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JUNE 2020

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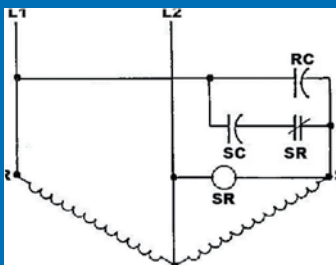
THE WEST'S LEADING MONTHLY NEWSMAGAZINE FOR THE AIR CONDITIONING, HEATING, REFRIGERATION, SHEET METAL AND VENTILATING INDUSTRIES



Editorial Focus

What's new? What's been improved? Find out here as ICN takes a look at the latest offerings in Residential Cooling.

Page 13



Troubleshooting

In this month's problem, the equipment is a split system that the customer says is not cooling at all.

Page 16



Indoor People

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

Page 19

ASHRAE Issues Statements on COVID-19, HVAC in Buildings

Expanded guidance available on organization's newly updated COVID-19 resources page.

ASHRAE has published two statements to define guidance on managing the spread of SARS-CoV-2, the virus that causes COVID-19 disease (Coronavirus) with respect to the operation and maintenance of HVAC systems in buildings.

"In light of the current global pandemic, it's critically important that ASHRAE responds with guidance on mitigating the transmission of the virus, as well as ventilation and filtration recommendations," said 2019-20 ASHRAE President Darryl K. Boyce, P.Eng. "ASHRAE has a significant role to play in ensuring safe and healthy building environments and these statements offer the expert strategies needed at this time."

ASHRAE developed the following statements in response to widening false statements surrounding HVAC systems. ASHRAE officially opposes the advice not



to run residential or commercial HVAC systems and asserts that keeping air conditioners on during this time can help control the spread of the virus. The official statements are below.

ASHRAE's Statement on Airborne Transmission of SARS-CoV-2/COVID-19

Transmission of SARS-CoV-2 through the air is sufficiently likely that airborne exposure to the virus should be controlled. Changes to building operations, including the operation of heating, ventilating, and air-conditioning systems, can reduce airborne exposures.

Continued on Page 18

Inside

Project Spotlight

"Mesa Modern" Showcase Home in Palm Springs Features Ferguson HVAC Products

By Ted Rieger
Northern California Correspondent

Ferguson HVAC supplied Trane and Mitsubishi HVAC equipment and provided system design assistance for a new home in Palm Springs, Calif. known as "Mesa Modern," a featured showcase home for the annual Palm Springs "Modernism Week" home tour held in February.

Ferguson, through its Bath, Kitchen & Lighting Gallery in Rancho Mirage, also supplied many of the home's plumbing and lighting features and appliances. Ferguson was a major corporate sponsor of 2020 Modernism Week, and has been an event sponsor for six years. When Mesa Modern was in the planning stages, associates at the Ferguson Gallery Showroom contacted the Ferguson HVAC Division branch in nearby Indio to be a partner in the home's



(At right) A Trane XR16 Series 4-ton split system heat pump serves the south side of the "Mesa Modern" home (above).



planning and construction. The project involved many local and international artists, artisans, and construction and design contractors to create a modern masterpiece. Karen Okner Design of Palm

Continued on Page 12

DEPARTMENTS

Industry News 4

Technical Training 17

Case Study 18

Classifieds 22



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3.0	4TWR4036G1000A
3.5	4TWR4042G1000A
4.0	4TWR4048G1000A
5.0	4TWR4060G1000A



XR15	
TONS	SKU #
1.5	4TWR5018G1000A
2.0	4TWR5024G1000A
2.5	4TWR5030G1000A
3.0	4TWR5036G1000A
3.5	4TWR5042G1000A
4.0	4TWR5048G1000A
5.0	4TWR5060G1000A



XR16	
TONS	SKU #
1.5	4TWR6018H1000A
2.0	4TWR6024H1000A
2.5	4TWR6030H1000A
3.0	4TWR6036H1000A
3.5	4TWR6042H1000A
4.0	4TWR6048H1000A
5.0	4TWR6060H1000A



XR17	
TONS	SKU #
2.0	4TWR7024A1000D
3.0	4TWR7036B1000D
4.0	4TWR7048A1000D
5.0	4TWR7060A1000D



XR16 (LOW PROFILE, SIDE DISCHARGE)			
TONS	SKU #	TONS	SKU #
1.5	4TWL6018A1000A	3.5	4TWL6042A1000A
2.0	4TWL6024A1000A	4.0	4TWL6048A1000A
2.5	4TWL6030A1000A	5.0	4TWL6060A1000A
3.0	4TWL6036A1000A		

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Industry News



CALIFORNIA



CoolSys Recognized as Top Service Provider by Pepco

Brea, Calif. – CoolSys Energy Solutions, a division of CoolSys, the parent of market-leading refrigeration and HVAC service companies nationwide, was recognized as the top overall service provider by Pepco, an energy company serving

the District of Columbia and parts of Maryland. The award was given as part of Pepco's Energy Savings for Business Program at its annual award ceremony in Baltimore, Maryland.

"We are honored to be recognized by Pepco for our work in bringing greater energy efficiency to their operations," said Anthony Tippins, president of CoolSys Energy Solutions. "Strengthening our partnerships with utility companies like Pepco is vital to providing comprehensive energy solutions and maximizing incentives for our clients. We would like to congratulate our entire team for successfully working together with Pepco to achieve its goals."

CoolSys Energy Solutions earned the Pepco top overall service pro-

vider award for LED installations in 2019 as part of energy-efficient lighting upgrades at Giant Foods in the Pepco service area. Senior Project Manager John Barnett, Project Manager Jeremy Young and Project Coordinator Wyatt Wilkins managed the installations. Warren Graham, Product Manager of CoolSys Energy Solutions also worked directly with Pepco on the incentives. Pepco is one of the 30 utility companies that CoolSys Energy Solutions has worked with to complete more than 400 projects on the East Coast in the past 18 months.

"Pepco congratulates CoolSys for being named our Energy Savings for Business top overall service provider for 2019," said William Ellis, senior manager, Energy Efficiency Portfolio for Pepco Holdings. "We applaud

your commitment to helping businesses save energy and money. Your hard work will inspire other service providers to bring the benefits of energy efficiency to their own customers."

ARIZONA



Technical Training Associates Videos Available Online

Sahuarita, Ariz. – Technical Training Associates has announced that their training videos are now available online via ELN, the ESCO Learning Network, where HVACR technicians and contractors can purchase individual training programs on specific subjects, or choose access to a complete video library via a subscription plan.

TTA representative Jim Johnson, who developed and presents the training, said: "We have worked with ESCO group for more than 25 years, using their resources to accomplish training and certification testing for HVACR technicians, and we know they can be trusted to provide quality learning opportunities for technicians, and resources for instructors, in this new online platform."

For information, visit <https://elearning.escogroup.org/> or call 800-726-9696.

TEXAS



Abacus to Offer Unprecedented Lifetime Warranty

Houston, Texas – Abacus Plumbing, Air Conditioning & Electrical announced its new and unprecedented Abacus Lifetime Warranty. The warranty – which includes parts and labor on new air conditioning systems – is the

first comprehensive coverage available to customers in south-east Texas.

Long a leader in customer service and a perennial winner of Better Business Bureau awards, Abacus is now raising the bar for long-term peace of mind. Features of the exclusive Abacus Lifetime Warranty include:

- Zero out of pocket for parts and labor
- Zero service fee or trip charge
- Zero deductible
- Priority service on any issue 24/7/365
- Covers major component pieces

"At Abacus Plumbing, we believe in building lasting relationships with customers who appreciate our level of expertise, detail and customer care," said Alan O'Neill, CEO & Founder.

Abacus' Lifetime Warranty on select Lennox air conditioning products guarantees customers will receive the latest technology that follows EPA guidelines, to help protect the ozone and ensure the maximum value of energy efficiency.

"With the Abacus Lifetime Warranty, we are putting our money where our mouth is," said Lance Ellison, HVAC Operations Manager. "We guarantee you'll be taken care of 100% after installation is completed by our licensed and insured, certified, background-checked technicians."

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Epicor Launches Commerce Site

Austin, Texas – Epicor Software Corporation, a provider of industry-specific enterprise software to promote business growth, announced the launch of Epicor Commerce Connect Express (ECC Express), a new portal to its existing Epicor Commerce Connect solution. The e-commerce product is designed for businesses which need an immediate way to improve productivity, offer quality online experiences, and stay connected to their valued customers and suppliers.

ECC Express is an e-commerce solution designed to be an affordable and scalable solution that can be implemented in only a few days. The product enables users to build a basic online presence, with the option to choose other upgrades and capabilities to further scale their business. It is the

Continued on Page 6

LIVE ONLINE PROCTORED EXAMS

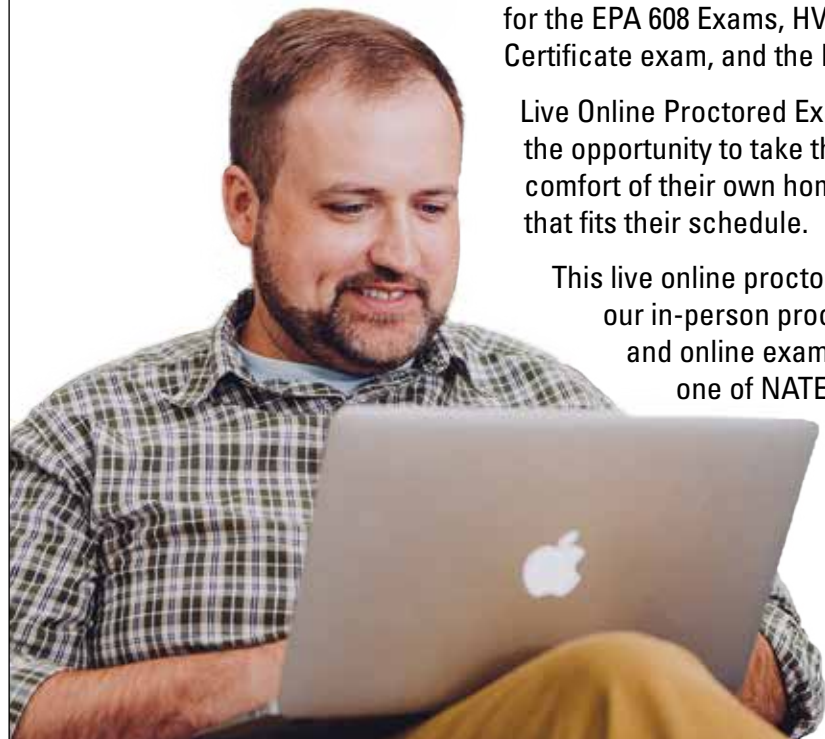


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GAW14L24C21S	2.0	14	29-1/4	30	29-1/4	135
GAW14L30C21S	2.5	14	29-1/4	36-1/4	29-1/4	150
GAW14L36C21S	3.0	14	35-1/4	33-1/4	31-3/4	195
GAW14L42C21S	3.5	14	35-1/4	33-1/4	31-3/4	195
GAW14L48C21S	4.0	14	38	36-1/4	34-1/4	200
GAW14L60C21S	5.0	14	38	42-1/4	34-1/4	215



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Not all brands available at all locations

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latest eCommerce offering under Epicor Commerce Connect – a comprehensive eCommerce solution that works with Magento and is tightly integrated with the Epicor ERP, Prophet 21, and Eclipse to promote online business growth for manufacturers, distributors, and merchants.

“To help businesses during this critical period, we launched ECC Express so that they can pivot quickly, stay connected to their customers, and maintain productivity,” said Steve Murphy, Epicor CEO. “It’s never been more important for business to automate where possible, and ECC Express enables this while also providing an excellent and seamless online experience for customers and suppliers.”

The new program also allows for

self-service features that allow users the ability to easily view orders, quotes, invoices, purchase history, account info and shipments, as well as conduct quick product searches.

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Lennox Extends Rebates to COVID-19 Frontline Workers

Richardson, Texas – To help homeowners, Lennox is extending its Friends and Family rebate on IAQ equipment to those on the frontline of the COVID-19 crisis. Until June 12, first responders and frontline workers will receive the same rebate offered to family members of Lennox employees on PureAir, PureAir S, and MERV 11, 13 or 16 filter and cabinet ensembles.

Lennox leadership also understands the position dealers are in right now. To help its dealers, Lennox is providing consistent guidance about how to communicate to homeowners, including reassuring them that their health and safety is top of mind and describing the extra precautions dealers are taking during this time. Lennox wants to help by providing the same guidance to our readers across the country.

A few pieces of advice from Lennox for dealers includes:

- Before a technician arrives at a home, have the office send a text message or email with the technician’s name, expected arrival time and a little information about the technician as a pre-introduction to the homeowner.
- During the visit, communicate findings via text or email.
- After the visit, eliminate the need to handle cash by either using tap-to-pay from a phone or have the office send an invoice so that a homeowner can call and authorize an electronic payment.

Finally, Lennox understands these are unique, uncertain times, and so released a new video to encourage both homeowners and dealers to acknowledge that all this time at home keeps us closer to what matters most to us.

NATIONAL



Aircuity Celebrates 20th Anniversary

Newton, Mass. – Aircuity (www.aircuity.com), creator of measurably better environments, announced that 2020 marks the company’s 20-year anniversary. Over the last twenty years, Aircuity has evolved from being a pioneer of indoor environmental quality (IEQ) monitoring to become the industry leader in accurate measurement and control while providing unique analytics utilized to drive core business outcomes.

“Our founder, Gordon Sharp, is truly an industry pioneer and was ahead of his time when creating Aircuity in 2000,” said Aircuity CEO, Dan Diehl. “We thank our progressive and demanding clients who believed in Aircuity early on and who have helped us continually evolve and improve.”

Today, Aircuity is installed in more than 100 million square feet across 17 countries. Equally as extraordinary is the impact that the company is having on the envi-



ronment. To date, Aircuity has sequestered 9.2 billion lbs. of CO2; the same amount saved by 5.4 million acres of forest.

Aircuity is continuing to innovate and has exciting new products and platform enhancements planned for release this year. A few of these items include: a new mobile application, a refreshed UI analytics platform and new and improved sensor technologies. “We must continue to invest and innovate to keep leading in this rapidly expanding market,” said Diehl. “We have always believed that accurate, reliable and integrated IEQ measurement will be ubiquitous in the built environment.”

Aircuity’s current growth trajectory is being fueled by fundamental market drivers, such as WELL, RESET, carbon taxes, wildfire impacts along with the link between air and cognitive function improvements. The company is also fortunate to serve a diverse set of vertical markets, be a part of many net zero buildings and partner with workspace leading clients.

“We want to give special thanks to all our current and past employees, our partners and owners who have made this possible, through steadfast belief and the desire to improve the planet and the indoor environment,” stated Diehl. “Everyone at Aircuity is excited to begin our next 20 years.”

For additional information on the company and its solutions, please visit: www.aircuity.com.

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A. O. Smith Training Videos Launched

Ashland City, Tenn. – A. O. Smith (www.hotwater.com) is announcing a new product training series called “A. O. Smith Training Tuesdays” to provide contractors and channel partners with free access to weekly online classes. The hour-long shows will be broadcast live at 2 p.m. CDT every Tuesday through June 16 at <https://university.hotwater.com/live-show/>. Training sessions will cover various topics, including water conditions, troubleshooting, proper venting, installation tips and more.

The videos will be broadcast via the newly renovated A. O. Smith training facility and will air on the

A. O. Smith University website. During the live shows, participants are encouraged to text their questions to a phone number on-screen, and that week’s hosts will end the show answering the questions live.

“At A. O. Smith, we’re always looking for ways to be a valuable resource for our loyal channel partners. Pairing our team of experts with cutting-edge technology allows us to build richer content and offer real-time educational resources,” said Jason Leonard, technical training manager at A. O. Smith. “This new series will provide our partners with expanded knowledge and continued educational opportunities until we can open our doors again for on-site training.”

Can’t make it to the live show? Videos will be recorded and housed on the A. O. Smith University website, <https://university.hotwater.com/live-show/>, along with many other product training videos and online certifications.

.....

ASHRAE Epidemic Task Force Created

Atlanta, Ga. – ASHRAE announced a Society-wide effort to respond to the current global COVID-19 pandemic and provide guidance on how to ensure that buildings are prepared for future epidemics.

The ASHRAE Epidemic Task Force has been established to help deploy ASHRAE’s technical resources to address the challenges of the current pandemic and future epidemics as it relates to the effects of heating, ventilation, and air-conditioning systems on disease transmission in healthcare facilities, the workplace, home, public, and recreational environments. The task force will also provide recommendations for setting up temporary field hospitals in convention centers, arenas, and indoor stadia to deal with surges.

The primary role of the task force is to maintain communication with members, industry partners, building owners, facility operators, government agencies, and the general public.

2013-14 ASHRAE Presidential Member William Bahnfleth, Ph.D., P.E., will chair the task force.

“We have assembled an outstanding group of experts to serve on the task force,” said Bahnfleth. “They are high-level building professionals with collective experience in design, construction, operations, and research, who are

Continued on Page 8

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- Up to **\$400** rebate on ENERGY STAR certified natural gas furnaces.

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

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

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Continued from Page 6

well qualified to offer guidance on how to protect building occupants and support healthcare facility needs during the uncertainty of an epidemic.”

Leading experts in medicine and public health will serve as consultants to the task force.

“ASHRAE is a global, grassroots organization of more than 57,000 members in 130 countries, so we have boots on the ground around the world,” said Bahnfleth. “Our members and chapters take the initiative to help wherever they are and are already addressing the COVID-19 pandemic. That is also true of our technical and standards committees. When called upon by circumstances to assist in situations such as the COVID-19 pandemic, they act within their spheres of competence to do whatever they can to help.”

Distech Controls Receives Facilities Management Award

Atlanta, Ga. – Acuity Brands, Inc. (NYSE: AYI) announced that the Allure UNIWAVE™ series of wireless interfaces and remote controls from Distech Controls™ has been recognized by BUILDINGS as a product award winner in the Building & Energy Management category as part of the magazine’s annual Money-Saving Product award program. Distech Controls Inc. is an innovation leader connecting people with intelligent building solutions.

Selected for its innovative and budget-friendly room control, the Allure UNIWAVE series is a member of an elite group of 45 products currently featured online

at BUILDINGS.com and will be showcased in the magazine’s May/June 2020 issue. Finalists were evaluated by the BUILDINGS media editorial staff for the money-saving benefits they offer to building owners and facility managers in areas such as energy efficiency, water savings and maintenance.

“We are honored by the recognition of the Allure UNIWAVE, a series that allows building occupants to manage comfort settings in a room or open space while providing lower installation costs and easier retrofit repairs for building owners,” said Charles Pelletier, Vice President of Product Management.

The Allure UNIWAVE device works as part of the ECLYPSE™ Sky Ecosystem (recognized last year by BUILDINGS) by communicating through Bluetooth low energy wireless technology to EC-Multi-Sensor-BLE devices, which offer capabilities for temperature, luminosity and motion detection. The UNIWAVE allows for the ongoing evolution of built spaces without costs typical of wired room controller devices. The wall mounted UNIWAVE can be installed on a variety of surfaces (glass, concrete or brick).

Learn more about Distech Controls products and solutions here: www.distech-controls.com.

Emerson Supports U.S. Army Corps During Pandemic

White Plains, N.Y. – As the number of New Yorkers infected by COVID-19 skyrockets, health department officials are bracing for local hospitals being unable to accommodate the thousands of people who may need medical attention in coming weeks.

In response to the crisis, the Federal Emergency Management Agency issued a \$350 million Mission Assignment to the U.S. Army Corps of Engineers for construction of four alternate care facilities in New York, including the Westchester County Center arena in White Plains. Dating back to its opening in 1930, the Westchester County Center has hosted tradeshows, sports, as well as political and family entertainment events ranging from New Kids on the Block to Dancing with the Stars.

The Army Corps of Engineers allotted 21 days to complete the Westchester County Center project. This was no short order given that the arena, which was to be transformed into a alternate

care facility providing acute care. On top of that, there was the construction of four MASH-style tents in the arena’s parking lot. Ruggedly built of aluminum instead of standard canvas, the four tents now house half of the total 110 hospital beds at the Westchester site.

In need of pipe protection, the project’s general contractor Haugland Energy Group LLC reached out to AEF Sales, a local sales representative of Emerson brand Nelson™ heat tracing cables and accessories. AEF Sales has worked with Haugland on various power plant projects in the past and enjoys a strong partnership with the contractor.

Recognizing the importance of getting the Westchester County Center up and running, Emerson’s sales representatives removed all barriers to meet the order quantity expeditiously.

Pietro Fasolino, president of AEF Sales, stepped up to the challenge, as well. Rather than wait for delivery, Fasolino drove a dedicated truck more than 100 miles to the Emerson manufacturing and warehouse facility in East Granby, Connecticut, to pick up the Nelson cable Sunday night and ensure on-site delivery at 5:30 a.m. Monday.

As a result of the efforts of AEF and Emerson, the water lines were fully protected from the elements by the time service was turned on.

“Behind the scenes, Emerson’s team worked alongside us to rapidly get the right heat trace cables into the hands of Haugland Energy Group contractors who were on the frontlines of this project,” said Fasolino. “Emerson cut lead times from weeks to days, or even hours, ensuring the quick mobilization of the alternate care facility in an emergency situation.”

ACCA VP Joins EPA Political Team

Arlington, Va. – The Air Conditioning Contractors of America (ACCA) announced that Todd Washam, vice president of Public Policy & Industry Relations, has been tapped to join Administrator Wheeler’s team. Washam will be serving in the Environmental Protection Agency’s Office of Congressional Affairs Office starting on May 4, 2020. Washam has been with ACCA since 2016 and has been serving as vice president of Public Policy & Industry Relations since May 2019. Longtime Republican Congressional staff, Washam will be serving as the Director

of House Relations and will be charged with leading the agency’s interactions with members of the House of Representatives.

“ACCA is excited for Todd to join the Trump Administration and use his talents and relationships to make a difference for the American people and build stronger working relationships between EPA, Congress, and the White House,” said Barton James, ACCA president and CEO. “Throughout his time with ACCA, Todd has helped build an incredible and well-respected voice for HVACR contractors on Capitol Hill. We are pleased he will take that strong understanding of the importance of HVACR contractors, as the federal government works on policies that will impact the HVACR industry and consumers. This certainly is an exciting time to join the Administration and be on the frontlines, leading efforts to rebuild the American economy as we recover from the COVID-19 pandemic.”

“I’ve learned a tremendous amount at ACCA, whether it be from our technical department, member services, communications and marketing, finance, human resources, and legal, or the government relations office,” said Washam. “We have seen ACCA continue to soar to new heights with its Pledge to America’s Workers commitment, partnership growth, and HVACR representation in congress. I’m thankful to have the opportunity to serve at the EPA and use some of the skills and knowledge I have learned from contractors to help build a deeper understanding of how public policy impacts the HVACR industry. I am forever grateful for the opportunities I have had at ACCA and the friendships that I have developed through the association.”


Regal Launches New Podcast Series

Beloit, Wisc. – Regal Beloit Corporation, a leading manufacturer of electric motors, electrical motion controls, power generation and power transmission components, announced the launch of its new Community News – On The Air podcast series from its Power Transmission Solutions (PTS) unit.


This podcast will share tools, tips and new innovations to help Regal customers address their challenges in mechanical power transmission and achieve more success. In one podcast, Regal reviews how a

Continued on Page 10

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quarry was able to mitigate flooding risk by predicting the future with Perceptive Technologies' 24/7 monitoring; in another, they share how a customer saved \$105,000 by implementing System Plast®Speedset™ Brackets.

"The goal of the podcast is to share customer pain points and discuss how Regal PTS is working to solve problems," said Carmen Ek, podcast host and distribution marketing manager, Regal. "Ultimately, we want to make our customers and their employees more successful."

Each podcast is around 7 to 13 minutes long and can be accessed

through popular apps like Spotify®, Apple® or Google® podcasts, or directly from a desktop via a modern web browser like Google Chrome®, Firefox® or Microsoft Edge® browsers. Go to <https://www.regalbeloit.com/podcasts/pts> to learn more.

Taco Expands Free Online Training

Cranston, R.I. – Taco Comfort Solutions has greatly expanded its free online hydronic training opportunities during the social distancing brought about by the COVID-19 virus.

"Our surprisingly high attendance proved quickly that online education

is a valuable resource right now, and that many professionals have the time to capitalize on it," said John Barba, Taco training director.

The company now offers three different types of online training: Taco Tuesdays, Taco After Dark, and personalized webinars. Over the past six weeks, more than 6,000 attendees have attended the training sessions.

Taco Tuesday is a weekly webinar hosted each Tuesday at noon EST. The webinar alternates between residential and commercial topics. John Barba and Dave Holdorf host the residential webinars while Rich Medeiros and Brett Zerba host the commercial webinars. These webinars last about an hour, with roughly 15 minutes dedicated to Q&A. Over 900 attendees have been signed up for a single session.

Taco After Dark is presented weekly by John Barba, Dave Holdorf, and Rick Mayo. The content from these webinars comes from Taco's full-day hydronic courses, broken into one-hour segments. The sessions begin on Wednesdays at 7 p.m. EST. The webinar content is presented in one hour, with no time limit set for Q&A and general discussion. Taco has collaborated with Mechanical-Hub.com to host this series of webinars.

Personalized training sessions are also available for reps, wholesalers, and their customers. Taco's trainers are conducting 30 to 40 of these webinars each week.

"Our goal with these training sessions is to learn, socialize, and have fun in an otherwise difficult time," said Holdorf. "It's always lighthearted and the feedback has been fantastic."

All training is presented via live webinars. Taco Tuesday and Taco After Dark are recorded and hosted on the Taco Comfort Solutions website and YouTube channel for viewers to watch at their convenience.

Winsupply Names HVAC Vendor of Year

Dayton, Ohio – Winsupply Inc. announced that the winner of the HVAC 2019 Vendor of the Year is Johnson Controls Unitary Products Group, along with winners in nine other categories.

The Winsupply Preferred Vendors that won in each category were chosen based on several criteria, the most important of which was being a leader in growing the segment's business over the past year. They were also judged on selling to a breadth of locations that buy the vendor's product, providing strong support at the local level, and con-

sistent volume and growth.

"Winsupply awards the Vendor of the Year from an already exceptional group of preferred suppliers based on the votes of our 600 local companies," said John McKenzie, president of Winsupply Inc. "The winners of Vendor of the Year have gone beyond our expectations in the way they partner with our locations and Winsupply Sourcing Services to grow sales at each location and provide our customers with outstanding products and service."

Carrier Selects R-32 to Replace R-410A Refrigerant

Charlotte, N.C. – As part of its commitment to provide customers with solutions that use the right refrigerant for each application, Carrier has selected R-32 refrigerant to replace R-410A refrigerant, a high global warming potential (GWP) refrigerant, in commercial chillers using scroll technology. R-32 was chosen for its lower environmental impact, high energy efficiency, wide availability and ease of use. In Europe, the refrigerant will be offered in some scroll chillers beginning in the first half of 2020. Introductions will follow in other regions and all will meet UN Montreal Protocol Kigali Amendment regulations taking effect in 2023. 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.

"Carrier focuses the right refrigerant for each application in order to provide the very best solutions for our customers," said Chris Nelson, President, HVAC, Carrier. "After thorough evaluation of the options, Carrier selected R-32 for scroll chillers and heat pumps for its lower impact on the environment, reaffirming our continued commitment to sustainability."

Carrier's use of R-32 refrigerant and expert system design will reduce the refrigerant carbon footprint by 80% in commercial scroll chillers and heat pumps. This is due to the much lower GWP and a significant system refrigerant charge reduction compared to the previous generation using R-410A.

Carrier is continuously investing in long-term solutions to lead the industry and promote highly

efficient products with lower impact on global warming. This announcement follows Carrier's 2018 selection of R-454B, known commercially as Puron Advance™, as its primary lower GWP solution to replace R-410A in ducted residential and package unitary commercial products utilizing scroll compressors sold in North America. Carrier also previously announced commitments to move toward low GWP refrigerants with the selection of HFO R-1234ze(E) for screw chillers in Europe in 2015, the introduction of R-513A in multiple centrifugal and screw chillers in 2018 and finally the introduction of the award winning AquaEdge® 19DV centrifugal chiller using HFO R-1233zd(E) in 2016.

Uponor Center Now Powered by Wind Energy

Apple Valley, Minn. – In conjunction with Earth Day 2020, Uponor North America announced that its Lakeville, Minnesota, distribution center now receives 100 percent of its electrical power from wind energy, and is the first major manufacturing customer to participate in Dakota Electric Association's Wellspring Renewable Energy program.

Wellspring Renewable Energy subscribers pay a slight premium to purchase wind energy sold in 100 kilowatt-hour blocks. As a partner in the program since Jan. 1, 2020, Uponor will annually purchase approximately 2.2 million kilowatt-hours of wind-generated electricity, which is equivalent to powering 263 homes' electricity use for one year.

"Wellspring provides a way for businesses to receive all their power from renewable sources without having to build infrastructure or get in the energy business," said Dakota Electric Association President and CEO Greg Miller. "Uponor has demonstrated its environmental commitment in a tangible way, and we are happy to assist the company in achieving its environmental goals."

Since 2017, Uponor has worked with local utilities to purchase renewable energy blocks, increasing its renewable energy consumption in North America to 36 percent of its total energy use. Globally, Uponor continues to work towards its commitment of achieving 100 percent renewable resources to power its facilities by 2025.

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Ferguson HVAC Supplies Equipment for “Mesa Modern” Showcase Home

Continued from Page 1

Desert acted as the project lead to coordinate vendors, suppliers and contractors.

The Mesa neighborhood, located at Palm Canyon Mesa, was originally developed in the 1930s by Los Angeles businessman Edmond Fulford as a private community and was one of the first gated communities in Palm Springs. The neighborhood has an array of home styles featuring luxury designs blended into the desert landscape. It has been home for many movie stars and celebrities over the years including: Clark Gable, Carole Lombard, Sonny Bono, Barry Manilow, Robert Wagner, Natalie Wood and Suzanne Somers.

The Mesa Modern estate was completed in 2019. It features a 24,000 square-foot lot, a 3,200 square-foot home, and a 700 square-foot guest house/casita.

The general contractor was Dantor Martinez Construction of Palm Desert, a licensed B-General Contractor. The family-owned construction company was founded in 2008 by Daniel Martinez, Hector Martinez and Christina Martinez. The company's website posted the following statement



Inside one of the bedrooms of the sprawling Mesa Modern estate, which measures in at 3,200 square feet.

about the Mesa Modern project: “We are proud to be part of the multi-talented team that has come together to craft a new home for Modernism Week that epitomizes the fusion of mid-century aesthetics with modern form and function. Situated on Palm Canyon Drive, the home showcases the most innovative products from around the world, the need for energy efficiency, smart-home technologies and the incorporation of sustainable design and building practices. An integration of indoor and outdoor spaces is a dream for outdoor living and entertaining, and celebrates the inimitable character, spectacular scenery and natural beauty of Palm

Springs.” A photo gallery and virtual tour of Mesa Modern can be found on the company's website at www.dantorconstruction.com.

Ferguson HVAC territory manager Silverio Davila, based in Indio, coordinated the HVAC system equipment and supplies for the project and worked closely with installing C-20 contractor, Compressor Air Conditioning and Heating of Indio to help design the system. Compressor is owned by David Gutierrez Leal and has been a California licensed contractor since 2011. According to Davila, the modern home design presented HVAC system challenges, with a flat roof and no attic space for a traditional ductwork system. Davila also noted,



The estate utilizes ecobee smart thermostats to pair up with the well-designed HVAC system.



A Honeywell control system provides zoning control with the Trane HVAC equipment.

“Homeowners here don't want to see or hear HVAC equipment.” This required the placement of equipment units and ducting to be as inconspicuous as possible.

Davila explained, “There was no way to get ductwork from one side of the house to the other and no way to hide it by using one equipment unit or system. By using two heat pump split systems and multi-zoning it gave us the flexibility we needed.”

High-efficiency HVAC equipment for the main home includes a Trane XR16 Series 4-ton split system heat pump serving the south side of the home that includes the master bedroom and part of the living area space. The outdoor unit has a Trane Climatuff scroll compressor and outdoor fan and coil. The indoor unit is a variable-speed convertible air handler with indoor coil and fan. Overall system efficiency ratings are 15.0 SEER, 11.5 EER and 9.5 HSPF.

The second system for the main home is a Mitsubishi Electric M Series 5-ton multi-zone heat pump system that serves guest rooms and the remainder of the living space. The outdoor unit has a variable-speed inverter-driven compressor. Two Mitsubishi indoor air handlers serve this part of the home. System efficiency ratings are 15.1 SEER,

9.6 EER and 10.0 HSPF.

The use of two HVAC systems and well-planned placement and design enabled relatively short runs of ductwork that was hidden within available wall spaces. A Honeywell control system provides zoning control with the Trane equipment. The home also utilizes Ecobee smart thermostats.

The 700 square-foot guest house/casita had an individual system, a Mitsubishi P-Series 2.5-ton Mini-Split single-zone system. The outdoor unit has a variable-speed inverter-driven compressor. The 30,000 BTU/H horizontal ducted heat pump system has efficiency ratings of 19.1 SEER, 10.0 EER and 10.8 HSPF.

Davila said the all-electric equipment fits in with the current trend toward electrification, without having to worry about a gas loop, and shows how heat pumps can be a great fit for the desert environment. Davila explained, “Electric heat pumps have had somewhat of a stigma in some areas of California for not being adequate for severe temperature and climate conditions, but they are more than capable of heating and cooling in any environment, and at Ferguson we are working with other contractors to supply these systems.”

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Residential Cooling

Bryant Heating & Cooling Systems Evolution Extreme 26



Bryant Heating & Cooling Systems recently launched the latest additions to its top-tier Evolution™ series with the Evolution Extreme 26 air conditioner (Model 186CNV) and Evolution Extreme 24 heat pump (Model 284ANV). Both products showcase a number of industry-leading features performance, which includes numerous technological advancements with 12 patents pending. Bryant, a leading supplier of heating, ventilating and air-conditioning (HVAC) equipment, is a part of Carrier (NYSE: CARR), a leading global provider of innovative HVAC, refrigeration, fire, security and building automation technologies.

The Evolution Extreme 26 and 24 offer a number of enhancements designed with technicians in mind. Bluetooth® technology is available on the outdoor unit, making it unnecessary to access outdoor unit diagnostic information inside the home. Over-the-air software updates are available and technicians can assess over 130 diagnostic points. Plus, installations can use up to 250 equivalent feet of refrigerant line length, features two-wire installation, and the units are self-configuring and Evolution™ Zoning System-capable. Bryant also offers online troubleshooting and training modules, and virtual reality, 3D simulation training is available.

For most sizes, the Evolution Extreme 26 offers the highest ratings for a ducted system at up to 26.0 SEER and 16.5 EER; while the Evolution Extreme 24 heat pump offers the highest in-class ratings at up to 24.0 SEER, 15.0 EER and 13.0 HSPF.1 Furthermore, both the Evolution Extreme 26 and 24 tout market-leading quiet operation with sound output as low as 51 dB.

The Evolution Extreme 26 and 24 include enhanced dehumidification and can remove

up to 70% more moisture per day than a single-stage system.2 Plus, both units feature a variable-speed capacity operating range down to 25% in 1% increments and provide high-ambient cooling operation with full power up to 125 F. The Evolution Extreme 24 also offers heating operation to minus 15 F. In addition, it is the only ducted heat pump on the market with a variable-speed, 5-ton unit that can achieve 13.0 EER and features the addition of vapor-injection technology.3

"We're confident that homeowners will appreciate the features and benefits that are realized in our most ambitious development project to date. We're also pleased to

introduce enhanced installation and serviceability to our dealers, as we know that these improvements will make their lives easier," said Todd Nolte, senior director, product and brand marketing, HVAC-Residential, Carrier.

In addition, an Evolution™ air purifier will be included with the purchase of every Evolution Extreme 26 and 24.4 The Evolution air purifier works silently in-line with the HVAC system and can improve indoor air quality. It uses Captures & Kills™ technology to trap up to 95% of particles5, then uses an electrical charge to kill or inactivate up to 99% of germs and viruses. With every cycle of air that passes through this patented air purifying system, pollen,

animal dander, bacteria and other pollutants are trapped and held tightly to the filter. An electrical charge then bursts the cell walls of pathogens it comes in contact with.

More information: www.bryant.com/en/us/.

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Lennox XC21

With efficiencies of up to 21.00 SEER (Seasonal Energy Efficiency Rating), the XC21 from **Lennox** can lower your energy bills by hundreds of dollars a year, while still keeping your home cool and quiet. This product has been designated as one of the Most Efficient ENERGY STAR certified products.

Key features and benefits of XC21:

- The XC21 uses SilentComfort™ technology to reduce operating noise, making it the quietest multi-stage air conditioner you can buy. Up to 20% quieter than a



Continued on Page 14

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Residential Cooling

Continued from Page 13

standard air conditioner.

- The XC21 can be combined with solar roof modules in a SunSource® Home Energy System to reduce heating and cooling costs by up to half.

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- The XC21 works with the iComfort® S30 Ultra smart thermostat to adapt cooling settings to match the families routine.

The XC21's multi-stage scroll compressor allows it to fine-tune your cooling, humidity levels and

energy use by matching output to demand.

More information: www.lennox.com.

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Luxaire Acclimate

With up to 19 SEER efficiency, the new two-stage, Acclimate™ Series air conditioning unit from the **Luxaire** brand of Johnson Controls can save up to 47 percent on energy use compared to older 10 SEER units. The ENERGY STAR®-certified AL19 air conditioner, available in 2-5 tons, meets rigorous energy efficiency performance levels set by the U.S. Environmental Protection Agency.

These units can be sold as part of



a complete Acclimate residential system or as a premium upgrade to an existing system. It provides contractors and homeowners flexible options by matching it with either a variable-speed air handler or a standard ECM air handler.

Systems can be installed with a conventional two-stage thermostat or

the communicating Wi-Fi®-enabled Acclimate™ Hx™ Touch-screen Thermostat, which allows remote monitoring and diagnostics using the Hx™ Pro App. The unit can also communicate with competitive controls for greater installation flexibility.

Matched equipment includes furnaces, coils and air handlers, all of which are optimized to work together, maximizing comfort and overall performance. Other features include:

- A swing-open electrical box that provides full corner access to the inside of the unit for easy maintenance, installation and service.
- Advanced SilentDrive™ Sound Reduction system which includes

swept-wing fan, high-efficiency ECM fan motor, sound enclosure and composite base for quiet, efficient air circulation.

- A smaller footprint that allows the unit to fit into compact spaces without sacrificing performance.

Luxaire Acclimate Series AL19 units include a 1-year Labor Limited Warranty, Lifetime Compressor Limited Warranty and 10-year Parts Limited Warranty on registered outdoor units.

More information: www.luxaire.com/acclimate.

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Midea U



Although window air conditioners are an affordable cooling option, many people find them to be a hassle. According to extensive consumer research conducted by **Midea**, consumers are most concerned with installation, cooling performance and energy efficiency. Midea also found that more than 70 percent of consumers would like to open the window where a window air conditioner is installed which is not something traditional window units can accommodate.

Keeping these insights front and center, Midea's research and development team took an innovative approach and decided to not only reinvent the window air conditioner category, but also provide consumers with a smart and simple solution to better their overall user experience. Enter Midea U – the world's first u-shaped inverter air conditioner. Midea U's innovative design enables users to easily install the unit, as well as freely open and close the window when it is in place. It also offers a variety of benefits including whisper quiet operation, the highest efficiency in an AC in the category, quick and powerful cooling, and smart controls.

"Our primary focus at Midea is to improve our consumers' daily lives through thoughtful and innovative technology to address their real concerns," said Kurt Jovais, President of Midea



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Residential Cooling

America Corp. “By combining the consumer insights we collected with our local and global R&D capabilities, the idea for Midea U was born. We’re especially proud of its unique design which is unlike anything in the market; especially its ability to allow customers to use their windows which is something traditional window AC units are not capable of.”

Unlike other window AC units, Midea U’s patented design allows unparalleled flexibility. Gone are the days of installing a window unit and not being able to open the window when it is in use. The compact u-shaped design of the Midea U enables the window to open and close normally so users can get fresh air whenever they need it.

Midea U’s exclusive design also blocks the operating noise outside, as well as compressor sounds. This allows for ultra-quiet operation as low as 42dBA which is almost as quiet as a library, and up to nine times quieter than traditional window AC units.

Due to the u-shaped design, Midea U has a stronger airflow than traditional units. Users can feel the cold air blowing up to 20 feet away and with its full DC inverter technology, the Midea U can cool spaces within seconds of being powered on. It is available in three cooling capacities from 8,000 to 12,000 BTU/h, ideal for cooling rooms up to 550 square feet.

Midea U is the first window AC to obtain the ENERGY STAR Most Efficient 2020 certification. It provides cooling up to 12,000 BTU/h with a record-breaking low estimated yearly energy cost as low as \$58, which is more than 35 percent less than similar models already on the market. This is possible due to its patented inverter technology, which enables it to do more with considerably less electricity than traditional window AC units.

More information: www.Midea.com.

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Nortek Global HVAC W-Series

Nortek Global HVAC, a leading manufacturer of HVAC equipment, introduces the W-Series of air conditioning and heat pump equipment for residential and light commercial applications.

The introduction completes the final phase of an overall redesign of Gibson®, NuTone® and Frigidaire® branded 1.5 to 5-ton, single-phase air conditioning units and heat



pumps. The redesign began with introductions of the premium F-Series in 2017, the mid-range E-Series in 2018 and now culminates with the economically-priced W-Series in 2019. The redesign offers contractors a “good-better-best” strategy that accommodates any consumer price range and feature requests backed by Nortek’s renowned reliability and contractor technical and marketing support.

The W-Series’ air conditioning (WSA) is available in 13, 14 and 16-SEER models and the heat pump (WSH) in 14 and 16-SEER models. Standard features include Copeland scroll compressors and a liquid line filter-drier for field installation in an accessible position to facilitate easy periodic change-outs.

Featured aesthetic and functional additions include a coil-protecting wire guard that adds cabinet structural integrity and holds a plastic mesh in place to safeguard against hail and accidental contact damage. The wire guard is secured by the top and three corner screws to promote quiet operation and easy disassembly for coil cleaning access. The W-Series’ anti-corrosive polymer drain pan also includes more drainage holes to eliminate potential standing water.

In keeping with past product enhancements launched in early 2019, the W-Series will include charging chart access for an easy and accurate refrigerant charge. Nortek’s proprietary charge assist tool, www.chargecalculator.com, can be accessed conventionally, or by scanning a weather-proof quick response (QR) code called “Charge Me” affixed on the unit’s exterior cabinet above the refrigerant access port. The tool helps account for sub-cooling, fixed orifices, thermostatic expansion valves (TXV), ambient temperature at time of charging, lineset length and other variables.

The W-Series, as does the F-Series and E-Series, also features a barcode on the interior control panel to scan and access all the particular unit’s Nortek website documents.

Other W-Series features include:

- Mammoth® branded three-phase air conditioning units available in three, four and five-ton models;
- Options include a low ambient temperature control kit for operating in lower outdoor temperatures, low pressure controls and a cantilever mount kit for securing the condenser to a foundation fastened platform;

- ETL Listed and tested under standard AHRI 210/240 Unitary Air Conditioning and Air Source Heat Pump Equipment;
- Warranty is three-year for parts and 10-years if registered;
- and available through most Nortek wholesale HVAC distributors.

More information: www.nortekhvac.com.

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YORK YEE



The YORK® brand of Johnson Controls is extending its LX Series of products with the introduction of a new single-stage heat pump. The YORK YEE heat pump offers 14 SEER cooling and 8.2 HSPF heating efficiency performance. The economical systems can provide heat down to an outdoor temperature of 0° F and cooling up to 125° F, making it an ideal year-round

comfort solution, especially for southern U.S. climates.

“We designed the new heat pump with today’s homeowners in mind who are looking for efficient HVAC systems at a lower price point,” said Ken Ely, product manager, Residential Ducted Systems. “Beyond offering lower upfront costs, the YEE can reduce annual energy bills by 14% when replacing older low-efficiency systems. The compact design allows for further cost savings for homeowners and time savings for contractors by allowing the reuse of existing system pads, making it ideal for retrofit applications.”

The YEE was specifically optimized to be paired with indoor equipment, such as air handlers

Continued on Page 19



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Troubleshooting

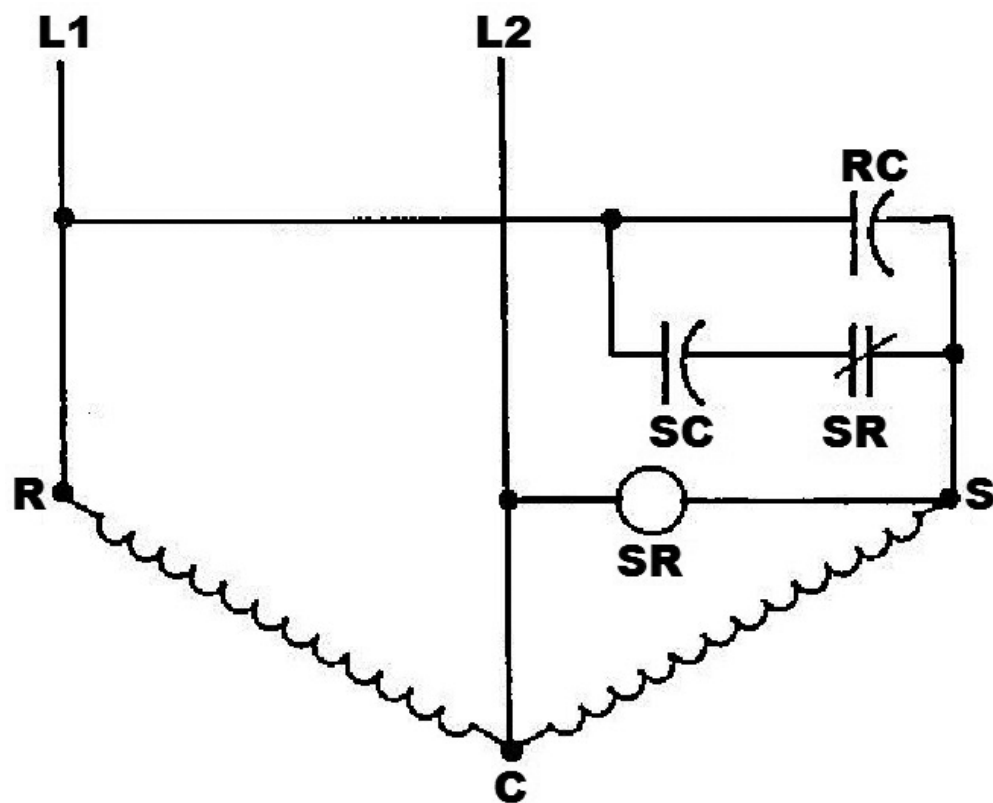


FIGURE 1

A Split System That's Not Cooling

By Jim Johnson
Contributing Editor

Note: Before we get into the details of this particular situation, we want to point out that there are actually three questions to answer.

In this month's troubleshooting problem, the equipment is a split system that's approximately 8 years old, consisting of a gas furnace that provides heat in the winter, and employs a condensing unit and "A" coil to provide summer cooling. The information you get from the dispatcher is that the customer's complaint is that the system is not cooling and the specific information they provide is that the unit is "blowing warm air".

Which brings us to the first question about this problem: *What are two components located in the furnace assembly that can be eliminated from consideration as the possible source of the problem?*

When you arrive, you confirm that the system is blowing warm air. You also confirm that the thermostat is set to the cooling mode with the set-point below room temperature, and the fan switch is set to the AUTO position. A check on the condensing unit reveals that the condenser fan motor is operating normally, but the compressor is not running. It is hot to the touch and off on internal overload.

Your second question: *What two components inside the condensing unit can be eliminated from consideration as the source of the problem?*

After turning off the disconnect switch and removing the access cover, you find that the compressor is hot to the touch, indicating it is attempting to start. Based on that observation, you disconnect all the appropriate wiring when necessary, and, with a digital meter, check the start components shown in **Figure One**. And, you get the following results:

1. At terminals SC, you read the microfarad rating shown on the capacitor case.
2. At terminals RC, you read the microfarad rating shown on the capacitor case.
3. At the SR terminals of the potential relay coil, infinity.
4. At the SR terminals of the potential relay switch, a fraction of an ohm.

Your final troubleshooting question: *What do you have to do to get this unit operating again?*

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 month the question you are responding to was published.

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

Answer to Last Month's Troubleshooting Question

Our temperature measurements showing an extreme Delta T, along with a higher-than-normal static pressure difference, proves that the indoor coil needs to be cleaned.

The winner of last month's Troubleshooting is:

Gerald Stow
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Growing Green Technicians Part 128: Air Flow Performance in a Building

By Jim Johnson
Contributing Editor

In the previous segments in this series our focus has been on the operation of a refrigeration system and a simple approach to understanding and evaluating the operation of the equipment through the use of temperature/pressure charts, and considering coil temperatures in both normal and low ambient conditions.

In this segment, we'll discuss the concept of balance that needs to exist between the refrigeration and duct system in order for comfort cooling equipment to operate efficiently.

One simple approach to the duct system is considering the basic idea regarding the individual rooms in the building, and how each one requires the correct amount of air flow from the supply duct system and back through the return system. As an example, we'll consider the basic building shown in **Figure One**.

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 leads to the proper sizing of the duct system.

For our example, we'll decide that 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 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

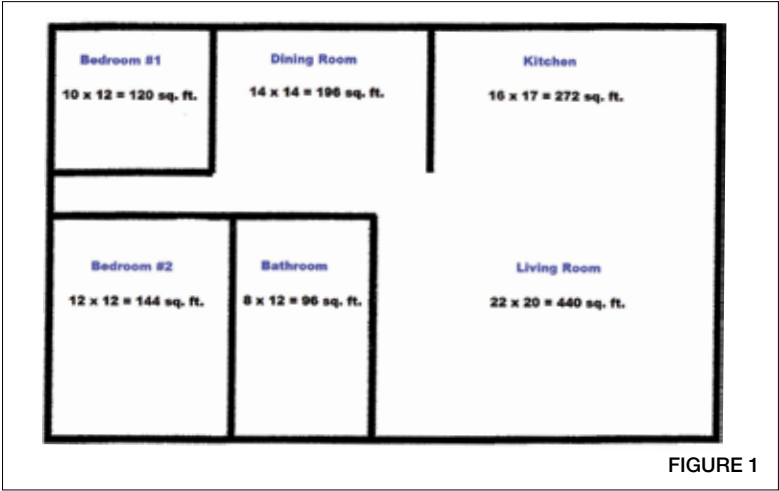


FIGURE 1

on evaluating the performance of the system by using a flow hood to determine if the air flow to each individual room is sufficient from at least a general perspective.

And, if our flow hood tests don't show that we are at least within shouting distance of the CFM calculations for each individual room, we've determined that fur-

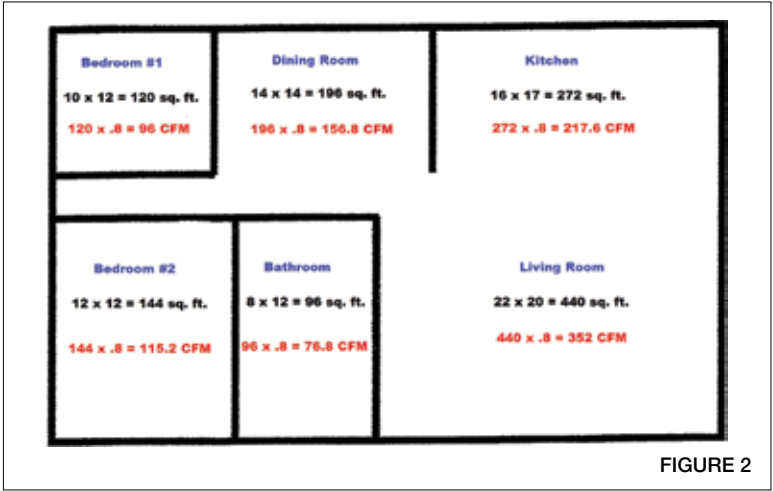


FIGURE 2

ther evaluation of the duct system is necessary. One element of this process could pertain to an overall inspection of the duct system and evaluating whether or not transi-

tions and other connections are not correct.

We'll discuss that issue in our next segment in this series.

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Case Study

Service Contractor Finds Success with Modular Replacement ERV Wheels

As one of the leading research universities in the United States, Georgia Tech has an ongoing commitment to sustainable design and architecture. At their Atlanta campus, the university has invested in advanced Energy Recovery Ventilation (ERV) systems to provide comfortable and energy efficient indoor environments for more than 23,000 enrolled students.

Original Wheel Design Shortens ERV Lifespan

ERVs are an important ventilation strategy for eliminating up to 80% of the outdoor ventilation air moisture and energy loads for many types of applications. To maximize their benefits, it is equally important to specify serviceable components that can be easily maintained for the life of the system. Unfortunately for Georgia Tech, the original ERVs in buildings throughout the campus were specified with single-piece (monolithic) aluminum energy recovery wheels that could not be adequately serviced.

After several years of operation, a pair of wheels at a dormitory building became plugged from dust and debris in the airstream. This blockage led to diminished performance and premature failure. Due to their size and single-piece design, cleaning in place with steam or a power washer was the only option. However, doing so came with the risk of water intrusion into the dorms and the unintended removal of a moisture controlling desiccant that is glued to the wheel's aluminum surface.

Seeking a Replacement Wheel Solution

Without a practical or effective means of cleaning, and not wanting to risk further damage to the ERVs, the University's service contractor, Johnson Controls, Inc. (JCI), explored replacement solutions to restore the system to its original performance level.

The task of replacing the wheels would be complicated by their location, which did not offer easy access. When the dorm was initially constructed, there was no plan for the aluminum wheels to be cleaned or removed.

Swapping the plugged and damaged aluminum wheels with exact replacements would be expensive and time-consuming – if not impossible.

JCI was eager to identify a simple and cost-effective ERV wheel replacement solution that minimized downtime and did not involve large investments in manpower, crane rentals, and alterations to building walls or the ventilation unit.

Segmented Wheel Design Provides Long-Term Solution

JCI's Atlanta office reached out to Airxchange, a leading supplier of energy recovery wheels. JCI was familiar with the "reliable by design" concept built into each energy recovery wheel made by Airxchange. This unique design originated more than 35 years ago when Airxchange entered the commercial market and learned of the need for building owners and contractors to periodically clean air-handling components for hygiene and efficiency.

To accommodate these after-market cleaning needs, Airxchange wheels incorporate a durable,



Airxchange's simple and cost-effective ERV wheel replacement solution minimized downtime and use of resources.

noncorroding polymer heat transfer material that is segmented for easy removal in as little as 15 minutes. They also developed a coating process to permanently embed the desiccant into the polymer without adhesives to eliminate degradation during the cleaning process.

The Airxchange design could easily overcome the maintenance challenges that led to the failure of the original wheels, ensuring that the new replacements would last for the life of the ventilation system.

To address the accessibility challenge, JCI utilized Airxchange's fully modular wheel and frame design. All wheels up to 13-feet in diameter are engineered for easy transport and assembly in limited access areas – without cranes or special building openings. This allows Airxchange wheels to be a direct replacement for any manufacturer's wheel, regardless of location. The innovative

design was recently recognized with a 2017 Dealer Design Gold Award from The ACHR News.

Direct Factory Support

Christopher Glover, Director of Aftermarket Sales for Airxchange, conducted a site visit to carefully plan the installation process. "Our modular design was ideal for this project at Georgia Tech," says Glover. "Both wheels were walked into the mechanical room in pieces and then assembled inside the ERV cabinet, saving time and capital expense."

Onsite, an Airxchange technician supervised the installation of the replacement wheels to ensure that they were properly placed and secured. Airxchange also provided Georgia Tech's maintenance contractor with training to operate and maintain

the wheels for a lifetime of savings.

A New Partner for ERV Upgrades

"We were pleased to be able to cost effectively restore the performance of the original ERV systems and provide the University with a reliable long-term solution. When one of the old wheels needs to be addressed, they know who to call for a seamless replacement solution," says Glover.

Satisfied with the quality and relative ease of the first wheel project, JCI has since replaced an additional 15 aluminum energy recovery wheels with Airxchange's reliable design.

Airxchange technology is now widely available through leading HVAC manufacturers, and also directly to end-users through its Aftermarket ERV replacement and retrofit division.

Duct Leakage Testing?



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ASHRAE COVID-19

Continued from Page 1

ASHRAE's Statement on Operation of HVAC Systems to Reduce SARS-CoV-2/COVID-19 Transmission

Ventilation and filtration provided by heating, ventilating, and air-conditioning systems can reduce the airborne concentration of SARS-CoV-2 and thus the risk of transmission through the air. Unconditioned spaces can cause thermal stress to people that may be directly life threatening and that may also lower resistance to infection. In general, disabling of heating, ventilating, and air-conditioning systems is not a recommended measure to reduce the transmission of the virus.

HVAC filters, along with other strategies, help to reduce virus transmission while removing other air contaminants that may have health effects.

ASHRAE's Environmental Health Committee also developed an Emerging Issues Brief to support the two above statements:

There is great concern about the real possibility of transmission through the air of various pathogens, especially SARS-CoV-2, among staff and administration in healthcare facilities, office workers, retail workers and patrons, manufacturing workers, and residents in private and public facilities and the general public in outdoor settings and in public transportation.

ASHRAE has created the

Epidemic Task Force, comprised of leading experts to address the relationship between the spread of disease and HVAC in buildings during of the current pandemic and future epidemics. The ASHRAE Environmental Health Committee's Position Document Committee also updated a Position Document on Infectious Aerosols.

"ASHRAE, working with its industry partners, is uniquely qualified to provide guidance on the design, operation, and maintenance of heating, ventilation, and air-conditioning systems to the COVID-19 pandemic as well as to prepare for future epidemics," said ASHRAE Epidemic Task Force chair, ASHRAE Environmental Health Committee voting member and 2013-14 ASHRAE Presidential Member Bill Bahnfleth.

Indoor People



KACIE MUHONEN

Pacific Systems Group welcomed **Kacie Muhonen** as its new assistant sales engineer. In this position, Muhonen will focus on developing new business for residential ductless systems by Carrier in its four-state area, work with mechanical contractors and distributors, and serve accounts for Pacific Systems Group.

Muhonen comes to Pacific Systems Group with lifelong experience in the HVAC industry as her father owned a sales representative company specializing in plumbing, heating and

air conditioning. Moreover, she has nearly five years of combined work experience for companies such as Carrier West Lohmiller for inside sales, Cooper Heating & Cooling as a comfort advisor, and R&R Electric, Heating & Air as a customer service manager.

Muhonen brings the experience and passion for this industry that will be instrumental to the success of designing custom HVACR systems, along with providing efficient and cost effective indoor environmental solutions. This includes meeting the standards of Title 24, ensuring that new and existing buildings can achieve the energy efficiency needed to preserve outdoor and indoor environmental quality.

• • • • •

A. O. Smith Corporation (NYSE: AOS), a leading water



JIM MARGONI

heater manufacturer, announced that **Jim Margoni**, senior vice president of wholesale sales at A. O. Smith Water Products, has retired from A. O. Smith, and Rick Hawk, current vice president of sales for national accounts, has been named the successor. Margoni was asked to remain on with the organization for a brief period to assist with the transition.

"In his more than 40 years of

service with A. O. Smith, Rick has proven to be a strong leader and mentor of others. He has a thorough understanding of the A. O. Smith organization and the overall marketplace," said Dave Warren, president and general manager for A. O. Smith's North America water heating division. "Rick has been instrumental in helping to guide the company's North American water heating sales team to where it is today, and I have the utmost confidence in him as he takes the helm for our sales organization."

"I want to take this opportunity to thank Jim Margoni for his nearly three decades of service to A. O. Smith. Under his tenure and leadership, the A. O. Smith water heating division further secured its position as

a leading supplier of residential and commercial water heaters," said Warren. "Jim has been dedicated to serving our industry for 40 years. His friendship, years of experience, and leadership will be missed by many."

As vice president of sales, Hawk will be responsible for overseeing the company's water heating wholesale sales team across the United States. Rick has bachelor's degree in management and human resources from Trevecca Nazarene University.

A. O. Smith Corporation is a leading global manufacturer and marketer of residential and commercial water heaters. A. O. Smith offers its customers an additional advantage in that the company designs, builds, distributes and supports the world's broadest and deepest line of residential and commercial water heaters, innovation.

Editorial Focus

Continued from Page 15

and gas furnaces, that use electronically communicated motors. The systems are dual fuel compatible, meaning that when paired with a gas furnace, it can automatically switch between electric, gas and heat pump heat, based on whichever is most efficient, resulting in additional cost savings. In addition, an advanced defrost system provides more even temperatures and reduces energy use.

The systems feature a large electrical box cover, offering contractors easy access to components. The electrical box can swing open to provide full corner access to the interior of the unit for easier maintenance or service without going through the top of the unit. In addition, a two-piece extruded louver coil guard provides superior coil protection while being easy to remove and reinstall for annual coil cleaning.

YEE heat pumps are backed by industry-leading one-year labor warranties and 10-year limited parts warranties with registration for greater peace of mind. The YEE cabinet is made of heavy-gauge galvanized steel with an automotive-grade powder-coat finish, providing a clean look and long-lasting corrosion protection.

More information: www.YORK.com/for-your-home/heat-pumps.

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SOCALGAS, ERC, DOWNEY

JUNE

Chiller Module

(Two-Night Class)

Instructor: John Dalton

Wed., June 10 – Part 1 • TBD

Thurs., June 11 – Part 2 • TBD

Commercial Cooling Tower Module

(Two-Night Class)

Instructor: John Dalton

Wed., June 17 – Part 1 • TBD

Thurs., June 18 – Part 2 • TBD

SEPTEMBER

CAQI/QM/QS Air Distribution Module

(Four-Night Class)

Instructors: Mike Griffin / Dave Highland

Wed., Sept. 2 – Part 1 • TBD

Thurs., Sept. 3 – Part 2 • TBD

Wed., Sept. 9 – Part 3 • TBD

Thurs., Sept. 10 – Part 4 • TBD

OCTOBER

NATE Training

(Four-Night Class)

Instructor: John Dalton

Wed., Oct. 21 – Part 1 • TBD

Thurs., Oct. 22 – Part 2 • TBD

Wed., Oct. 28 – Part 3 • TBD

Thurs., Oct. 29 – Part 4 • TBD

Sat., Oct. 31 - NATE Exam, 7:30 a.m. • TBD

SoCA EDISON, ENERGY EDUCATION CENTER, IRWINDALE

JUNE

Chiller Module

(Two-Night Class)

Instructor: John Dalton / Mike Griffin

Tues., June 16 – Part 1 • Webinar

Thurs., June 18 – Part 2 • Webinar

Commercial Cooling Tower Module

(Two-Night Class)

Instructor: John Dalton / Mike Griffin

Tues., June 23 – Part 1 • Webinar

Thurs., June 25 – Part 2 • Webinar

NATE Training

(Four-Night Class)

Instructor: Mike Griffin

Wed., June 3 – Part 1 • Rescheduled – New date TBD

Thurs., June 4 – Part 2 • Rescheduled – New date TBD

Wed., June 10 – Part 3 • Rescheduled – New date TBD

Thurs., June 11 – Part 4 • Rescheduled – New date TBD

Sat., Jun. 13 - NATE Exam, 7:30 a.m.

Rescheduled – New date TBD

SEPTEMBER

System Diagnostics Module

(Four-Night Class)

Instructor: John Dalton

Wed., Sept. 2 – Part 1 • TBD

Thurs., Sept. 3 – Part 2 • TBD

Wed., Sept. 9 – Part 3 • TBD

Thurs., Sept. 10 – Part 4 • TBD

NOVEMBER

Non-Residential Acceptance Testing

(Two-Night Class)

Instructor: Bill Brown

Wed., Nov. 4 – Part 1 • TBD

Thurs., Nov. 5 – Part 2 • TBD

2019 Non-Residential Title 24

(Two-Night Class)

Instructors: Mike Griffin / Jayme Carden

Wed., Nov. 18 – Part 1 • TBD

Thurs., Nov. 19 – Part 2 • TBD

PACIFIC GAS AND ELECTRIC ENERGY TRAINING CENTER, OAKDALE

JUNE

CAQI/QM/QS AC/HP

(Four-Night Class)

Instructor: Jeff Paine

Wed., June 3 – Part 1 • TBD

Thurs., June 4 – Part 2 • TBD

Wed., June 10 – Part 3 • TBD

Thurs., June 11 – Part 4 • TBD

SEPTEMBER

System Diagnostics Module

(Four-Night Class)

Instructor: Mike Griffin

Wed., Sept. 16 – Part 1 • TBD

Thurs., Sept. 17 – Part 2 • TBD

Wed., Sept. 23 – Part 3 • TBD

Thurs., Sept. 24 – Part 4 • TBD

OCTOBER

CAQI/QM/QS System

(Four-Night Class)

Instructors: Mike Griffin / Dave Highland

Wed., Oct. 7 – Part 1 • TBD

Thurs., Oct. 8 – Part 2 • TBD

Wed., Oct. 14 – Part 3 • TBD

Thurs., Oct. 15 – Part 4 • TBD

NOVEMBER

NATE Training

(Four-Night Class)

Instructor: John Dalton

Wed., Nov. 4 – Part 1 • TBD

Thurs., Nov. 5 – Part 2 • TBD

Wed., Nov. 18 – Part 3 • TBD

Thurs., Nov. 19 – Part 4 • TBD

Sat., Nov. 21 - NATE Exam, 7:30 a.m. • TBD

Note: When registering for a training class please make sure you honor that commitment and show up on time and prepared. If you cannot attend, please call (818) 551-1555 and cancel in ample time. Thank you.

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have been converted to Webinars while others are being rescheduled (dates to be determined).
for Utility websites. We look forward to your continued participation when classes are available.

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

JUNE

Refrigeration Module
(Two-Night Class)

Instructor: Mitch Bailey

Part 1 • Webinar

Part 2 • Webinar

Part 3 • Webinar

Part 4 • Webinar

SEPTEMBER

System Diagnostics Module

(Four-Night Class)

Instructor: Mike Griffin

Part 1 • TBD

Part 2 • TBD

Part 3 • TBD

Part 4 • TBD

OCTOBER

System Performance Module

(Two-Night Class)

Instructor: Mike Griffin/Jayme Carden

Part 1 • TBD

Part 2 • TBD

Part 3 • TBD

Part 4 • TBD

NOVEMBER

Training

(Two-Night Class)

Instructor: Jeff Painter

Part 1 • TBD

Part 2 • TBD

Part 3 • TBD

Part 4 • TBD

Exam, 7:30 a.m. • TBD

JUNE

CAQI/QM/QS System Performance Module

(Four-Night Class)

Instructors: Mitch Bailey / Jeff Painter

Tues., June 16 – Part 1 • Webinar

Thurs., June 18 – Part 2 • Webinar

Tues., June 23 – Part 3 • Webinar

Thurs., June 25 – Part 4 • Webinar

SEPTEMBER

Chiller Module

(Two-Night Class)

Instructor: Mitch Bailey

Tues., Sept. 22 – Part 1 • TBD

Wed., Sept. 23 – Part 2 • TBD

Commercial Cooling Tower Module

(Two-Night Class)

Instructor: Mitch Bailey

Tues., Sept. 29 – Part 1 • TBD

Wed., Sept. 30 – Part 2 • TBD

OCTOBER

NATE Training

(Four-Night Class)

Instructor: Mitch Bailey

Wed., Oct. 14 – Part 1 • TBD

Thurs., Oct. 15 – Part 2 • TBD

Wed., Oct. 21 – Part 3 • TBD

Thurs., Oct. 22 – Part 4 • TBD

Sat., Oct. 24 - NATE Exam, 7:30 a.m. • TBD

NOVEMBER

2019 Non-Residential Title 24

(Two-Night Class)

Instructors: Mike Griffin / Jayme Carden

Tues., Nov. 3 – Part 1 • TBD

Wed., Nov. 4 – Part 2 • TBD

Non-Residential Acceptance Testing

(Two-Night Class)

Instructor: Bill Brown

Tues., Nov. 17 – Part 1 • TBD

Wed., Nov. 18 – Part 2 • TBD

JUNE

Chiller Module

(Two-Night Class)

Instructor: John Dalton / Mike Griffin

Wed., June 3 – Part 1 • Webinar

Thurs., June 4 – Part 2 • Webinar

Commercial Cooling Tower Module

(Two-Night Class)

Instructor: John Dalton / Mike Griffin

Wed., June 10 – Part 1 • Webinar

Thurs., June 11 – Part 2 • Webinar

SEPTEMBER

System Diagnostics Module

(Four-Night Class)

Instructor: Dave Highland

Wed., Sept. 2 – Part 1 • TBD

Thurs., Sept. 3 – Part 2 • TBD

Wed., Sept. 9 – Part 3 • TBD

Thurs., Sept. 10 – Part 4 • TBD

OCTOBER

NATE Training

(Four-Night Class)

Instructor: Dave Highland

Wed., Oct. 7 – Part 1 • TBD

Thurs., Oct. 8 – Part 2 • TBD

Wed., Oct. 14 – Part 3 • TBD

Thurs., Oct. 15 – Part 4 • TBD

Sat., Oct. 17 - NATE Exam, 8:00 a.m. • TBD



IHACI

LOCATIONS

SoCA Edison
Training Center - Tulare
1000 N. Main St.
Tulare, CA 93274
www.socaledison.com

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

San Diego Gas & Electric
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4760 Clairemont Mesa Blvd.
San Diego, CA 92117
seminars.sdge.com

Schedule (Subject to Change)

(Training)

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Help Wanted



Institute of Heating and Air Conditioning Industries, Inc. (IHACI) Commercial HVAC Instructors Wanted

IHACI is looking for qualified Commercial HVAC/R/SM instructors to join its education team. These are evening classes (typically 4 nights/4 hrs. per night.) Locations: Chatsworth, Downey, Irwindale, San Diego, Stockton, and Tulare, CA. We offer competitive hourly rates, mileage reimbursement, hotel/meal accommodations when needed. Previous training experience very helpful.

HVAC/R/SM disciplines – Candidates should indicate all applicable areas of expertise.

- HVAC/R/SM Industry Certifications
- Commercial Components and Applications
- Boilers
- Chillers
- Water Towers
- Refrigeration Systems
- Water Source Heat Pumps
- Fan Coils & Air Handlers

1. Instructors should have a

Help Wanted

minimum of twenty (20) years of actual field experience in the HVAC/R/SM industry.

2. Instructors should have recognized HVAC/R/SM industry certifications.

3. Instructors should have the ability to teach face-to-face, HVAC/R/SM material as determined by the IHACI Education Committee (typical 80 to 160 seminar attendees).

4. Instructors should have minimum computer skill sets to present existing and future formatted IHACI curriculum.

5. Instructors should be able to pass HVAC/R/SM work history and security background checks.

6. Instructors should be able to travel as needed to the different training venues.

7. Instructors must be able to attend required education and training meetings.

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

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Advertiser Index

ADVERTISER.....	ICN PAGE
American	
Refrigeration Supplies.....	17
Baker Distributing Company	19
Energy Code Ace.....	12
Champion Cooler Corp.	13
Ferguson HVAC / Trane.....	2-3
Ferguson HVAC / Day & Night.....	23
Fieldpiece	10
Goodman.....	24
Kwik Model.....	8
Mitsubishi Electric	11
NATE.....	4
Pro Source/ Pro Lift.....	8
Rapid Duct Testing.....	15
R.E. Michel Company	14
Rudy's	
Commercial Refrigeration	6
Sierra Chevrolet.....	16
SoCal Gas	7
Studio Air Conditioning.....	6
USACD.....	5, 9
Vent Cap Systems.....	18



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10
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10
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