volume and four-stage with IntelliSpeed™ fan control.

- Competitive replacement opportunity with same footprint as the majority of similar tonnage-range units in the field, minimizing the need for costly, leak-prone transition curbs.

- A broad range of outdoor air options, including low-leak damper economizers, manual dampers, barometric relief, constant volume powered exhaust and modulating powered exhaust.

- Multiple heat options, including staged and modulating gas heat, stainless steel heat exchangers and electric heat*.

More information: www.YORK.com/SunSelect.

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Refrigeration Day

Continued from Page 1

ing food loss would both feed greater numbers of undernourished people and advance climate protection. In addition, the wise selection and operation of cooling technology contributes significantly to protection of ozone layer and climate change combat.

"Cooling matters. And keeping food safe is one example of that," said Steve Gill, founder of World Refrigeration Day. "Cooling is at the very heart of modern life. And the importance of cooling to the global food chain and sustaining human life on our planet cannot be overestimated."

Cooling's significance is sometimes taken for granted by govern-

ments, end users, and the public. "Cooling makes so many important contributions to our society, with direct connections to lives, livelihoods, health, nutrition and environmental protection. Besides its main purpose of keeping food fresh and safe to eat, a refrigerator can also be an agent of change to help solve environmental challenges such as preserving Earth's ozone layer, fighting climate change, and promoting energy efficiency," said Jim Curlin of UNEP's OzonAction Law Division. "The Cooling Keeps Food Fresh campaign seeks to motivate the public to learn about the myriad benefits of cooling."

According to the United Nations Food and Agriculture Organization, the contribution of food

waste emissions to global warming is almost equivalent to global road transport emissions. If it were a country, food waste would be the third largest emitting country in the world.

"Industry can facilitate the reduction of food waste and its negative environmental impact by promoting greater access to food preservation technology and promoting the development and utilization of cost-effective, energy-efficient equipment with reduced environmental impact," said Juergen Goeller, co-chair of the Global Food Cold Chain Council and director of regulatory affairs for Carrier Refrigeration. "A sustainable food cold chain will be an economic, social and environmental net-positive."

The York® HMM7 Horizontal Discharge Heat Pump:

2-5 Ton • Standard 24 Volt Controls • Works With Conventional Air Handling Units and Evaporator Coils • Price Competitive With Standard Heat Pumps

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- Up to 18 SEER/10.5 HSPF
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- 36% quieter operating sound; as low as 54 dBA
- Capable of dual-fuel operation when paired with an existing or new furnace, using a Venstar thermostat
- Inverter system and modulating technology
- Modulating technology maintains exact temperatures by operating from 35-100% capacity
- 40% more compact than standard heat pump units and can be installed in tighter spaces – ideal for high-density areas
- No unique installation procedures required
- Long line set length (up to 246 ft)
- Designed to work with standard ECM indoor air handlers
- Includes a standard 10-year Compressor Limited Warranty and 10-year Parts Limited Warranty; extended warranties available for a full system replacement (product registration required)

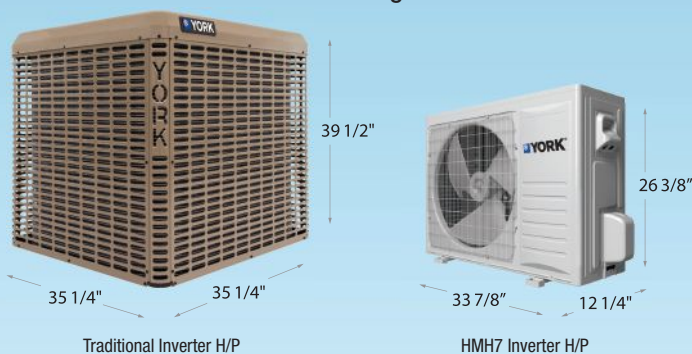
The YORK® HMM7 Heat Pump is designed to provide all the comfort and technology of a high efficiency unit at the cost of a base-tier vertical unit for residential customers. It's an ideal solution for homes that require a compact design and comes in several models and tonnages with flexible installation options and innovative features.



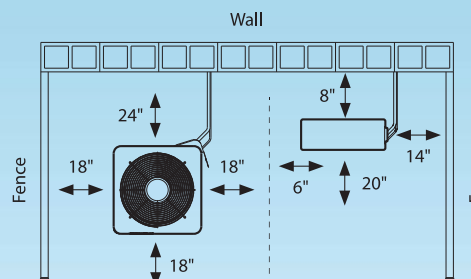
Model	Tons	SEER	HSPF	Height (Inches)	Width (Inches)	Depth (Inches)	Operating Weight (Lbs)	Sound Range (dBA) Low-High*
HMM72B241S	2	17.5	9.0	26 3/8	33 7/8	12 1/4	112	54-65
HMM72B361S	3	18.0	10.5	33	37 3/8	13 3/8	155	56-68
HMM72B481S	4	18.0	9.5	54 5/8	37 3/8	13 3/8	227	62-69
HMM72B601S	5	17.0	10.0	54 5/8	37 3/8	13 3/8	251	62-73

*High sound rated in accordance with AHRI Standard 270.

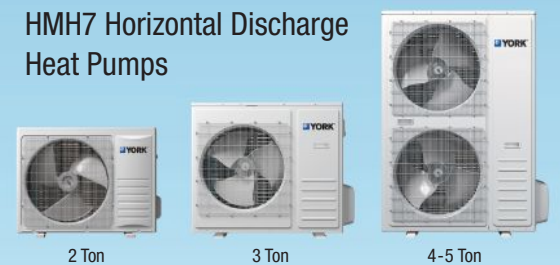
40% smaller footprint compared to traditional vertical discharge units



Traditional, Vertical Unit Minimum Clearances vs. HMM7 Minimum Clearances



HMM7 Horizontal Discharge Heat Pumps



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Growing Green Technicians Part 153: Room Size, Supply Duct System Performance

By Jim Johnson
Contributing Editor

In last month's segment in this series, our focus was on the concept of TEL (Total Effective Length) in a duct system and how properly positioned fittings such as take-offs and the correct use of Ell's will ensure that the resistance created by using those fittings will be overcome and allow the necessary air flow through the supply duct system.

In this issue we'll consider a simplistic approach to understanding air flow into each room in a building and technicians taking a green approach to a customer's "running but not keeping comfortable" complaint. An important

point we want to consider here is that when supply air flow is being evaluated in regard to individual rooms, when we're considering room measurements and the necessary air flow into each area, we're not load estimating.

What we're focusing on is the supply duct system and how its design and/or present condition could affect the overall comfort level in the building, and also keeping in mind the idea that the condition of the building envelope could be affecting the performance of the system.

In **Figure One**, we're illustrating a simple approach to the supply duct system and considering the individual rooms in the building, and how each one requires the

Bedroom 1 12 x 10 120 sq. ft.	Dining Room 14 x 14 196 sq. ft.	Kitchen 16 x 17 272 sq. ft.
Bedroom 2 12 x 12 144 sq. ft.	Bath 8 x 12 96 sq. ft.	Living Room 22 x 20 440 sq. ft.

FIGURE 1

correct amount of air flow from the supply and back to the return.

When you add up the individual room sizes shown, the total square footage of the building is 1,268, which is one of the factors regarding the detailed load estimate that ultimately

Bedroom 1 12 x 10 96 CFM	Dining Room 14 x 14 156.8 CFM	Kitchen 16 x 17 217.6 CFM
Bedroom 2 12 x 12 115.2 CFM	Bath 8 x 12 76.8 CFM	Living Room 22 x 20 352 CFM

FIGURE 2

leads to the proper sizing of the duct system. For our example, we'll decide that all aspects of the heat load calculations have been accomplished correctly, and the equipment size is 2.5 ton.

And, in consideration of that

sizing, we'll apply an air flow of 400 CFM per ton, which means our total supply air output will be 1,000 CFM.

With our total CFM output calculated, our next step will be to divide the total CFM by the total square footage:

$$1,000 \text{ CFM} / 1268 \text{ sq. ft.} = .788$$

Now we have a factor (.788, which we'll round up to .8) that we can apply to the individual square footage of each room to get a general idea of the proper amount of air flow into the rooms themselves. (See **Figure Two**)

The point to consider here from a technician's perspective is that if the duct sizing process was accomplished correctly in regard to the appropriate friction losses and the design considerations of the structure, we can get a handle on evaluating the performance of the system by employing a flow hood to determine if the air flow to each individual room is sufficient from at least a general perspective.

And, if it's not, we know that further testing and evaluation of the air flow is necessary before proceeding with checking any other aspects of the equipment, such as the refrigerant pressures, superheat, or subcooling.



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Troubleshooting

A No Cool Complaint from a Heating/Cooling System

By Jim Johnson
Contributing Editor

The equipment in this troubleshooting situation is a heating/cooling system in a second home that the residents occupy on a part-time basis. They told the dispatcher that last time they were there was in January, and at that time, the system performed normally.

When you arrive and check the situation indoors, you note that the temperature is far above the standard comfort level, that the thermostat is set properly for the cooling mode, and that the indoor fan motor is operating normally. You also check the filter and find it clean.

Your observation of the equipment operation is as follows:

...The outdoor fan motor is very hot and not operating.

...The compressor is also very hot and not operating.

...The contactor is pulled down into closed position.

After confirming that both the compressor and outdoor fan motor were off on their internal overloads, you prepare your professional grade digital meter to check the run capacitors. (See **Figure One**) When checking the OFM RC, your meter briefly shows a row of numbers on the display, then flashes a different row of numbers repeatedly.

Your troubleshooting question: *What is the next step you need to take in servicing this equipment?*

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 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

LEGEND

H1: Electric Heater
HC: Heater Contactor
C: Contactor
COMP: Compressor
RC: Run Capacitor
OFM: Outdoor Fan Motor
IFM: Indoor Fan Motor
IFC: Indoor Fan Capacitor
FS: Fan Switch
IFR: Indoor Fan Relay
TR: Transformer
HP: High Pressure Switch
LS: Limit Switch

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."

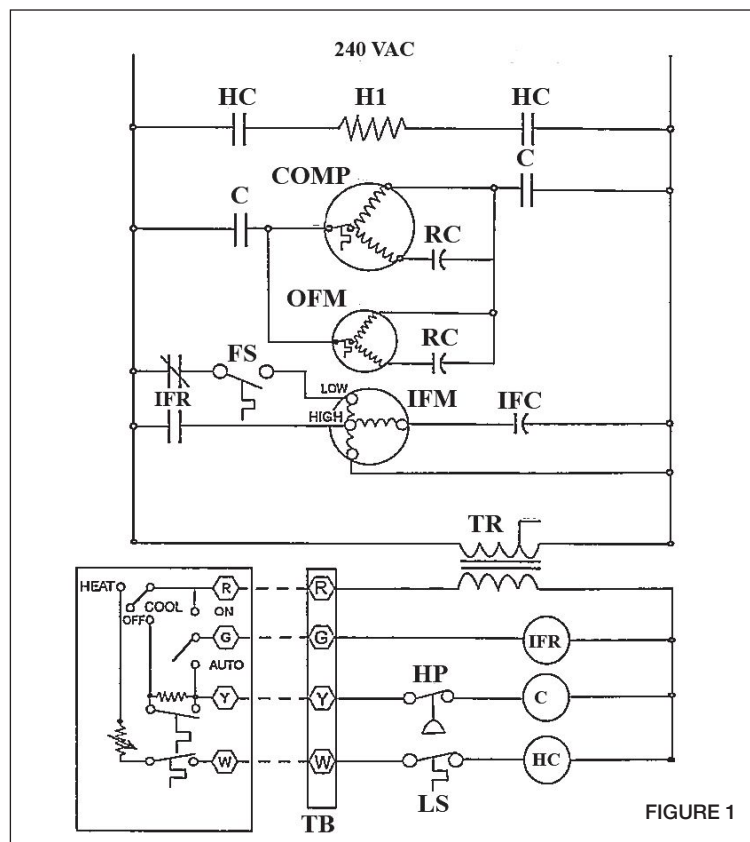


FIGURE 1

Answer to Last Month's Question

The next step is to replace the outdoor fan motor thermostat control. In a high ambient temperature situation, this control device should be operating the outdoor fan motor on high speed. Our voltage tests showed the high-speed circuit to the fan was open and the low-speed circuit was complete.

The answer to the bonus question is: True.

The winner of last month's Troubleshooting is:

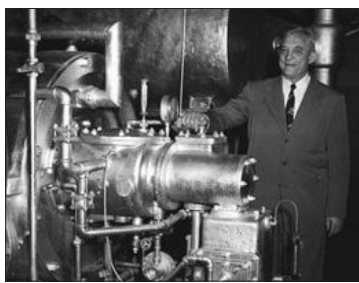
Christopher Caceres

Company Spotlight

Carrier Celebrates 100th Anniversary of Centrifugal Chiller Tech Invention

On the evening of May 22, 1922, 300 people were invited by Willis Haviland Carrier to a sheet metal shop in Newark, New Jersey, for a free meal and a boxing match followed by the unveiling of the first centrifugal chiller technology. Today, Carrier celebrates the 100th anniversary of the invention of the centrifugal chilling machine that in many ways made the modern world possible. Carrier is a part of Carrier Global Corporation (NYSE: CARR), the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.

"Carrier's breakthrough invention opened the door to large-scale comfort air conditioning while improving the effectiveness of process cooling," said Gaurang Pandya, President, Commercial HVAC, Carrier.



WILLIS HAVILAND CARRIER WITH ONE OF THE FIRST CENTRIFUGAL CHILLING MACHINES.

"Each day we build on that legacy, innovating with purpose to create what's next, get ahead of changing requirements, unleash the power of digital technology, run smarter with IoT and help customers deploy commercial HVAC solutions aligned tightly with their business objectives."

Carrier's conception to combine a centrifugal refrigeration

Continued on Page 30



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Trane, Discovery Education Launch National STEM Education Initiative

New Initiative to inspire students to be climate innovators.

Trane Technologies and Discovery Education announced they have teamed up to launch a multimedia Science, Technology, Engineering, and Math (STEM) education experience for students in grades 5 to 10. The multifaceted learning program includes interactive tools, resources, and volunteers to engage and inspire students to learn, think, and solve the world's biggest sustainability challenges – such as climate change and food waste – through

sustainable innovation.

“We’re excited to launch this unique learning experience in collaboration with Discovery Education to reach students across demographics, including those in underserved communities,” said Deidra Parrish Williams, Trane Technologies’ leader of global corporate social responsibility. “The goal is to expose them to STEM concepts and experts at work in the real world, and encourage them to pursue careers in science, technology, and sustainability. Our company’s purpose is to boldly challenge what’s possible for a sustainable world. This initiative does



just that by inspiring students to explore themes and topics, problem solve and develop creative solutions. It is accessible to all, and easy for educators to incorporate into their curriculums.”

The program is part of Trane Technologies’ Sustainable Futures corporate citizenship strategy, which uplifts underrepresented students and communities through access to STEM education, enhanced learning environments, and pathways to green careers. The company has committed \$100 million and 500,000 employee volunteer hours by 2030 to deploy Sustainable Futures in communities where it operates

and serves.

A core feature of the learning experience is a virtual field trip, “Reimagining Today for a More Sustainable Tomorrow.” The engaging virtual experience gives students an up-close look at climate innovators at work across Trane Technologies. During the field trip, students will encounter professionals from diverse backgrounds as they demonstrate real cases of how bold thinking can spark leading edge innovation. Students can also connect directly with STEM professionals for classroom talks, mentoring, and career exploration. Program resources will be available to schools and educators throughout the United States, starting May 24.

“Innovation sprouts from courage and creativity in STEM. Sustainable Futures with Trane

Technologies helps inspire students to create real-world sustainable solutions that make the world a better place, both in their own neighborhood and around the world,” said Beth Meyer, vice president of social impact at Discovery Education. “By connecting the dots between STEM and sustainability, educators can access critical resources to empower students with forward-thinking content that sets them up for future success.”

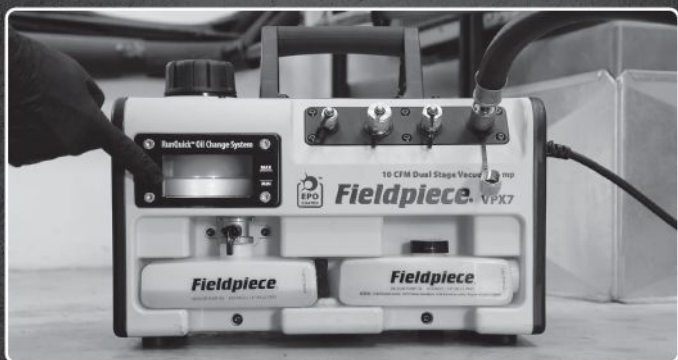
Connecting educators to a vast collection of high-quality, standards-aligned content, ready-to-use digital lessons, intuitive quiz and activity creation tools, and professional learning resources, Discovery Education provides educators an enhanced learning platform that facilitates engaging, daily instruction.

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Daikin to Sponsor '23 National HVACR Education Conference

Daikin, a manufacturer of air conditioning equipment, is making a big investment in education through a major sponsorship of the HVAC Excellence National HVACR Education Conference. This annual event allows HVACR educators, trainers, and other professionals to gather and learn about new and emerging technologies, get answers from, and be inspired by industry leaders, exchange ideas with industry peers, while gaining a better understanding of the future of the HVACR industry.

Daikin envisions a society where people and space are healthier and more comfortable, while reducing the environmental impact. To this end, Daikin realized that to achieve these goals, they needed to invest in educating the HVACR workforce, which begins with their sponsorship of the National HVACR Education Conference. Daikin has supported career

and technical education around the globe, and has received the Award for Excellence at the Career Education Awards sponsored by the Ministry of Economy, Trade, and Industry of Japan. Through their sponsorship of the National HVACR Education Conference, Daikin is making an investment in the North American workforce.

According to Jeff Bledsoe, contractor development manager at Daikin Comfort Technologies, “It’s not about making an immediate sale, it’s about building a pipeline of qualified technicians in the marketplace. This helps the industry across the board, so customers enjoy the comfort of our equipment. This is also improving the education across the industry as a whole. As the number one HVAC manufacturer in the world we view this as part of our commitment to the industry. We are also extremely proud to be able to provide those resources and assistance to those

who want and need it.”

“Statistics illustrate that technology is growing at a faster rate today, than at anytime in the past. Experts predict that this trend will continue, with the HVACR industry being among those that will see the most change,” added Jerry Weiss, chairman, HVAC Excellence. “To remain current and relevant in an ever-changing industry, everyone must continue to adapt and learn. With Daikin taking a leading role, HVAC Excellence and our industry partners will be able to do more at the National HVACR Education Conference to help everyone involved in the education process become more effective in their roles.”

To learn more about the 2023 National HVACR Education Conference, being held March 20-22, 2023 at the South Point Hotel in Las Vegas, Nevada, visit escogroup.org and click on the conference link.

Trinity Warranty Solutions Offers Scholarships to HVAC Students

Trinity Warranty Solutions is offering scholarship opportunities for individuals that are studying in trade schools or colleges to become HVACR technicians. The scholarships total \$8,000, with four \$2,000 scholarships awarded annually.

Scholarships will be awarded based on financial need, eligibility requirements, academic merit, and interest in pursuing a career in HVACR. Trinity employees and children of employees are ineligible

to apply.

Eligibility requirements:

- Students must be planning to enroll or are currently enrolled in an HVACR program at an accredited trade school or college for the entire 2023-2024 academic year;
- Must be U.S. Citizens, U.S. Nationals, and U.S. Permanent Residents based on the guidelines utilized by the U.S. Department of Education Federal Financial Aid eligibility;

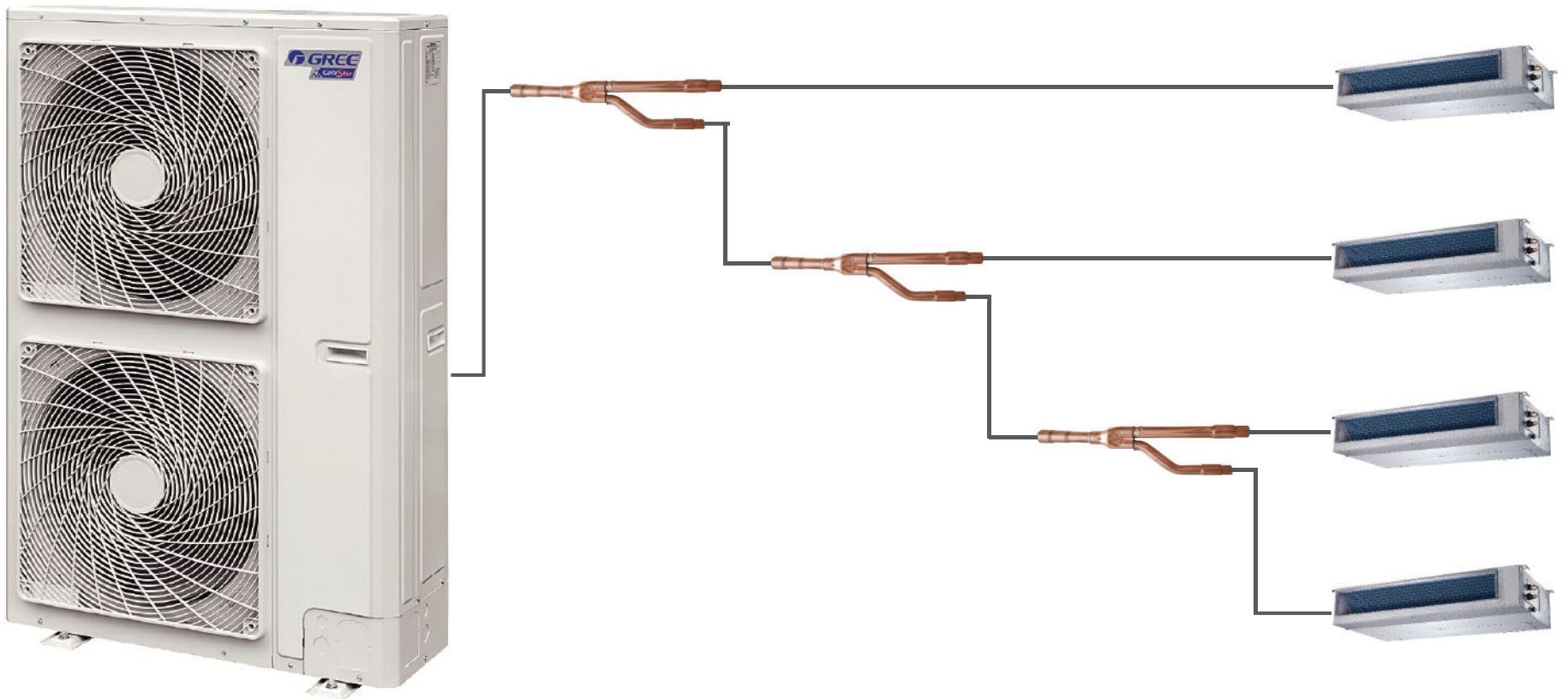
- Minimum GPA (grade point average) of 3.0 on a 4.0 scale or equivalent; and

- Pursuing an associate’s degree, certificate, or diploma in HVAC or refrigeration.

Application submission opens June 1, 2022 and closes December 31, 2022. Scholarship winners will be notified February 2023.

For more information, visit <https://www.trinitywarranty.com/hvacr-scholarship>.

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FERGUSON HVAC FOURSOME, WITH GOLF TOURNAMENT CHAIRMAN STEVE ADAMS (FAR RIGHT).



PLAYERS PARTICIPATING IN THE TOURNAMENT'S HOLE-IN-ONE GOLF CONTEST.



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METUS Celebrates Distributors at Diamond Leadership Conference in Florida

Mitsubishi Electric Trane HVAC US LLC (METUS), a supplier of ductless and ducted mini-split and variable refrigerant flow (VRF) heat-pump and air-conditioning systems, recently held its 2021 Diamond Leadership Conference at the Ritz Carlton Key Biscayne in Key Biscayne, Fla. The conference recognized distributors for their outstanding performances.

Keynote speaker, economist Robert Genetski, spoke to the

group of 300 about the economic environment and provided insights on best practices for safeguarding businesses. Conference events included business updates from executives, breakout sessions, a luxury yacht dinner cruise, and activities including power boats, golf, local food tours of South Beach and an awards ceremony to celebrate winners' accomplishments.

"We're honored to have the opportunity to host and celebrate our

distributors for their great work and success," said Mark Kuntz, chief executive officer, Mitsubishi Electric Trane HVAC US LLC. "Coming together to recognize their accomplishments is always a meaningful experience."

The 2021 National Distributor of the Year Award was presented to Homans Associates of Wilmington, Massachusetts. Rich Iandoli, Joe Baker, Mark Potenza, Mike MacDonald, and Scott DePinto accepted the award on behalf

of the company at the awards ceremony.

METUS business units also presented 2021 Residential Distributor of the Year and Commercial Distributor of the Year Awards to channel leaders. The following companies received awards:

Residential:

- Crescent Parts & Equipment, St. Louis, Missouri, Southwest Business Unit
- Homans Associates, Wilmington, Massachusetts, Northeast

Business Unit

- Ferguson HVAC, Pomona, California, West Business Unit
- The Gustave A. Larson Company, Pewaukee, Wisconsin, Central Business Unit
- Ferguson HVAC, Caldwell, New Jersey, Mid-Atlantic Business Unit
- Ferguson HVAC, Charlotte, North Carolina, South Business Unit

Continued on Page 31

Unilever Projects Warm Up Ice Cream Freezers to Reduce Energy Use

Unilever's pilot projects will explore whether higher temperatures affect product quality.

Unilever is launching two pilots to trial warmer ice cream freezer cabinets with an aim of reducing energy use and greenhouse gas emissions by approximately 20% to 30% per freezer, while ensuring the same ice cream quality and consumer experience.

The pilots, one kicking off this spring in Germany with a second to follow in Indonesia next year, are the first step in exploring and understanding the product performance of ice cream and the energy consumption of freezers at warmer -12°C (10.4°F) temperatures in real-life conditions.

With a current industry standard in many markets of -18°C (0°F), Unilever's ambition is to move the temperature of its retail sales freezers to -12°C to improve energy efficiency and reduce greenhouse gas emissions, in a move that it hopes will drive industry-wide change.

Following the completion of the first two pilots and if successful, Unilever will work to "warm up" its last mile freezer cabinets in a phased approach. Unilever will start in markets where its last mile freezer cabinet carbon footprint is highest, to achieve the maximum reductive impact on its

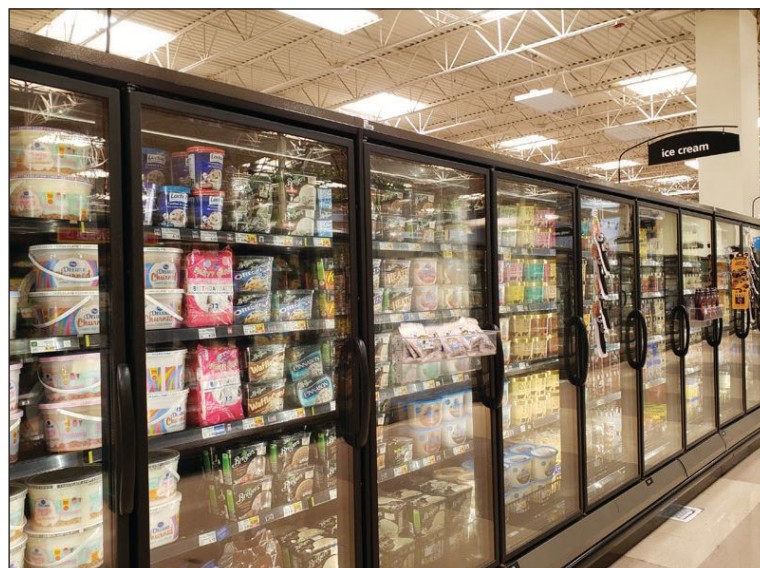
own carbon emissions. It is hoped that other ice cream manufacturers will follow.

Matt Close, president of ice cream at Unilever, said, "These pilots will provide valuable information on how much energy we can save and how our ice cream products perform in warmer freezers to ensure we deliver the same great tasting ice cream. We're actively seeking to collaborate with partners from across the ice cream and frozen food sectors to drive industry-wide change, so the collective positive impact is far greater."

Emissions from retail ice cream freezers account for 10% of Unilever's value chain greenhouse gas footprint. Unilever's Climate

Transition Action Plan sets out the company's roadmap to reduce these emissions, including reducing cabinet energy consumption through innovation of the main technical components (e.g., compressors), exploring programs that will enable the freezers to be powered by renewable electricity, and working towards "warming up" the cold chain.

"Warming up" the cold chain is just one of the steps Unilever is taking to reach its ambitious climate targets which include zero emissions from its operations by 2030, halving the full value chain emissions of its products (per consumer use) by 2030, and achieving net zero emissions across Unilever's value chain by 2039.



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AUGUST

Commercial Cooling Tower Module

(Two-Night Class) Instructors: Mike Griffin / John Dalton

Tues., Aug. 2 – Part 1

Tues., Aug. 9 – Part 2

SEPTEMBER



NATE CORE & Gas Heating Training

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Wed., Sept. 7 – Part 1

Thurs., Sept. 8 – Part 2

Wed., Sept. 14 – Part 3

Thurs., Sept. 15 – Part 4

OCTOBER



NATE AC/HP Refrigeration & Air Distribution Training

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Wed., Oct. 5 – Part 1

Thurs., Oct. 6 – Part 2

Wed., Oct. 12 – Part 3

Thurs., Oct. 13 – Part 4

Sat., Oct. 15 - NATE Exam, 7:30 a.m.

SOUTHERN CALIFORNIA EDISON, IRWINDALE

SEPTEMBER

Air Distribution Module

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Wed., Sept. 21 – Part 1

Thurs., Sept. 22 – Part 2

Wed., Sept. 28 – Part 3

Thurs., Sept. 29 – Part 4

OCTOBER

AC/HP Refrigeration Module

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Wed., Oct. 19 – Part 1

Thurs., Oct. 20 – Part 2

Wed., Oct. 26 – Part 3

Thurs., Oct. 27 – Part 4

NOVEMBER

System Diagnostics Module

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Wed., Nov. 9 – Part 1

Thurs., Nov. 10 – Part 2

Wed., Nov. 16 – Part 3

Thurs., Nov. 17 – Part 4

SOUTHERN CALIFORNIA EDISON, TULARE

SEPTEMBER

System Performance Module

(Four-Night Class) Instructors: Mitch Bailey / TBA

Tues., Sept. 13 – Part 1

Wed., Sept. 14 – Part 2

Tues., Sept. 20 – Part 3

Wed., Sept. 21 – Part 4

OCTOBER



NATE CORE & Gas Heating Training

(Two-Night Class) Instructors: Mitch Bailey / TBA

Wed., Oct. 12 – Part 1

Thurs., Oct. 13 – Part 2

Wed., Oct. 19 – Part 3

Thurs., Oct. 20 – Part 4

NOVEMBER



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(Two-Night Class) Instructors: Mitch Bailey / TBA

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(Four-Night Class) Instructors: Mitch Bailey / TBA

Mon., Oct. 10 – Part 1

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NOVEMBER

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(Four-Night Class) Instructors: Mitch Bailey / TBA

Mon., Nov. 7 – Part 1

Tues., Nov. 8 – Part 2

Tues., Nov. 15 – Part 3

Wed., Nov. 16 – Part 4

Sat., Nov. 19 - NATE Exam, 7:30 a.m.

JULY

System Diagnostics Module

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Wed., July 6 – Part 1

Thurs., July 7 – Part 2

Wed., July 13 – Part 3

Thurs., July 14 – Part 4

AUGUST

System Performance Module

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Wed., Aug. 3 – Part 1

Thurs., Aug. 4 – Part 2

Wed., Aug. 10 – Part 3

Thurs., Aug. 11 – Part 4

SEPTEMBER

Chiller Module

(Two-Night Class) Instructors: Mike Griffin / John Dalton

Tues., Sept. 6 – Part 1

Tues., Sept. 13 – Part 2

Commercial Cooling Tower Module

(Two-Night Class) Instructors: Mike Griffin / John Dalton

Tues., Sept. 20 – Part 1

Tues., Sept. 27 – Part 2

OCTOBER

Boiler Module

(Two-Night Class) Instructors: Mike Griffin / John Dalton

Tues., Oct. 4 – Part 1

Tues., Oct. 11 – Part 2

Commercial Refrigeration Module

(Two-Night Class) Instructors: Mike Griffin / John Dalton

Tues., Oct. 18 – Part 1

Tues., Oct. 25 – Part 2

NOVEMBER

NATE CORE & Gas Heating Training

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Mon., Nov. 21 – Part 1

Tues., Nov. 22 – Part 2

Mon., Nov. 28 – Part 3

Tues., Nov. 29 – Part 4

DECEMBER

NATE AC/HP Refrigeration & Air Distribution Training

(Four-Night Class) Instructors: Mike Griffin / John Dalton

Mon., Dec. 5 – Part 1

Tues., Dec. 6 – Part 2

Mon., Dec. 12 – Part 3

Tues., Dec. 13 – Part 4

Sat., Dec. 17 - NATE Exam, 7:30 a.m.

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Indoor People



SARAH MONTELEONE

Controls Group North America (CGNA) announced the appointment of the company's new President, **Sarah Monteleone**, who succeeds Michael J. Sackett and will retain his role as CFO for the foreseeable future.

"I am honored to join CGNA as the new president," said Monteleone. "As someone who has been involved with this amazing network for many years, I'm looking forward to taking on this new role and I am excited to build upon the great work that so many people have done before me."

Monteleone's leadership appointment is part of a rigorous and comprehensive search from the board of directors and advisors. The CGNA leadership team is excited to work with Monteleone as the HVACR Controls and Building Automation Systems network continues its focus on accelerating growth and new opportunities.

Monteleone holds a B.A. in Business Finance from the University of Charleston, and has extensive experience in the HVACR and BAS industries. The established relationships she has developed over the years and her understanding of the CGNA network is predicted to benefit the organization.

Prior to this role, Monteleone was recruited by Honeywell as a business development executive, focused on launching a new solution. She also served as vice president of sales at Connect Air

Wire & Cable and sales manager and national accounts for Functional Devices.

Michael Sackett expressed confidence in the board's choice. "Sarah is a remarkable executive with years of industry experience and knows many of the leaders in our industry. Sarah was introduced to CGNA as a preferred vendor at Functional Devices. She has a deep understanding of our industry and how to succeed within our network."

• • • • •



SIMONE WALZEL

Armstrong Fluid Technology has announced that **Simone Walzel** has joined the company as global head, Data Centers.

Walzel has invested more than 20 years in the mission-critical industry. After launching her career with Honeywell, she has worked in progressively senior roles with Schneider Electric, Emerson Network Power, Stream Data Centers, and Vertiv.

In her new role, Walzel will lead a global team of sales professionals serving customers directly and through an established partner network.

"We're extremely proud that Simone has joined us," said Joachim Schulz, commercial director, Global Building Business. "She is an experienced data center professional and the perfect leader to take on this opportunity."



GREG WELLS

MAX Service Group, which operates a number of heating, cooling, and plumbing companies in the Midwest, announced **Greg Wells** as its new president.

Wells, who has been with MAX Service Group for more than six years, started with the company in the role of fleet and safety manager and spent more than four years as director of sales before being promoted to vice president, and now, president.

"It is an honor to lead MAX Service Group, and I hope to follow the superior leadership footsteps left by Jacob Huck," said Wells. "Time and time again, I've been in awe of the way this company has been able to not only impact customers through exemplary services, but make a real impact in the communities it serves, as well. I'm thrilled to continue with MAX Service Group in this new role, and am confident we'll be able to expand upon our top-notch reputation to do more great things in the industry and in the Midwest."

Former MAX Service Group President Jacob Huck will remain with the company as a special project manager.

"When I decided I wanted to step away from the President's role with MAX Service Group to spend more time with my family, my instinct was to look within the company for a successor," said Huck. "Greg immediately came to mind. He has a long history of

success with MAX Service Group and is an incredible leader. I have no doubt he'll push the company forward in meaningful ways, and I am confident he'll help spur more growth for the business."

MAX Service Group operates Williams Comfort Air and Mr. Plumber in central Indiana, Thomas & Galbraith Heating, Cooling & Plumbing in southwestern Ohio, Buckeye Heating and Cooling in greater Columbus, Ohio and Jarboe's Heating, Cooling & Plumbing in greater Louisville, Kentucky.

• • • • •

Mestek announced that **Jeff Pitcairn** has joined their Boiler Products Group as a senior sales engineer. Pitcairn comes to Mestek with over 35 years of experience designing and selling HVAC systems, with specific concentration on hydronic-based systems including boilers and heat pumps.

The company said that they consider Pitcairn to be "coming home," as he was a product manager and application engineer for both Smith Cast Iron Boilers and Hydrotherm Boilers early in his career. Most recently, Pitcairn was a regional sales manager for Skidmore Pump and IEC and prior to that, he spent 14 years with Taco, Inc. as the eastern regional sales manager, commercial products.

In his new position, Pitcairn will



JEFF PITCAIRN

concentrate on actively promoting the the company's existing hydronic product portfolio, including boilers, water heaters, commercial heat pumps, and active chilled beams across various Mestek brands including RBI, Advanced Thermal Hydronics, Dadanco, and the recently acquired Transom, Inc.

As a dedicated commercial hydronics solutions engineer, Pitcairn will also assist representatives, engineers, and contractors in both product training and system design in a solutions-based approach.

• • • • •



GARETH RICHARDS

Unico, Inc., maker of small-duct central heating and air conditioning systems, has appointed **Gareth Richards** as its West Coast territory manager. Richards will be factory representative for The Unico System in California, Oregon, and Washington.

Richards brings 20 years of strong sales and territory management experience to Unico. Born in the United Kingdom, his family emigrated to California when he was a boy. Richards once owned an import business bringing goods from India to the U.S. market.

In the years since, he has worked with industrial and facility maintenance customers. His latest role before joining Unico was as a maintenance contract sales representative for a commercial HVAC firm.

Carrier Centrifugal

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compressor with a shell, a new type of condenser and a chiller on one frame enhanced process cooling in factories around the world. Following the first installation of three centrifugal chillers at a Philadelphia chocolate factory in 1923, Carrier's innovation soon provided process cooling to rayon manufacturers in India and cracker factories in Mexico.

In 1924, Carrier realized his dream of comfort cooling when the owners of a Detroit department store added centrifugal

chillers. The centrifugal technology reliably and affordably delivered comfort air to the public in theaters, stores, restaurants, sports venues, ships, hospitals and office buildings.

A decade later centrifugal refrigeration had driven process air into more than 200 industries. Food and beverage production became safer, hospitals were more comfortable and sanitary and new lifesaving drugs, such as penicillin became possible.

By providing precise temperature and humidity, centrifugal chiller technology has supported the infrastructure of the modern digital age, including electronics of

every type, semi-conductor chips, data centers and robotics. These new inventions and new technologies couldn't have existed without it.

While the fundamental physics of centrifugal technology have not changed in a century, Carrier engineers have never stopped driving new advancements in centrifugal chiller technology. Today, the Carrier AquaEdge® 19DV water-cooled chiller provides world class energy-efficiency with its unique free cooling and heat recovery options that boost the total energy savings of the system while using ultra-low global warming potential refrigerant. The AquaEdge

19MV water-cooled chiller offers a wide operating range in a greatly reduced machine size to replace older chillers. Both machines feature the unique EquiDrive™ two-stage back-to-back compressor technology to dramatically reduce energy consumption.

From digitally enabled applied systems and connected controls to business-process-focused offerings to efficient high-rise residential systems to healthy building with automation systems and sustainability solutions, Carrier HVAC technology continues shaping the future. To learn more about the history of the centrifugal chiller, visit carrier.com/100.

Founded by the inventor of modern air conditioning, Carrier is a world leader in high-technology heating, air-conditioning and refrigeration solutions. Carrier experts provide sustainable solutions, integrating energy-efficient products, building controls and energy services for residential, commercial, retail, transport and food service customers. Carrier is a part of Carrier Global Corporation, the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.

For more information, visit carrier.com or follow @Carrier on Twitter.

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- 1 – Robinair Vacumaster Vacuum Pump (Model - 15600 6 CFM) - \$150

METUS Conference

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- Commercial:
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 - Homans Associates, Wilmington, Massachusetts, Northeast Business Unit
 - A/C Warehouse Inc., Honolulu, Hawaii, West Business Unit
 - The Gustave A. Larson Company, Pewaukee, Wisconsin, Central Business Unit
 - Luce, Schwab and Kase, Inc., Fairfield, New Jersey, Mid-Atlantic Business Unit
 - Johnstone Supply, Jacksonville, Florida, South Business Unit
 - Efficiency Limited, Bermuda, International Business Unit

NEW IHACI MEMBERS

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- **CY HVAC Supply**, El Monte, CA
- **Mor Air Inc.**, North Hollywood, CA
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- Luce, Schwab and Kase, Inc., Fairfield, New Jersey, Mid-Atlantic Business Unit
- Yandle-Witherspoon Supply, Inc., Charlotte, North Carolina,

South Business Unit

Commercial:

- Norman S. Wright Co., Albuquerque, New Mexico, Southwest Business Unit
- Homans Associates, Wilmington, Massachusetts, Northeast Business Unit
- Ferguson HVAC, Pomona, California, West Business Unit
- Midwest Mechanical Solutions, Golden Valley, Minnesota, Central Business Unit
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