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NOVEMBER 2019

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NEWS

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

IHACI'S 40th Annual HVAC/R/SM -

Performance Contracting Product and Equipment Trade Show

Celebrating HVAC

SUPERHEROES

WEDNESDAY,
November 20, 2019
11:00 a.m. - 7:00 p.m.

Pasadena Convention Center
300 E Green St, Pasadena, CA 91101



Exhibitor Directory **14**

IHACI Hands-On
Training Demo **47**

Off-Site Parking/Trade
Show Floor Plan **48**

Seminar Schedule **49**

Attendees: pre-register
at www.ihaci.org



Produced by:
Institute of Heating and
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RUUD IS READY FOR ULTRA-LOW NO_x FURNACE COMPLIANCE

SOUTH COAST AQMD \$500 CLEANAIR FURNACE REBATE DETAILS

- Effective October 1, 2019, condensing and non-condensing home furnaces installed within the South Coast Air Quality Management District (SCAQMD) must comply with a NO_x emission limit of 14 ng / J.
- South Coast AQMD offers up to \$500 consumer sales rebate for the first 6,000 compliant furnaces purchased.
- Thereafter, rebates will be \$300 for compliant condensing (high efficiency) furnaces and \$200 for compliant non-condensing (standard), weatherized, and mobile home furnaces.
- More information at cleanairfurnacerebate.com

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R801TA070317MUA	70,000 BTUs	3-TON, HIGH HEAT
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DECEMBER 2019 RUUD DEALER MEETINGS



“WIN CONTRACTOR TOOLS FOR YOUR TEAM”

Company principals that attend the dealer meeting can enter in our “WIN CONTRACTOR TOOLS FOR YOUR TEAM” Prize Give Away. One entry per company makes the company principal eligible for all prizes and eligible for the grand prize.*

MEETING DATES | LOCATIONS:

WEDNESDAY	DECEMBER 4, 2109	PHOENIX, AZ
TUESDAY	DECEMBER 10, 2019	NORTHRIDGE, CA
WEDNESDAY	DECEMBER 11, 2019	PALM SPRINGS, CA
TUESDAY	DECEMBER 17, 2019	SACRAMENTO, CA
WEDNESDAY	DECEMBER 18, 2019	TULARE, CA



EARLY BIRD REGISTRATION: NOVEMBER 15, 2019

Only Early Bird Registrations that register the company principal by November 15, 2019, are eligible to receive a **10% DISCOUNT OR UP TO \$600 OFF** based upon the cost of the system purchased. Company principal must attend the meeting to receive the discount.

OPEN REGISTRATION BEGINS NOVEMBER 16, 2019

All registrations received after November 16, 2019 that register the company principal are eligible to “Win Contractor Tools For Your Team” Prize Give Away. One entry per company makes the company principal instantly eligible for all prizes and eligible for the grand prize.

REGISTER:

www.fergusonhvac.com/ruudregistration



SCAN WITH YOUR
SMART PHONE TO REGISTER

*Company principals that register early by November 15, 2019 and attend the dealer meeting receive a 10% discount or up to \$600 OFF based upon the cost of the system purchased.

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CALIFORNIA



SCAQMD Sets Furnace Standard

Diamond Bar, Calif. – As of Oct. 1, 2019, condensing and non-condensing furnaces offered for sale, supplied, sold, or installed within the South Coast Air Quality Management District must comply with a NOx emission limit of 14 ng/J.

The purpose of this advisory is

to provide additional notification to manufacturers, distributors, sellers, and installers of natural-gas-fired, fan-type central furnaces that only condensing and non-condensing furnaces certified to meet 14 ng/J can be offered for sale, supplied, sold, or installed after Sept. 30, 2019. There is no sell-through for non-compliant condensing or non-condensing furnaces manufactured, distributed, offered for sale, supplied, sold, or installed after Sept. 30, 2019.

Any party offering for sale, supplying, selling, or installing non-compliant condensing or non-condensing furnaces after Sept. 30, 2019, will be in violation of Rule 1111. Violators of this rule will be liable for penalties of up to \$10,000 per day or more. This includes inventory that was

purchased prior to Sept. 30, 2019.

For more information on South Coast AQMD Notice of Violation, please visit www.aqmd.gov/home/rules-compliance/compliance/compliance-notices/notice-of-violation.

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Sigler Hosts 2nd Annual Charity Softball Tournament

Huntington Beach, Calif. – Sigler Commercial Southern California recently hosted its 2nd Annual Softball Charity Tournament in Huntington Beach, Calif.

This year's charity of choice was in partnership with United Way, "United to End Homelessness" and 100 percent of the donations received went to United Way to

further support their efforts towards ending homelessness.

Sigler is proud to report that over \$30,000 was raised thanks to its customers and employees. Twelve teams took to the field competing for first, second and third place. It was a grueling tournament but the camaraderie and spirits were in full effect as this tournament supported such a great cause.

Winners:

- First Place – Southland Industries Envisé
- Second Place – South Coast Facility Services
- Third Place – K&S Air Conditioning

For more information, visit <http://siglercommercial.com/>.

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Arcticom Group Buys Market Refrigeration

Walnut Creek, Calif. – The Arcticom Group (TAG), Walnut Creek, Calif., a U.S. provider of commercial refrigeration and HVAC services, has acquired southern California-based Market Refrigeration Specialists (MRS). This acquisition brings the total of HVACR companies that TAG owns to seven in the western United States. Financial terms of the deal were not disclosed.

"The MRS team are well known to the customers in the west, and since their founding 33 years ago they have forged a stellar reputation for quality, integrity and responsiveness," said Jim Pape, CEO of The Arcticom Group. "Since the tragic and untimely passing of MRS's founder, Bill Badger, the leadership team at MRS and the Badger family have done a heroic job of keeping the company thriving. We (TAG) are honored to have the opportunity to add MRS to the TAG family of companies and make them an important part of the industry leading brand we are building."

Through its network of HVACR companies, TAG provides a wide variety of commercial refrigeration services, including preventative maintenance, repair, installation, renovation, new system engineering and design, energy optimization, and refrigerant management programs.

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TEXAS



Friedrich Named Supplier of Year by AD HVAC

San Antonio, Texas – Friedrich Air Conditioning Co., a leading manufacturer of room air conditioning and other home environment products, earned the industry's top "Supplier of the Year" award for 2019 from AD HVAC.

The award, which was presented during AD HVAC annual member meeting held earlier this month, reflects Friedrich's strong commitment to support independent distributors by offering a wide range of innovative product solutions, training, customer service and personalized support.

As a member-owned organization, AD brings growth-oriented independent distributors and best-in-class supplier partners together with the purpose of outperforming the market and staying ahead of the competition. For nearly six years, Friedrich has been a member of AD HVAC, a premier group of industry-leading HVAC distributors and suppliers in North America.

"At Friedrich, we're constantly investing in the ongoing success of our independent distributor partners," said Chuck Campbell, CEO of Friedrich Air Conditioning Co.

"We're very proud to have been honored with this award because it reflects our unwavering commitment to support the industry with outstanding products and services."

Founded in 1883, Friedrich has manufactured room air conditioners since 1952. Friedrich is a leading manufacturer of air conditioners and other home environment products.

Constructed of the highest quality components, Friedrich products are built to exacting standards and are among the most sophisticated, energy efficient and quietest available.

Visit Friedrich at www.friedrich.com for more information.

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Industry News

RectorSeal Tabs Wright Sales as Representative

Houston, Texas – RectorSeal LLC, Houston, a manufacturer and distributor of quality HVAC/R products, has named Wright Sales Co., Claremont, Calif., as its manufacturers’ representative for the territories of California, Nevada except for Clarke County, and Hawaii.

Principals Mike Brase, president and Cindy Brase, vice president, see Wright Sales’ territory as an excellent market for RectorSeal’s dozens of HVAC/R products, especially the new RSH-Series of HVAC surge and brownout protection; Slimduct lineset protection covers; AC Leak Freeze PRO refrigerant leak sealants; Aspen condensate pumps and other mini-split air conditioner accessories. RectorSeal’s new GulfCoat protectant coil coating and GulfClean two-step coil cleaner and salt reducer method will be invaluable for contractors protecting HVAC systems from ocean salt corrosion in Hawaii and the California coast.

RectorSeal’s John Kane, western regional sales manager–Plumbing/HVAC, will oversee the territory. “Wright Sales is a very unique rep firm, because they go beyond the conventional business of calling on just wholesale distributors and contractors,” said Kane. “They will also be promoting RectorSeal’s products to consulting engineers and other specifiers, code officials and architects.”

Mike Brase has 20-years’ experience with Wright Sales and is formerly a mechanical contractor field rep/project manager. He is one of the few HVAC/R reps nationally that holds a Certified Professional Manufacturer’s Representative (CPMR) certificate from the Manufacturers’ Representatives Educational Research Foundation (MRERF), an organization that trains reps in all trades. Cindy Brase brings a doctorate degree in organizational leadership and a B.S. in marketing management that helps Wright Sales market its lines to its extensive database of customers, as well as social media. Wright Sales has nine inside and road sales and one engineer intern on staff.

The 28-year-old firm’s top lines are LG Air Conditioning Technologies.



John Kane, western regional sales manager–Plumbing/HVAC, Rectorseal LLC, Houston; and Cindy Brase, vice president of Wright Sales Co.

NATIONAL



Carrier, Bryant Names Foundation Scholarship Winners

Indianapolis, Ind. – Carrier and Bryant have announced the 25 recipients of this year’s Carrier & Bryant Distributors’ Education Foundation scholarships. Scholarship recipients will receive support for the 2019-2020 school year. Carrier and Bryant, world lead-

ers in high-technology heating, air-conditioning and refrigeration solutions, are a part of Carrier, a leading global provider of innovative heating, ventilating and air conditioning (HVAC), refrigeration, fire, security and building automation technologies. “We’re pleased to offer a way to help our contractors prepare their sons and daughters for success through the Carrier & Bryant Distributors’ Education Foundation,” said David Meyers, vice president, sales and distribution, Residential HVAC, Carrier and Bryant. “Our contractors are an invaluable part of our business, and this is just one small way we can give back and say ‘thank you’ for their support and contributions.”


Continued on Page 6




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Continued from Page 5

Established in 1981, the Carrier & Bryant Distributors' Education Foundation was created to commemorate the late William A. Bles for his many significant contributions to Carrier distributors. Today, the foundation continues to serve the children of dealers and contractors while also honoring our industry's founder, Dr. Willis Carrier.

A post-secondary scholarship fund is a fitting memorial because Dr. Carrier attended Cornell University on a full, four-year merit scholarship. He earned a bachelor's degree in electrical engineering, became a successful inventor and business person, and, in 1902, invented modern air conditioning. Dr. Carrier was a consummate scientist and an educator, but he might not have attended college without financial assistance.

Scholarships from the foundation are available to children of Carrier and Bryant dealers and contractors and their employees throughout the U.S. and Canada.

Scholarship finalists are selected based on their demonstrated performance in school. Leadership, motivation and involvement in extracurricular activities are also taken into consideration.

The full list of the 2019 Carrier & Bryant Distributors' Education

Foundation scholarship recipients include:

- Joseph Alvarez, Tallahassee, Florida
- Jaclynne Carden, Columbiana, Alabama
- Madison Cook, Queen Creek, Arizona
- Hunter Crist, Watervliet, Michigan
- Cayden Diefenbach, Omak, Washington
- Rachel Hammes, Vancouver, Washington
- Jorden Harber, Somis, California
- Kaylee Houseman, Springfield, Ohio
- Audrey Kamper, Potosi, Missouri
- Luke Kilgore, New Market, Alabama
- Austin Koppeis, Farmington, Missouri
- William Kulis, Kent, Ohio
- Chloe McDaniel, Ankeny, Iowa
- Avery McNeill, Florala, Alabama
- Colleen Mock, Maryville, Illinois
- Danielle Owens, Columbus, Mississippi
- Jaydin Romalia, Fond Du Lac, Wisconsin
- Daniel Scheer, Glenview, Illinois
- Elyse Travis, Coatsburg, Il-

linois

- Katie Woods, Minocqua, Wisconsin

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Daikin Adopts R-32 for Key Products in North America

Washington, D.C. – Daikin companies in North America (Goodman Global Group, Inc.; Daikin North America LLC; Daikin Applied Americas Inc.; Daikin America, Inc.; and Daikin U.S. Corporation) announced they are developing ducted and ductless residential, light-commercial, and applied products utilizing R-32 refrigerant.

In evaluating alternative, low global-warming-potential (GWP) refrigerants for North America, Daikin is focused on reducing greenhouse gas emissions and climate impacts. The company also took a holistic approach to include safety, energy efficiency, and cost-effectiveness. Based on comprehensive evaluation and testing, Daikin concluded R-32 is the ideal low-GWP alternative to R-410A for many key residential, light-commercial, and applied products in North America.

Daikin's choice of R-32 is based on the beneficial attributes of

the refrigerant. Compared to R-410A and certain alternative refrigerants, R-32 can mitigate effects of direct refrigerant emissions by reducing the equipment refrigerant charge. Daikin has found that in comparison to R-410A, R-32 has a drastically lower GWP and could reduce refrigerant charge in certain equipment by up to 40 percent. The company has also found that equipment using R-32 can be more energy efficient and compact – thereby consuming fewer manufacturing resources – when compared to equipment using R-410A or certain alternative refrigerants. Daikin believes that R-32 – a pure, single component refrigerant available globally from multiple suppliers – is easier to reuse, reclaim, and recycle when compared to other refrigerants that are blends of R-32 and other components. In summary, Daikin believes R-32 can effectively help to minimize the environmental impact of HVAC equipment.

The choice of R-32 for the North American region is consistent with the wide global acceptance of the refrigerant. In Japan, R-32 is the dominant refrigerant for residential HVAC equipment while in other Asian countries – including China – and in many European countries, the refrigerant has become an increasing popular choice for HVAC equipment. Daikin has estimated that more than 84 million R-32 residential units have been installed by the industry across 70 countries. According to a Japan Air Conditioning, Heating & Refrigeration News, Ltd. (JARN) report, in 2018 alone, over 25 million residential units using R-32 were sold worldwide, accounting for more than 25 percent of total residential units sold in that year. This number is expected to increase in 2019. Furthermore, in the United States, acceptance of the refrigerant has already begun in some HVAC applications: JARN reports that in 2018, almost half of window air conditioning units sold across the U.S. used R-32.

By selecting R-32 for various ducted and ductless residential, light-commercial, and applied products, Daikin is extending its leadership position in North America. The company was the first to introduce R-32 residential air conditioners and heat pumps globally and has, since 2012, sold more than 21 million R-32 residential units worldwide.

To advance the adoption of R-32, Daikin has committed to share its knowledge and expertise. Earlier this year, Daikin announced its patent non-assertion pledge of identified patents to further facilitate the use of the R-32 in HVAC products. Daikin has also provided education and training programs for the refrigerant programs that have been supported by many governmental agencies. Daikin's overarching goal is to ensure that North America can benefit from the use of a refrigerant that provides measurable environmental and performance qualities that will benefit the environment and consumers.

"We know that the net effect of air conditioning on the environment is a combination of the refrigerant used and energy consumed," said Daikin Applied Americas' President and CEO Mike Schwartz. "R-32 enables home and building owners to achieve reduced climate impact, superior performance, and operational savings. Daikin is in a unique position as a manufacturer of both HVAC equipment and refrigerants. Our approach has always been to use our expertise to choose the right refrigerant for each application. R-32 is the right low GWP refrigerant choice for many of our residential, light-commercial, and applied products in North America."

Goodman Global's President and CEO Satoru Akama said, "Daikin's choice of R-32 demonstrates our strong commitment as a U.S. HVAC manufacturer to minimize environmental impacts of our equipment including the reduction of greenhouse gas emissions. R-32 brings many benefits including energy efficiency, resource reduction, and overall environmental mitigation. Based on our global experience, we are confident R-32 is the right choice for HVAC manufacturers, contractors, and consumers."

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Fresh-Aire UV Buys ElectroBreeze

Jupiter, Fla. – Fresh-Aire UV®, Jupiter, Fla., a leading manufacturer of indoor air quality (IAQ) products, acquired commercial/residential HVAC air filtration manufacturer Electro-Breeze Manufacturing, Saint-Sauveur, Quebec.

The acquisition positions Fresh-Aire UV to now offer particulate removal, using Electro-Breeze's sub-micron polarized filtration

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technology, in addition to its industry-leading IAQ product line-up that includes ultraviolet (UV-C) equipment for biological disinfection and activated carbon media catalyst air treatment for volatile organic compound (VOC) elimination. “We now offer a full-line, turnkey filtration solution for our HVAC distributors and contractors to address any IAQ challenge, whether it’s biological, VOCs and now particulates,” said Chris Willette, Fresh-Aire UV’s president.

The acquisition include Electro-Breeze’s Canadian-based manufacturing and assembly operations for its polarized particulate filtration and other IAQ equipment, all which will be relocated to Fresh-Aire UV’s new Jupiter-based filtration division manufacturing plant. Electro-Breeze’s products will be rebranded under Fresh-Aire UV or carry the new “Electro-Breeze by Fresh-Aire UV” brand, and be marketed globally. Electro-Breeze President and Founder, Pierre Audet has joined the Fresh-Aire UV team and will oversee the transition and Electro-Breeze’s equipment manufacturing operations

Audet began his career in elec-

trostatic filtration in 1984 with Engineering Dynamic followed by his leadership position as CEO of Cimatic. In 2002 Audet founded Electro-Breeze Manufacturing, a leader in sub-micron polarized filtration. Electro-Breeze products have provided air filtration solutions globally for residential and commercial applications, especially in casino, hospitality, healthcare and agricultural markets.

“Electro-Breeze is a leader in the high-efficiency filtration and polarized air cleaner market,” said Audet. “Our global reach and innovative solutions have made Electro-Breeze a premier filtration manufacturer offering exceptional solutions for those looking for highly effective sub-micron filtration with low static-pressure and odor control.”

For more information on Fresh-Aire UV or its products, please visit www.freshaireuv.com, call 1-(800) 741-1195 or email: sales@freshaireuv.com.

Danfoss Names Arctic Chiller Group EnVisioneer Winner

Baltimore, Md. – Danfoss has named Arctic Chiller Group the winner of its 10th annual EnVi-

sioneer of the Year award competition. Arctic Chiller Group is using Danfoss Turbocor® oil-free magnetic bearing centrifugal compressors in the development of its air- and water-cooled chillers with new Arctic Boost option to dramatically reduce first costs of equipment as well as energy consumption.

Launched in 2010, the annual EnVisioneer of the Year award competition recognizes North American original equipment manufacturers, building owners, municipalities, contractors, and end users that have introduced a new product, opened a new facility, or invested in a building or system upgrade in the past 18 months using Danfoss products or solutions to realize significant energy and environmental savings.

Through its new Arctic Boost option, Arctic Chiller Group has enabled its air-cooled and water-cooled lines of oil-free magnetic bearing chillers to extend its low lift operating envelope by approximately 40 percent for either cold condenser water or cold ambient air – allowing the chiller to run for an extended period in an inverted condition. This eliminates the need for other cooling systems to supplement the chiller load, thus reducing first costs and system complexity while also



Staff of the Arctic Chiller Group with the Danfoss EnVisioneer of the Year Award.

reducing energy consumption and total lifecycle costs.

For a 655,000-gross-square-foot office building in downtown Washington, DC, with a mechanical cooling load ranging from 150 to 200 tons when occupied and about 40 tons when unoccupied, Arctic Chiller Group’s oil-free magnetic bearing chiller with Arctic Boost option has allowed the building owner to quickly benefit from significant energy savings – more than \$74,000 just from December 2018 to March 2019.

According to Tim Blanch of Washington, DC-based real estate development and management company S.C. Herman & Associates, the oil-free chiller solution with Arctic Boost option is a lower first cost alternative that not only is more efficient but also enables buildings to meet water-side economizer code requirements.

“This is yet another example of the tremendous potential of the benefits of the proven, energy-efficient technology available to equipment manufacturers – and the tangible impact for building owners,” said John Galyen, president, Danfoss North America. “We know that the first costs often associated with upgrading to new, high efficiency equipment is one of the building owners’ primary challenges in becoming more energy efficient.”

“Danfoss Turbocor Compressors is pleased to have partnered with Arctic Chiller Group to implement our oil-free compressor technology and further expand the possibilities for oil-free chillers in an increasingly energy-focused building environment,” continued Ricardo Schneider, president and CEO, Danfoss Turbocor Compressors.

The EnVisioneer of the Year award was recently presented to Arctic Chiller Group and S.C. Herman & Associates in Washington, DC.

Mark Rogan, senior vice president, sales and marketing, Arctic Chiller Group said: “Arctic Chiller Group

is honored to receive this year’s EnVisioneer of the Year award. Through years of using high-quality Danfoss components, the Arctic Boost option is one of the most innovative and impactful designs we have developed for our customers in recent years—and the savings are really proving it. It’s hard to improve on a high industry benchmark for efficiency like the Danfoss Turbocor® compressor, but Arctic Boost is supplementing pre-existing savings in off peak or lower load conditions amazingly well.”

HARDI Releases Short Film Version of Documentary

Columbus, Ohio – Heating, Air-conditioning & Refrigeration Distributors International (HARDI) has released the short film version of their HVAC Workforce Recruitment Initiative Documentary, Hot Commodity. It is a tool to help increase awareness of the HVAC industry and its career opportunities.

When completed, Hot Commodity will be a full-length film, with the primary intent of reaching an audience of high school and college students, who visit streaming platforms to learn about things that they may be unfamiliar with and who are trying to find the right career path.

HARDI plans to cut the film into shorter pieces that can be used to target different audiences. This is where the recently released short film comes to play.

“We wanted to give our members something tangible to use for recruitment,” said Director of Marketing and Sales Chris DeBoer. “Something to show young individuals entering the workforce

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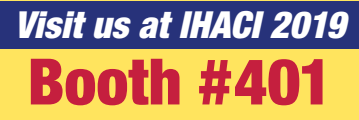
-  **Ultra-low emissions.** Advanced burner technology reduces emissions by as much as 65% versus standard low-NOx models, allowing these models to meet the most stringent standards for air quality – taking care of both your home environment, and the one outside.
-  **Engineered for savings.** YORK® TL9E ultra-low NOx gas furnaces are optimized to provide ENERGY STAR® rated efficiency when connected to select YORK® home comfort systems.
-  **Consistent comfort.** High-efficiency, standard ECM blower motors ensure dependable, high-performance air distribution while saving you money. These high-efficiency blower motors increase the efficiency of your HAC system in both cooling and heating seasons.
-  **Quality construction.** Designed, engineered and assembled in the United States, YORK® TL9E and TL8E ultra-low NOx gas furnaces are built to last. They feature reliable, stainless-steel primary and secondary heat exchangers for exceptional corrosion resistance and a fully insulated blower compartment to improve thermal and acoustic performance.

With ultra-low NOx gas furnaces from YORK®, you get comfort that goes beyond temperature. These environmentally responsible furnaces reduce greenhouse- and smog-producing gases by up to 65% vs. standard low-NOx furnaces. At the same time, fuel costs can be reduced thanks to exceptionally high AFUE efficiency ratings. And every ultra-low NOx gas furnace from YORK® comes with peace of mind provided by class-leading warranties. It's high-performance comfort that's more reliable – while also being more sustainable.



Model Number	Heating BTUh	AFUE	Weight	Length (Inches)	Width (Inches)	Height (Inches)
TL8E060A12UH11	60k	80%	94	29.5	14.5	33.0
TL8E080C16UH11	80k	80%	114	29.5	21.0	33.0
TL8E100C20UH11	100k	80%	122	29.5	21.0	33.0

Model Number	Heating BTUh	AFUE	Weight	Length (Inches)	Width (Inches)	Height (Inches)
TL9E060B12UH11	60k	95%	122	29.5	17.5	33.0
TL9E080C16UH11	80k	95%	136	29.5	21.0	33.0
TL9E100C20UH11	100k	95%	145	29.5	21.0	33.0



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Industry News

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the opportunities available to them within the HVAC industry. Members can utilize this film on their website, at career fairs, or on their social media pages to showcase the industry and the careers it offers.”

The film was first introduced at HARDI’s 2018 Annual Conference. While the film was scheduled to debut soon after the conference, after taking into account member feedback, HARDI decided to add more individuals to the film, including contractors, to get a full picture of the HVAC industry.

The full documentary is scheduled to be released late Fall 2019. To learn more about the project, or to get involved, contact Chris DeBoer at cdeboer@hardinet.org. To view the short film and to learn

more about HARDI’s workforce recruitment initiative visit: <https://hardinet.org/workforce-recruitment-initiative/>.

Mitsubishi Electric Trane Opens New Showcase Room

Suwanee, Ga. – Mitsubishi Electric Trane HVAC US (METUS) announced the opening of its Product Showcase room.

“Interactive experiences will be based on a customer’s input and what they want to view,” said Brinnon Williams, senior director, Residential Channel Development for Mitsubishi Electric Trane HVAC US. “The Product Showcase room will provide customers with



The ribbon-cutting ceremony for Mitsubishi Electric Trane’s new product showcase room.

innovative tools and resources previously unavailable.”

METUS developed the Product

Showcase room over an eight-month period, culminating in the grand opening on Aug. 28. METUS designed the room so customers can take self-guided tours through 11 stations where they gain insight into the company and its state-of-the-art technology by interacting with products and videos.

Stations include:

- Our History: Starts with the broader history of Mitsubishi Electric Corporation in Japan and continues through the establishment of METUS in May 2018
- Quality Section: Illustrates the company’s commitment to quality control, including use of high-quality materials, rigorous testing, and innovative product design
- INVERTER-Driven Technology: Explains the differences between a conventional HVAC system and

a Mitsubishi Electric system in terms of efficiency, physical footprint, weight, and noise level

• Hyper-Heating INVERTER® (H2i®) Technology: Describes how hyper-heat technology works and simulates a real-world example of cold climate performance

• Residential Controls: Allows customers to interact with residential product controls, including the kumo® cloud app

• 3D i-see Sensor™ Technology: Uses thermal imaging display to illustrate how the 3D i-see Sensor scans the room continuously, adjusting temperature and airflow for maximum comfort

• Zoned Comfort Solutions®: Includes products and a video to explain how Mitsubishi Electric’s Zoned Comfort Solutions technology provides individual temperature control in each room

• Commercial Controls and Solutions: Allows customers to interact with commercial product controls and solutions, such as energy-apportionment panels

• Four-Way Cassettes: Provides customers with an up-close view to learn about the vanes ability to direct airflow in multiple directions, plus explanatory videos

• CITY MULTI® Variable Refrigerant Flow (VRF) System: Allows customers to see and touch Mitsubishi Electric’s cutting-edge VRF technology, view schematics, and watch explanatory videos

• METUS Resources and Support: Highlights METUS’ customer support offerings and resources through interactive video and web-based content

Located at 1340 Satellite Boulevard, Suwanee, Ga., the Product Showcase room will be open to customers Monday – Friday from 8:30 a.m. to 5 p.m.

Rheem Partners with Bell for NASCAR Cup

Atlanta, Ga. – Rheem will continue its longstanding commitment to NASCAR and its relationship with driver Christopher Bell in 2020. The company is proud to sponsor Christopher as he joins Joe Gibbs Racing alliance partner,

Continued on Page 12

1 INNOVATIVE OUTDOOR FAN SYSTEM

New Weather Series Rooftop Units* feature an outdoor fan system with an exclusive, innovative design. Its high-density composite fan blade provides long-lasting quality, and the blade is dynamically balanced for quieter operation. Permanently lubricated motor bearings also provide high-efficiency operation and reliability.

2 UNIT COIL DESIGN

Carrier units use a time-tested round tube plate fin condenser coil design. In addition to their proven reliability, the 5/16" copper tube and aluminum fin condenser coils help enhance efficiency and reduce refrigerant charge.

3 VANE AXIAL INDOOR FAN

This innovative, patent-pending technology replaces traditional belt drive fans with a simpler, more compact design that's the first of its kind in the industry for this type of equipment.* It delivers quiet operation and reduced operating costs through features including a direct-drive ECM motor and dynamically balanced blade fan.

4 NEW UNIT CONTROL BOARD

To make unit setup and service simpler, the updated Weather Series Rooftops* have been equipped with a new control board. The board offers dedicated indoor fan setup with a large field wiring terminal connection, an intuitive speed dial and switch operation. It's so simple that no special trades or training is required.

5 OPTIONAL SYSTEMVU™ CONTROLS

To bring the benefits of smarter diagnostics to Weather Series Rooftop Units,* all models now include intelligent SystemVu controls. SystemVu controls make installation and startup simpler while providing ongoing real-time information to help ensure the efficient operation and optimum performance of the unit.

6 TOOL-LESS FILTER ACCESS DOOR

As part of our commitment to designing for simplified maintenance, Carrier has equipped new Weather Series Rooftop Units* with filter access doors that can be opened without tools. This allows for quick and easy access to service, check and change filters.

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Industry News

Continued from Page 10

Leavine Family Racing (LFR) for the 2020 Monster Energy NASCAR Cup Series (MENCS) season as the driver of the No. 95 Toyota Camry.

Bell is currently competing in his second full-time NASCAR Xfinity Series season for Joe Gibbs Racing, where he's amassed 15 career-series victories and in 2018, set the record for most wins (seven) by a rookie in the series. He is the winningest driver in Rheem Racing's 11-year history.

Bell's NASCAR Xfinity Series crew chief, Jason Ratcliff, will join him in the transition to the Cup Series. The technical alliance that LFR has had with Joe Gibbs Racing and Toyota Racing Development (TRD), U.S.A., will be enhanced in 2020 giving Bell the benefit of the same TRD's engines and technology used by JGR's four

championship contending Cup teams.

"Christopher is exceptionally talented, and we are thrilled that Rheem will continue to support him as he moves up to the next level in his already impressive career," said Chris Peel, President and CEO, Rheem. "The Rheem Racing program has been a hallmark of our business for more than a decade, and we are looking ahead to 2020 with nothing but excitement. It's an honor to continue our winning relationship with Christopher, Joe Gibbs Racing and Toyota Racing Development."

"Since I was young, I wanted to make a career out of racing," said Bell. "To take this next step and race in the NASCAR Cup Series with the support of LFR, JGR and Toyota is just a dream come true. It also means a lot to me to have Rheem make the move to Cup racing with me. I wouldn't be in the

position I am today without their support."

Since entering NASCAR as a sponsor, Rheem has steadily increased its level of participation in the sport. Throughout each season, the company hosts its valuable customers on-site at various races for truly unique experiences. To learn more, visit Facebook.com/Rheem-Racing.

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Johnson Controls Project Wins State Award in Oklahoma

Milwaukee, Wisc. – Johnson Controls announces the Norman Economic Development Coalition (NEDC) received a Project of the Year Award for Excellence in Economic Development for its critical role in the expansion of the Rooftop Center of Excellence

in Norman, Oklahoma. The NEDC, which won in the category of cities with a population over 40,000, received the honor from the Oklahoma Economic Development Council.

The NEDC helped Johnson Controls secure \$1.75 million in funding from the Oklahoma Economic Development Pooled Finance Program, which helped fund construction of a new 400,000 square-foot laboratory and manufacturing space and renovations to over 150,000 square-feet of office and meeting space. The expansion of the 900,000 square-foot facility had a tremendous impact on the Norman community, creating 300 full-time jobs and adding an annual \$110 million local economic boost. Overall, Johnson Controls has a \$350 million impact on the local economy.

"This award represents the successful collaboration and teamwork put forth to make the Johnson Controls Rooftop Center of Excellence a win-win for everyone involved," said Maureen Hammond, NEDC interim president. "Having this state-of-the-art facility has created new jobs for our citizens and made a considerable positive impact on our local economy. Johnson Controls' vision and implementation strategy made this facility future-ready for growth and we are honored and proud they have selected to reinvest in our community."

Over the past year, Johnson Controls has developed new products for existing lines and launched two new series of commercial rooftop units that were designed, engineered and assembled at the Rooftop Center of Excellence. The new series include the 25-50 ton Premier rooftop units, launched in December 2018, and, most recently, the 15-27 ton Choice rooftop units launched in August 2019. The facility was also honored by Industry Week as a Best Plants Winner for empowering its employees to use their voice to make positive change with both product and process development.

"We are so proud to see the NEDC honored for their hard work," said Liz Haggerty, vice president and general manager, Ducted Systems, Johnson Controls. "The new space represents our commitment to the rooftop unit industry and enables our team to deliver exceptional products to our customers with faster lead times, while provid-

ing unprecedented future growth opportunities."

The Rooftop Center of Excellence includes a two-story, 52-foot-high testing lab, roughly the size of one-and-a-half football fields. The extensive laboratory offers an environment that allows Johnson Controls to conduct on-site complex development, regulatory compliance, performance, safety and reliability testing, including the ability to test a 150-ton rooftop unit in climates ranging from -30 to 130 degrees F. To learn more about the Johnson Controls Rooftop Center of Excellence, visit www.johnson-controls.com.

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Chill Challenge Hopes to Spur New Technologies

Denver, Colo. – Engineers Without Borders USA (EWB-USA) recently announced a challenge competition to develop innovative refrigeration technologies for off-grid households in the developing world.

"As many as 2 billion people live without refrigeration," said Andrew Dowdy one of EWB-USA's engineers instrumental in developing the challenge. "It's more than just a convenience, refrigeration can be an essential service, improving the quality of life for millions of people in a number of important ways. However, it has largely been an unaffordable option, especially for those who live without access to grid power."

The Challenge will provide up to 10 grants between \$25,000 to \$50,000 for the development of proof-of-concept prototypes for low-cost refrigerators and community icemakers. EWB-USA seeks to address the refrigeration gap and push engineers and inventors in their thinking around refrigeration, especially the assumption that off-grid refrigeration will look a lot like on-grid.

"We need to re-think off-grid refrigeration in two important ways," said Dowdy. "First, rather than continuing to try to adapt existing refrigerators to the off-grid market, we need to examine other refrigeration technologies to identify ones that may be more appropriate for off-grid customers and conditions. In addition, we need to rethink our definition of refrigeration to include not only household units but also other solutions such as community-sized

Continued on Page 28

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*The Rheem Ultra Low NOx R801T Upflow Gas Furnace was the first unit certified to meet California's South Coast Air Quality Management District Rule 1111 mandate to reduce NOx emissions from 40 ng/J to 14 ng/J.



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SCE Energy Education Center
6090 N. Irwindale Ave.
Irwindale, CA 91702
626-815-7246
Booth(s) 407

Sealed Unit Parts Co., Inc.
2230 Landmark Place
Allenwood, NJ 08720
732-223-6644
Booth(s) 625

Service Roundtable
750 Canyon Drive
Coppell, TX 75019
877-262-3341
Booth(s) 502

ServiceTitan
801 N. Brand Blvd. #700
Glendale, CA 91203
626-434-6617
Booth(s) 307

Sierra Truck Center
1621 S. Magnolia Ave.
Monrovia, CA 91016
626-359-8291
Booth(s) 723, 725, 727, 729, 822, 824, 826

Sigler Wholesale Distributors
205 S. Puente St.
Brea, CA 92821
714-578-5225
Booth(s) 701, 703, 802

Sirris Abatement
12303 Woodruff Ave.
Downey, CA 90241
562-401-1122
Booth(s) 306

Slingshot
601 Timpanogos Pkwy
Orem, UT 84097
800-514-7360
Booth(s) 709

SoCal Gas
555 W. 5th Street
Los Angeles, CA 90013
800-427-2000
Booth(s) 803

SoCal Gas Multi Family Rebate Program
555 W. 5th Street
Los Angeles, CA 90013
626-622-2463
Booth(s) 809

SoCal Sheet Metal JATC
633 N. Baldwin Park Blvd.
City of Industry, CA 91746
626-968-3340
Booth(s) 508

SoleusAir
9645 Telstar Ave. #C
El Monte, CA 91731
626-626-4060
Booth(s) 302, 304

Southern California P.I.P.E. Trades
501 Shatto Pl. #200
Los Angeles, CA 90020
800-457-7473
Booth(s) 313

Style Crest, Inc.
2450 Enterprise St.
Fremont, OH 43420
419-332-7369
Booth(s) 504

- T -

TSI, Inc.
500 Cardigan Road
Shoreview, MN 55126
651-490-2860
Booth(s) 100

Thermaflex
381 Carwellyn Rd.
Abbeville, SC 29620
800-459-4822
Booth(s) 606

Thermostat Recycling Corporation
500 Office Center Dr. Ste. 400
Fort Washington, PA 19034
267-513-1726
Booth(s) 111

Thorson Motor Center
3456 E. Colorado Blvd.
Pasadena, CA 91107
626-795-8851
Booth(s) 813, 815

TruTech Tools, LTD.
3425 Gilchrist Rd., Suite B
Mogadore, OH 44260
888-224-3437
Booth(s) 203

- U/V -

US Air Conditioning Distributors
16900 Chestnut St.
City of Industry, CA 91748
800-937-7222
Booth(s) 401

Uniweld Products
2850 Ravenswood Rd.
Fort Lauderdale, FL 33312
(954) 584-2000
Booth(s) 613

Ventamatic, Ltd
100 Washington Ave.
Mineral Wells, TX 76067
940-325-7887
Booth(s) 210

Visual Service by IHACI (VS)
454 West Broadway
Glendale, CA 91204
818-551-1555
Booth(s) 619

- W/Z -

Walter's Sprinter of Riverside
8505 Indiana Ave.
Riverside, CA 92504
951-552-2820
Booth(s) 129

Western Enterprises
875 Bassett Road
Westlake, OH 44145
800-783-7890
Booth(s) 418

Wright Sales Company
112 Harvard Ave. #281
Claremont, CA 91711
760-634-7601
Booth(s) 604, 605, 607

ZONEFIRST
6 Aspen Drive
Randolph, NJ 7869
201-794-8004
Booth(s) 603

2019 EXHIBITOR DIRECTORY

AC Pro

Booths 323, 325, 327, 329, 422, 424, 426

AC Pro is a family-owned wholesale distributor that delivers outstanding customer service while supplying HVAC equipment, parts, and supplies to Southern California, Southern Nevada, and Western Arizona markets.

AC Pro has served the HVAC industry for over 30 years. In addition to our brick and mortar locations, we have a newly launched online store – acpro.com. This site is easy to navigate, and AC Pro customers can use it to view pricing, place orders, manage truck stock, check inventory levels, look up technical specifications and much more! The website is user-friendly and is readily accessible on all mobile devices.

AC Pro specializes in the add-on replacement, residential new construction, commercial, and multi-family divisions of the HVAC industry. Our strategically placed manufacturing plants in Fontana, California and Las Vegas, Nevada, allow us to make custom metal products and custom made line sets and provide next-day delivery or in-store pick-ups. We offer a wide variety of training clinics and NATE testing for you and your team. We also provide easy returns, instant warranty credits, extended hours at no charge, and free trash drop off.

At AC Pro, we are committed to integrity, quality craftsmanship, and long-term relationships with our customers. You can find AC Pro locations throughout Southern California and Southern Nevada - visit acpro.com for more details!

Action Duct Booth 202

Action Duct Cleaning has provided meticulous HVAC cleaning services for thousands of industrial, commercial and residential clients since 1978, with the most tenured, conscientious foremen in the business. Our President serves on the Board of NADCA, setting best practices and technical protocols for the industry. Contact us: 800-371-2284 or actionduct.com.

Aerus Enterprise Solutions (Air Scrubber) Booth 811

The suite of products offered by Aerus Enterprise Solutions is designed to provide premium purification methods for homes and businesses. We offer a whole-home air cleaning solution, single-room air purifiers, and a product to clean your laundry without detergents or chemicals. Each item in our collection features award-winning

ActivePure® Technology, a purification system with origins in the NASA space program, that's now recognized in the Space Foundation Hall of Fame as one of the most important innovations ever by the private sector. ActivePure® Technology effectively removes stale odors, reduces dust, and eliminates harmful contaminants in the air, water and on the surfaces of your home, all without the use of harmful chemicals or by-products, so it's safe for your whole family.

Airex Manufacturing, Inc. Booth 717, 719

Airex Manufacturing is the #1 choice in outdoor refrigerant piping solutions. The Airex Pro-System Kit™ is the optimum system to properly seal the wall penetration and protect pipe insulation from damage around the outdoor HVAC unit for an aesthetic and sustainable install. Website: www.airexmf.com; Email: salesteam@airexmf.com; Phone: (760) 343-2277.

Albritton Company Booth 217

The John Albritton Company, (since 1982, our 37th year!) will be exhibiting the following manufacturers' products:

Intermatic/Grasslin time clocks / defrost controls, GM-40AV general purpose timer replaces discontinued 4000 and 7000 models. CD-1 Compressor Defender + AG 3000 HVAC surge protection controls, Icubee series DDT40 adaptive defrost model - use standalone or retrofit existing DTAV-40's with DDFM by adding an evap coil sensor and logic to skip unneeded defrost - saving energy / equipment wear and tear! Midco lo-nox gas burners, Doucette heat exchangers and heat recovery units. CellarCool Wine Cellar Cooling Systems by WhisperKOOL, TPI heaters, fans, occupancy sensing t-stats, Midco power gas and Lo-Nox burners. New - NAVAC Vacuum pumps and Refrigerant Recovery Machines plus see our cordless flaring tool and cordless vacuum pump! Superior Valves by Mueller Brass - isolation, ball, check valves, suction / liquid line filters/cores. AccuTools TruBlu hoses! NoFreeze Controls. Auto Grip Tools And RocketCloud Web Enablement Solutions!
(949) 494-7030; www.johnalbritton.com.

Alliance / AirTek Booth 204

With offices throughout California and Arizona, Alliance



Environmental Group/Airtek Indoor Air Solutions is a leader in asbestos duct removal and air duct cleaning. We have over 75 years of experience in the indoor air quality industry. Stop by and meet our team at the upcoming trade show!

Apollo Power Solutions Booth 718

Apollo Power Solutions is a USA product development company that invents/produces innovative, problem-solving, product technologies for the HVAC/R Industry.

Apollo has applied over 50 years of knowledge & expertise in creating solutions that solve problems, save time, provide value for customers and increase profits.

"Where Technology Meets Need"

Appion Inc. Booth 704

Appion is Applied Innovation. We never stop challenging ourselves to develop smaller, lighter, and more innovative tools for HVAC/R technicians. Appion's solutions for fast Refrigerant Recovery, Evacuation and Measurement include: G5Twin Recovery Machine, TEZ8 Vacuum Pump, appION Wireless Digital Gauges, and MegaFlow Vacuum-Rated Tools.

Visit us at appiontools.com!

Aprilaire Booth 103

Learn more about indoor air quality solutions that can be used to comply with 2019 Title 24, Part 6

- Industry's first MERV 13 filter grille air cleaner
- Lowest static pressure
- Longer filter life
- Better equipment protection
- Ventilation and thermostat solutions

For more information contact Brian.Kennihan@aprilair.com

AQC Industries Booth 321

AQC Industries has revolutionized air-duct systems for indoor, outdoor and underground use in residential, commercial and industrial applications. BlueDuct®, QDuct® and PalDuct™ Preinsulated Duct Systems offer benefits including energy and labor savings. AQC Engineers, Technicians and Representatives consistently provide high-quality products, CAD services and contractor training

Arzel Zoning Technology, Inc. Booth 705

Arzel offers superior quality and a lifetime warranty. Designed specifically for trouble-free installation, our zoning products are perfect for retrofit and new construction applications in residential or commercial buildings. Our mission is to increase contractors' efficiency through training, outstanding technical support, and products, making Arzel the right choice for professionals.

Aspen Manufacturing Booth 229

Aspen Manufacturing is one of the largest independent coil manufacturers in the air conditioning marketplace in the United States and Canada. The company engineers, manufactures, and markets an extensive line of residential, manufactured homes, and light commercial evaporator coils and air handlers under the Aspen brand. Featured this year will be a wide variety of coils and air handlers including the new CR Plenum coil, the only plenum coil in the industry with the Primary and Secondary pan combined. The company will also be displaying a full line of soffit-mount electric and hydronic air handlers manufactured under the AirMark brand.

ASPEN Refrigerants, Inc. Booth 609

ASPEN Refrigerants is your

refrigerant partner – Any Refrigerant, Any Place, Any Time. Free shipment and one day delivery to nearly anywhere in the U.S. Buy R-22, which is legal to buy and sell, now and after 2020. Sell us your used refrigerant at the best market price. www.aspenrefrigerants.com or (1-800) 473-3766.

Baker Distributing Company Booth 601

Established in 1945, we bring over 75 years of business experience and knowledge of the HVAC and Commercial Refrigeration industries to our customers. Baker Distributing Company, offers our customers a wide range of product lines, competitive pricing, superior service and valuable timesaving services that position us as an industry leader. With over 200 service centers in 22 states we continue to grow and are positioned to serve the HVAC/R community.

Benoist Co.

Booth 106, 108, 110, 112

• ATCO Rubber Products, Inc. (Booth #106) is the world's largest manufacturer of flexible air ducts used for heating, ventilating, and air conditioning systems for residential systems and commercial applications. ATCO's service is enhanced by an unmatched production capacity in the form of 11 manufacturing and shipping locations throughout the U.S.A.

• Champion/Essick's (Booth #108, #110) is one of the nation's largest producers of evaporative coolers is committed to product quality and consumer value. Offering a comprehensive selection of aspen and rigid media residential and light commercial evaporative air coolers in the market, we continue to redefine the standards of quality and innovation in evaporative cooling solutions.

• Fresh-Aire UV- (Booth #106) is the world leader in UV light

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Get ahead with these fall classes

Continuing education classes from basic to advanced



NOVEMBER CLASSES

NATE Air Conditioners & Heat Pumps

Part 5: Wednesday, November 6

Part 6: Thursday, November 7

Time: 6:00 pm - 9:00 pm

NATE Air Distribution Systems

Part 7: Wednesday, November 13

Part 8: Thursday, November 14

Time: 6:00 pm - 9:00 pm

HVAC - Practical Green Buildings

Thursday, November 14

Time: 8:30 am - 11:30 am

NATE Exam

Saturday, November 16

Time: 8:00 am - 12:00 pm

All classes are held at:

SDG&E® Energy Innovation Center

4760 Clairemont Mesa Blvd.

San Diego, CA 92117

To register and view upcoming classes go to **seminars.sdge.com**.

We always have continuing education classes where you can brush up on the basics or challenge yourself to learn more. Act now because these classes are sure to fill up fast. Register at **seminars.sdge.com**.



Some programs are funded by California utility customers and administered by San Diego Gas & Electric® under the auspices of the California Public Utilities Commission. Programs may be modified or terminated without prior notice and are provided to qualified customers on a first-come, first-served basis until program funds are no longer available.

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disinfection for HVAC applications. Come see our new APCOX and Mini-UV LED products. All our products have a lifetime warranty with quality-made here in the USA.

Mason Industries, Inc. (Booth #112) for over 60 years has created "The Standard" in vibration control products for the HVAC industry. Stop by our booth and see our live demonstration on how our Super W waffle pad, neoprene and spring mounts can quiet down disturbing vibration problems. We will also display other products such as rubber flexible connectors, braided stainless steel hoses and seismic restraints.

Broadly Booth 206

Broadly's customer engagement platform helps businesses manage leads, communicate with today's customers, get paid, and generate online reviews. Our mobile first approach enables owners and managers to run their businesses from anywhere in real-time. Thousands of local businesses depend on Broadly every day.

Brownson Technical School Booth 410

Brownson Technical School has offered hands-on HVACR training for 35 years.

HVAC/R training is 1040 hours and one of only five HVAC Excellence schools in California and one of two schools offering training and testing for Mechanical Acceptance Test Technicians which becomes mandatory in 2020. (800) 799-9891 or visit: www.brownson.edu

CalCERTS, Inc. Booth 102

Visit CalCERTS Booth #102 to learn about CalCERTS HERS Training for Title 24 code compliance. CalCERTS' HERS Rater Training is based on HVAC best practices and the CalCERTS Registry provides the largest, most comprehensive data registry for HVAC contractors to easily complete compliance forms. The CalCERTS Registry simplifies code compliance for installers, building inspectors, and Raters. For more information visit www.calcerts.com.

California Contractors State License Board (CSLB) Booth 808

CSLB protects consumers by regulating California's construction industry. CSLB administers examinations and issues licenses,

investigates complaints, issues citations, suspends/revokes licenses, and/or seeks criminal and civil sanctions against violators. CSLB's Statewide Investigative Fraud Team works to eliminate unlicensed contractors through weekly sting/sweep operations.

California Energy Commission (CEC) Booth 810

Since 1975, the California Energy Commission has been reducing energy demand by adopting Building and Appliance Efficiency Standards that have contributed to keeping California's per capita energy consumption well below the average for the rest of the country. The 2019 Energy Standards will be in effect starting January 1, 2020 with new requirements for HVAC systems and components, HERS verification, and acceptance testing.

CCSREP

Booths 620, 622, 624, 626

CCSREP is a manufacturer's representative company promoting specialty products & supplies, and accessories. We use our hands-on experience to conduct training and to rapidly and effectively respond to our customer's needs and effectively promote their products. Our individual reputations with principals, customers and distributors combine to form a team well recognized and respected within the industry. CCSREP provides their manufacturers with many services and benefits above and beyond other traditional Sales Rep Firms. Visit our website for all of the products that we represent in the HVAC and plumbing industry: www.ccsrep.com.

CHEERS Booth 411

CHEERS is California's largest Registry for energy code compliance. The CHEERS Registry is simple, intuitive, and fast! Stop by the CHEERS booth to meet the team and learn more about CHEERS free contractor services and opportunities.

CHIGO Booth 707

Chigo Air Conditioning was founded in 1994 in Guangdong, China with the mission to build a reputation on quality and trust throughout the global HVAC industry. USA Headquarters is located in City of Industry, California, complete with a full inventory of Mini Split Heat Pumps, Aftermarket Parts and Customer Service. 626-839-3736



Coilmen Plus Booth 517

For over 50 years, Heatcraft coils have set the industry standard in quality heat transfer coil manufacturing. Coilmen Plus is the exclusive representative in the Southwestern states providing coils direct to you. Whether it is a replacement or new design, our in house engineering staff can provide the quality you need in the time frame your customer demands.

Coolfront by FieldEdge Booth 405

If you're looking for profitability, efficiency and consistency, the answer to your dilemma is field service software from FieldEdge or Coolfront. Both options utilize the best flat rate parts and repair database in the industry—we're talking over 35,000 repairs and 16,000 parts. Let us guide you in which software is the best fit for your business and we will boost your profits and help you run a more efficient service business.

Cozy Heaters Booth 708

Cozy heaters provide a reliable, safe and duct-free option for your heating needs. We have been supplying the market for almost 50 years. Stop by our booth to register for a chance to win a FREE, Cozy - 35K Gravity Wall Furnace, during the Show - Booth #708.

Dancool HVAC Supply Inc. Booth 529

4544 San Fernando Rd.
Glendale, CA 91204

Denco
Booths 221, 222, 223, 224, 225,
226, 227
Denco Manufacturing Repre-



sentatives is proud to represent Samsung Hvac - Superior Quality Mini Splits including Residential, Light Commercial & VRF. Yellow Jacket - Serving the industry for over 70 years with High Quality Service tools including hoses, gauges, manifolds, vacuum pumps, recovery units and so much more. ICM Controls - Technologically advanced custom controls. Blue Diamond - Condensate removal pumps and accessories for use in air conditioning and refrigeration. Shurtape - Outstanding Quality HVAC Tape as well as a full line of craftsman approved packaging, masking, and cloth tapes. Lucas Milhaupt - Decades of Expertise providing innovative Metal Joining Solutions to connect the world around us. Phenomenal Air - Plasma generators with cold plasma generator technology which kills viruses, bacteria, mold spores, fungus spores, eliminates allergens and odors and more. PDM - High Quality Polyethylene Preinsulated Linesets made in the USA. Maxxeon - The trusted name for Profes-

sional, Industrial, and Commercial Grade rechargeable Work Lights. Cool Automation- HVAC Home Automation Integration.

Dexen Booth 611

Did you leave the gas on? Is your HVAC equipment over-worked? Get an email alert before going on site. We provide status-on-demand and totalized readings for gas flow, temperature, humidity and current which you can check directly from our website and application. Get certified to install Dexen's natural gas flow meters! Live demos at 1pm and 3pm.

Emerson-White-Rodgers Booth 205

Emerson creates innovative solutions to maximize comfort, efficiency and reliability in heating, air conditioning and refrigeration systems. We offer a full line of thermostats, furnace controls, gas valves, water heater controls, heat pump controls, filter driers, and expansion valves from brands you

2019 EXHIBITOR DIRECTORY

can trust such as White-Rodgers and Sensi.

Energy Code Ace Booth 409

EnergyCodeAce.com is a “one-stop shop” offering no-cost tools, training and resources designed to help building industry professionals meet the requirements of California’s building energy code, Title 24, Part 6 and the Title 20 appliance standards. Learn how to decode these standards and gain a competitive edge!

ERE Inspections Booth 711

ERE Inspections offers HERS Testing and Permit Expediting throughout Los Angeles and Orange County. Our certified and insured inspectors are trained to test quickly, with minimal disruption to homeowners. Come find us at our booth! We will be handing out 50% OFF coupons for new customers, and raffling off FREE HERS Test packages!

ESCO Institute / HVAC Excellence Booth 807

Thinking about getting certified? HVAC Excellence is the industry’s largest provider of certification, 300,000 strong and growing. Offering over seventy different written and hands-on certifications, we have the tools to help you, regardless of what stage you are at in your career.

Express Fasteners, Inc. Booth 710

Express Fasteners supplies the construction & manufacturing industries with quality products delivered on time, and with knowledgeable staff who can accurately answer nearly any question relating to fasteners. Product offering includes strut, threaded fasteners/rod, screws, wire, cutting blades, anchors, pipe hangers and more. Services include pre-fab, take-offs, and nationwide stock.

Ferguson HVAC® | Day & Night® Booth 201

Ferguson HVAC is an industry leader and distributor of unitary residential and commercial heating and cooling equipment, parts and supplies. With Day and Night locations across California and Arizona, our localized branches offer HVAC contractors unique advantages over competition from an advanced network of distribution centers, superior logistics and highly-trained associates. When you combine Day and Night’s heating and cooling equipment,

parts, supplies, with Ferguson HVAC, our product offering consists of solutions for every application and segment of the HVAC industry. We offer high-efficiency full-featured inverter communicating models to standard economical systems (Maratherm), all backed by strong warranties. Our commercial lines range from 3-tons through 25-tons of cooling capacity in standard and high efficiency rooftop and split systems. Come meet Ferguson HVAC I Day & Night- the distributor that’s built for your industry with smarter ways for you to do business. Discover new growth opportunities and disruptive strategies necessary for today to compete and win.

Ferguson HVAC® | MITSUBISHI ELECTRIC® | HONEYWELL® Booths 303, 305

Ferguson HVAC is an industry leader and national distributor of residential and commercial heating and cooling equipment, systems, parts and supplies. With Mitsubishi Electric in locations across California, Arizona, and Nevada, our localized branches offer HVAC contractors unique advantages over competition from an advanced network of distribution centers, superior logistics and highly-trained associates. When you combine Mitsubishi’s heating and cooling equipment, parts, supplies, and Honeywell with Ferguson HVAC, our product offering consists of solutions for every application and segment of the HVAC industry. We offer you our most complete lineup of products ranging from ductless, mini-split systems and VRF. Come meet Ferguson HVAC, Mitsubishi Electric, and Honeywell- the distributor that’s built for your industry with smarter ways for you to do business. Discover new growth opportunities and disruptive strategies necessary for today to compete and win.

Ferguson HVAC® | Ruud® Booths 402, 404

Ferguson HVAC is an industry leader and distributor of unitary residential and commercial heating and cooling equipment, parts and supplies. With locations across California and Arizona, our localized branches offer HVAC contractors unique advantages over competition from an advanced network of distribution centers, superior logistics and highly trained associates. When you combine Ruud’s heating and cooling equipment, parts, supplies, with Ferguson HVAC, our product offering consists of solutions for



every application and segment of the HVAC industry. We pride ourselves on providing solutions to assist with the growth, health and profitability of your business. Come meet Ferguson HVAC I RUUD- the distributor that’s built for your industry with smarter ways for you to do business. Discover new growth opportunities and disruptive strategies necessary for today to compete and win.

Ferguson HVAC® | TRANE® Booth 301

Ferguson HVAC is an industry leader and national distributor of residential and commercial heating and cooling equipment, systems, parts and supplies. With Trane locations across California, Arizona and Nevada, our localized branches offer HVAC contractors unique advantages over competition from an advanced network of distribution centers, superior logistics and highly-trained associates. When you combine TRANE’s heating and cooling equipment, parts, supplies, with Ferguson HVAC, our product offering consists of solutions for every application and segment of the HVAC industry. Our commercial lines range from 3-tons through 25-tons of cooling capacity in standard and high efficiency rooftop and split systems. Superior customer “convenience” is provided with purchasing options, delivery options, as well as payment options. Come meet Ferguson HVAC I Trane- the distributor that’s built for your industry with smarter ways for you to do business. Discover new growth opportunities and disruptive strategies necessary for today to compete and win.



FIELDBOSS Booth 209

FIELDBOSS is an end-to-end solution built within Microsoft Dynamics 365. FIELDBOSS is a flexible and configurable platform that allows you to work the way you want. Our focus is to help you get the most out of your resources and deliver the information you need to run your business more efficiently, profitably, and with lower risk.

Fieldpiece Instruments Booth 317

Fieldpiece Instruments is the test tool company that HVACR professionals trust. Because Fieldpiece focuses only on the HVACR industry, all products are developed to solve real world HVACR problems. We offer a broad range of HVACR tools such as: recovery machines, vacuum pumps, manifolds, Job Link® system wireless testing, multimeters, combustion,

refrigerant scales, air flow, leak detectors, pocket tools, and A/C analyzers.

Flaretite, Inc. Booth 117

Refrigeration Seals: The Ultimate Solution for Eliminating Leaks!

- Copper stamping with Loctite coating
 - Fits all 45° SAE flared fittings
 - Compatible with all common refrigerants
 - Great for installing ductless systems
 - Slash the cost of downtime and Service
- Clip the Drip!! Made in USA.

Geary Pacific Supply Booth 501

Geary Pacific Corporation is an HVAC distributor serving the Western United States since 1961.

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We have 28 locations in California, Arizona, Nevada, Colorado, Oregon, Washington and Texas. We distribute Bard Manufacturing Wall Mount HVAC equipment for the Modular Building Industry as well as residential heating and air conditioning under the brands of Goodman and Amana. www.gearypacific.com

Global The Source Booth 420

Global is a leading master distributor of HVAC/R components to wholesalers throughout the United States. Our exclusive line of AmRad USA Capacitors and Turbo200 w/CPT (Compressor Protector Terminal), along with many other products prove we believe in supporting America, American manufacturers and the American worker.

GoGreen Financing Booth 527

GoGreenFinancing.com offers attractive energy efficiency financing options for your customers. The state-administered Residential Energy Efficiency Loan (REEL) and Small Business Financing (SBF) programs offer contractors an opportunity to increase their average sale through flexible project scopes and competitive rates with no pre-payment penalties. Stop by our booth or visit GoGreenFinancing.com to learn more.

Goodman Distribution, Inc. Booth 101

Goodman Distribution, Inc. offers a full line of Goodman® brand residential heating and cooling systems that are designed, engineered and assembled in the U.S.A. and quality ProParts™ supplies. The brand's commitment to innovation has resulted in advanced technology and high-performance products like ComfortBridge™, CoolCloud™, and the AlumaFin7™ evaporator coil.

Gree/Tradewinds Booth 519

- Gree is:
- The World's largest Manufacturer of Air conditioners.
 - 1 in 3 of all the world's air conditioners are made by Gree
 - Efficiency leader in the ductless market, up to 38 SEER

Heating & Cooling Supply Booths 309

Since 1960 Heating & Cooling Supply (H&C) has been serving contractors throughout the

Southwest. H&C is your premium HVAC wholesale distributor offering a complete line of equipment, aftermarket parts and installation supplies, featuring Rheem. We have the full line of Rheem water heaters and Rheem commercial units as well. We are also proud to sell the Fujitsu ductless mini-split and VRF products. Come by our booth and ask us about our unique programs designed to save you time and money too!

Herc Rentals ProSolutions Booth 319

ProSolutions specializes in rental equipment and services related to restoration and drying equipment, emergency power and distribution, and climate and humidity control with a quick response and expert approach when it matters most. Our comprehensive product line ranges from spot coolers to industrial-grade units. Our climate control specialists will calculate your job site needs to deliver the best, most reliable climate control solutions.

Howard Industries Booths 318, 320, 322, 324, 326

Howard Industries is exhibiting American Standard's 21 SEER communicating inverter heat pump system, affording homeowners years of energy savings and unparalleled comfort, along with the TAM9 matching air handler to complete the comfort package. In addition, the expanded NEXIA home connect system from American Standard will also be on hand. It has been the subject of rave reviews for its innovation and ease of use.

As well, Howard Industries has been appointed the exclusive distributor for the Mitsubishi-American Standard co-brand of product. We will have a full line of this amazing line to show off to you.

Howard Industries has six branch locations, with corporate offices located at 8855 Washington Blvd., Culver City, CA, 90232; 310-837-9100.

Hydra Flow West Booth 505

Hydra Flow West is a Master Wholesale Distribution Center for air compressors and related pneumatic accessories. Additionally, we market Rydlyme a Bio-degradable de-scaler and, Rydall coil cleaners and degreasers developed for the HVAC distributor and contractor by Apex Engineering Products. Find us at www.HFWINC.com



Inaba Denko, Division of PATLITE (U.S.A.) Corporation Booth 713

INABA DENKO, a division of PATLITE (U.S.A.) Corporation located in Torrance has been providing the market with heavy duty pre-insulated and paired Linesets PAIRCOIL®, the premium Lineset Cover having three widths and five colors named SLIMDUCT®, Drain hose, Condenser riser, Bracket, Tape, Wall Sleeve, and other innovative materials for AC installation.

Now, the cutting-edge drain-up piping system DSH-UP which has contractors reduce time and labor on-site during installing cassette type AC will show up at INABA DENKO booth.

You can come across the products you really want and need at the booth.

Prior information is here; <http://www.inaba-denko.com/en/>

Institute of Heating & Air Conditioning Industries, Inc./Indoor Comfort News Booth 627, 629, 726

The Institute of Heating and Air Conditioning Industries, Inc. (IHACI) is a nonprofit trade organization dedicated to the advancement of heating and air conditioning professionals throughout California. Membership benefits and services include free education and training opportunities, legislative advocacy, and business/professional referrals, just to name a few. IHACI produces the West's leading trade show of the HVAC/R/SM Performance Contracting industries, now in its 40th year of production.

IHACI also owns and publishes Indoor Comfort News, the West's leading news magazine of the HVAC/R/SM Performance Contracting Industries. Incorporated

in 1948, IHACI/ICN remains progressive in representing the needs of the heating and air conditioning industry. For information, contact IHACI/ICN at (818) 551-1555 or visit www.ihaci.org.

Interplay Learning Booth 720

Online, on-demand training course catalog that gives HVAC professionals the confidence & skills to do the job right. Access via mobile phone, computer, tablet, or in virtual reality (VR), this is online training for on-the-job skills.

iPermit Booth 804, 806

iPermit is the industry leader in providing testing and permit services to HVAC Contractors in California! Our team members are strategically placed throughout the State to meet the needs of our customers quickly and efficiently! Go to our website for information and reviews from satisfied customers! www.iPermitERaters.com.

J-MAR Controls Solutions Booth 621

J-MAR Controls Solutions, located in Murrieta, California, distributes Building Automation Controls, IoT Technology and Building Operating System software from EasyIO, Tosibox and J2 Innovations. We provide our customers with cutting edge products to help them meet the challenges of today's ever-changing marketplace.

Contact: Jeff Pose' (516-456-0744) or jpose@jmarcontrols.com

Kwik Model Booth 114

"Kwik Model is a BRAND NEW 3D Residential HVAC Design Software that requires

no CAD experience. The user interface is intuitive and fast. Designed by a licensed Mechanical Engineer with 30 years experience in performing and teaching HVAC design and an expert video game designer. See videos at www.kwikmodel.com"

Lennox Booth 617

Trust|Innovation|Quality
We are trusted partners. We work directly with our partners to provide the highest level of access, ease and accountability within the indoor comfort industry. Our partners count on us to do the right thing for them and their customer. We are dedicated to providing the most innovative and highest quality products, programs and training for our partners to win in the market. We have consistently delivered on the values of Trust, Innovation and Quality. <http://www.lennox.com/>

We have 15 convenient locations in Southern California that have an extensive inventory of universal service and installation parts, Lennox equipment, indoor air quality solutions, OEM parts and tools.

www.lennoxpros.com/partsplus

Come by our booth to win great prizes!

MagnetLatch, LLC Booth 608

MagnetLatch: a filter grille retrofit kit to repair broken latches. Using our patented magnet kit, repair filter grilles with ease and makes changing filters a breeze.

MarketAir, Inc. Booth 220

MarketAir, Inc. continually develops products for the professional installation and service of both ducted and ductless AC sys-

2019 EXHIBITOR DIRECTORY

tems. This includes RoughinBox™ for protecting linesets in minisplit rough in jobs, SuperSleeve for minisplit retrofits, Easy Bend line-set bending tools and Pipe Prop® rooftop support for piping and many other unique products.

Modine Mfg. Co. **Booth 507**

Modine Manufacturing continues to service our industry with superior heat transfer products. Stop by the booth to say hello to the team who has serviced Southern California and the Western States for over 20 years.

Modine Manufacturing has expanded their local facilities and is the most trusted name nationwide with HVAC/OEM Producers.

National Comfort Institute, Inc. (NCI) **Booth 211**

The National Comfort Institute (NCI) and Southern California Edison are partnering to bring contractors cutting-edge training on how to perform higher quality installations and service on residential and commercial HVAC systems. Come visit NCI at Booth #211 to learn how to take advantage of this advanced training. 800-691-1690 / www.NationalComfortInstitute.com.

NEBB **Booth 521**

Building owners are concerned about the cost-effective performance of the environmental systems within their buildings. This “green” goal can be best accomplished by having a building’s environmental system properly tested, balanced and/or commissioned by a NEBB Certified Professional. Find out how we can help you at nebb.org.

North American Technician Excellence (NATE) **Booth 702**

North American Technician Excellence (NATE) is the largest nonprofit certification organization for heating, cooling, ventilation, air-conditioning and refrigeration (HVACR) technicians. NATE tests represent real-world working knowledge of HVACR systems and validate the competency of service and installation technicians. Leading contractors, manufacturers, distributors and educators partner with NATE to develop skilled, certified technicians.

Olimpia Splendid USA **Booth 308**

Olimpia Splendid who has been in business since 1956, has

decided to enter the North American market with its one of a kind product line, which will be on display at the 2019 IHACI Expo in November. Olimpia Splendid designs and manufactures heating & air conditioning products with the end user’s ultimate comfort in mind. Diego Stefani, Director of Sales & Business Development – North America, stated “Olimpia Splendid’s company tagline “Home of Comfort” describes our commitment to design efficient, environmentally friendly products, while still maintaining our unique Made in Italy design. Our objective is to be able to offer our customers comfort solutions any time of year.”

P.W. Stephens Environmental **Booth 503**

P.W. Stephens Environmental is the largest and most experienced residential abatement contractor in the nation. P.W. Stephens Environmental has always been dedicated to providing the highest job quality and responsiveness to our customers’ requirements. We also provide mold/lead abatement/remediation. We welcome your suggestions and comments. Email: info@pwstephensinc.com.

Pacific Systems Group **Booths 825, 827**

Pacific Systems Group is an adaptive partner that assists consulting engineers, distributors, mechanical contractors, and building owners in designing HVACR systems, providing efficient and cost effective indoor environmental solutions. Manufacturers Represented: Carrier Ductless, Toshiba-Carrier VRF, Carrier VRF, Magic Aire, iAire, HMAX, Lifebreath, Denlar, Hi-Velocity and Zonex. Contact: www.psg hvac.com; (888) 909-HVAC; info@psghvac.com.

Panasonic Heating and Air Conditioning Group **Booth 104**

Panasonic offers a wide range of versatile heating and cooling solutions including single-split systems, multi-split systems, ECOi VRF-systems, controls and accessories. Installing Panasonic means you’re partnering with a trusted brand renowned for well-designed solutions, innovative technologies and unparalleled service and support.

Let’s take your business to profitable new levels together. Learn more at us.panasonic.com/HVAC

Panasonic Life Solutions **Booths 113**

Panasonic Life Solutions is com-



mitted to providing high quality ventilation products to meet constant changing codes. Performance driven ventilation is a key path to a better living environment and a unique must-have value. By helping improve indoor air quality, let’s address a major health issue facing our industry together.”

Paradise Chevrolet Commercial Vehicles **Booths 417, 419, 421, 423, 425, 427, 429, 518, 520, 522, 526**

Paradise Chevrolet Cadillac, located in Temecula, CA, received their 6th Consecutive Business Elite Dealer of the Year Award and is ranked #2 in the US for dealer fleet sales and #1 in Small Business sales in the Western US.

Terry Gilmore, Paradise Chevrolet Cadillac’s Owner/President, comments, “We want to thank our customers for their loyalty. I am very proud of our Business Elite team for their efforts in making our dealership one of the best in the United States. It is due to their commitment and dedication to excellence that Paradise Chevrolet Cadillac holds this prestigious award.”

AJ Hewitson, Paradise Chevrolet Cadillac’s Commercial & Fleet Vehicles Sales Manager says, “Our Goal is to provide the best fleet management experience from the small mom and pop business all the way up to large scale corporations.” The mission statement for the Commercial & Fleet Vehicle Division is and has always been, “We Bring the Dealership to You.”

Parker Hannifin - Sporlan Division **Booth 310**

Parker’s ZoomLock® Flame-Free Refrigerant Fittings. 10 Seconds. Connected.

ZoomLock flame-free refrigerant fittings install in ten seconds with no more flames, no more nitrogen purging, no more fire watch, and no more leaks.

With over 3 million ZoomLock fittings installed, contractors report 40-60% time and cost savings per job putting more money directly on their bottom lines. Visit www.zoomlock.com

Pointman **Booth 510**

Running your business is hard, and software alone doesn’t make it easier. That’s why Pointman provides residential HVAC, plumbing and electrical contractors with business coaching, data analysis, support from a community of peers AND award-winning field service management software — together. No other company delivers this all in one offering.

Proctor Engineering Group **Booth 218**

The LADWP AC Optimization Program pays contractors up to \$350 for tuning up central air conditioning systems (new filter, condenser coil cleaning, and up to two pounds of refrigerant), \$300 for a Nest E thermostat installation and \$1,200 in customer rebates for replacement of HVAC systems.

Profit Rhino Powered by Callahan Roach **Booth 208**

320 N. Jensen Rd., Suite 4D
Vestal, NY 13850

QwikProducts™ by Mainstream Engineering **Booth 801**

QwikProducts™ will be showcasing:

- QwikSwap® X1, X3 & V3 Universal ECM replacement boards

- QwikHurricane Generator Pad
- Qwik System Flush® for line set clean-outs
- QwikLug® compressor terminal repair kits
- QwikCheck® 2-second refrigerant acid test kit
- QwikShot®, Refrigerant and Oil Treatment
- Qwik608® EPA Training/Certification
- QwikBright™-MC Microchannel coil cleaner

Please stop by Booth #801 and learn about QwikSwap™, the universal ECM replacement board.

R.E. Michel Company **Booth 413**

A family business since 1935, we have grown to be one of the leading distributors of HVAC equipment, parts, and supplies serving customers coast to coast. Our goal is to be the most highly respected distributor of HVAC products. We will achieve our goal by: Providing service that makes us the supplier of choice. Inventory that assures we have the product when and where it’s needed. People that are knowledgeable and friendly. Pricing that is fair, accurate, and competitive.

Rapid Duct Testing **Booth 509**

Rapid Duct Testing & Air Balancing Inc. is proud to introduce our new Title 24 design department with professional energy consultants. We still emphasize on HERS and other air diagnostic measures to create a comfortable indoor environment. Come meet us at the show or contact us at 818-552-2050 or info@Rapid-ducttesting.com.

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RectorSeal Booth 602

From the ground up, RectorSeal manufactures and markets all of the equipment and accessory products you need to install, and maintain HVAC systems. New RSH surge protectors, Lineshot condensate drainline cleaners, Flare-it flare seals, Titan Metal Drain pans, and the most comprehensive lines of condensate shutoff switch products available.

Resideo Booth 219

Imagine homeowners connecting to their homes with one simple, intuitive ecosystem. Smart thermostats, combustion, water, air and security — all under one roof, accessed from anywhere. A global brand that can help you grow business, improve efficiency and expand inventory with product and education to back it up.

RGF Environmental Booth 207

RGF manufactures over 500 environmental products and has a 34+ year history of providing the world with the safest air, water, and food without the use of chemicals. The REME HALO Whole Home Air Purification System is the #1 in-duct air purifier on the market.

Robertshaw Booth 311

Robertshaw® is a leading global manufacturer of engineered components/systems/services for the appliance, HVAC, commercial cooking/refrigeration, and thermostat markets. We proudly offer the trusted brands Robertshaw®, Ranco®, Paragon®, PerfectSense™, Braeburn, Mersen and more. Stop by the booth to see what's new. Visit www.Robertshaw.com for our complete product offering.

RODMAN DRILL Booth 623

Come down and see us demonstrate the highest quality cutting tools available to the HVAC Industry since 1928!

Here are just a few:

- Rodman Multi-Purpose drill bits
- Reaper HSS & Cobalt twist bits, Vari-bits, Reamers, Hole Hogs
- Houghen Cutters
- Goldfinger Metal Cutting Blades, Carbide & Cobalt Recip Blades, Holesaws

Call any time (800) 685-8665 or email JON@RODMANDRILL.COM

WWW.RODMANDRILL.COM

ROKFORM Booth 823

ROKFORM designs and manufactures Protective magnetic iPhone and Galaxy cases and mounts to keep your crew and your devices safe and hands free. Our magnetic cases mount to any magnetic surface and are used in many industrial applications including HVAC and Plumbing Professionals. The built-in magnet allows you to go hands-free almost anywhere in almost any work environment even on the road with our hands-free car mounts.

Rotobrush Booth 403

Based in Texas, Rotobrush is the leading manufacturer of air duct cleaning and dryer vent cleaning equipment. With more than two decades of experience, Rotobrush provides contractors with turnkey packages and unique opportunities. Stop by booth #403 to feel the power of the BrushBeast!

Rottiers Sales Associates Booth 213

Rottiers Sales Associates is the California manufacturers' representative some of our lines are:

DuraVent is a California vent manufacturer. DuraVent has venting solutions for every appliance that needs to exhaust a flue gas.

Shoemaker is a grille and register manufacturer with a complete line of residential and commercial registers and grilles.

Polyken/Nashua tapes offer a complete line of UL181 listed tapes.

Modine is a manufacturer of unitary Make-up Air units, Duct Furnaces and Unit Heaters.

PRO1 IAQ is a manufacturer of thermostats.

RGF is the leader of IAQ (Indoor Air Quality). Got Smoke issues from the fires, RGF has the solutions.

UEI Test Instruments offers a complete line of test instruments. Come see the new HUB series which will eliminate gauges.

Smartlock is a manufacturer of innovative fitting solution for HVAC/R connections including Mini Split and refrigerant systems with a metal to metal sealing, no brazing.

Royal Service Supplies Booth 618

Contact Royal Service Supplies for high-quality HVAC products. We provide support, value design and engineering, manufacturing, quality assurance, and business solutions.



We provide industry-leading innovation on all of our products including our variable air volume zone diffusers, packaged BACnet line of VAV controls operating on BACnet TCIP network systems. We stock VAVs with or without DDC controls. Our mechanical CAVC controlled constant volume dampers satisfy Title 24 Compliance. We carry custom linear diffusers and commercial bar type grilles, both supply and return with filter rack. Our popular stainless steel 304 exterior ventilation caps are a great alternate for custom homes and multifamily complexes. They are widely used for fresh air, bathroom, kitchen, and dryer ventilation terminations. Our goal is to help you outcompete your competition with top-of-the-line products! For more information about our products, please visit our website at royalservicesupplies.com.

RSES / CARSES Booth 105

RSES is the world's leading education, training and certification association for heating, ventilation, air conditioning and refrigeration professionals. RSES credentials include its Certificate Member and Certificate Member Specialist categories, as well as one of the largest EPA Section 608 certification programs in the industry. Local chapters meet monthly with free educational topics. Visit www.carses.com for details. For more information call 310-600-8800.

San Bernardino Valley College Booth 109

San Bernardino Valley College (SBVC) offers over 90 Career and Technical Education (CTE) programs, including HVAC/R,

Machine Technology, Automotive Technology, Aeronautics, Flight Operations and more. SBVC is a regional leader in CTE programs and offers schedule flexibility with day, evening and weekend classes that lead to completion of certificates as well as associate of arts/science degrees. For more information or to register for classes, visit valleycollege.edu or call (909) 384-4400.

SCE – Energy Education Center Booth 407

We're Southern California Edison, leading the transformation of the electric power industry, focusing on opportunities in clean energy, efficient electrification, grid of the future and customer choice to strengthen and grow our business.

Sealed Unit Parts Co., Inc. Booth 625

We are proud to showcase our FREE Supco® TechLink™ App. Designed to work seamlessly with our Bluetooth® enabled meters and vacuum gauge, the App provides unsurpassed level of support in the field as it records, shares, educates and helps techs diagnose problems at very granular levels with individual component tests.

Service Roundtable Booth 502

Build your residential service business faster with Service Roundtable. A network of successful contractors, equipment and service providers help you tackle the everyday problems of owning a business. Plus, earn rebates and receive downloadable custom marketing material to make your phone ring! Join today at www.ServiceRoundtable.com.

ServiceTitan Booth 307

How have thousands of home service businesses across the U.S. increased their revenue by an average of 24% in just nine months? Learn more about the software solution that's transforming the industry at the IHACI ServiceTitan booth this November—and get a chance to win a Big Green Egg®, too!

Sierra Truck Center Booths 723, 725, 727, 729, 822, 824, 826

At Sierra Truck Center in Monrovia we carry a full line of light and medium duty commercial trucks and vans. Our lineup includes the full RAM commercial vehicle line of 1500, 2500, 3500, 4500, 5500, Promaster cargo vans, Promaster City cargo and wagon vans and our Chevy lineup includes everything from 1500 trucks to 6500 Low Cab Forwards and the conventional cab 4500, 5500, and 6500. Sierra is your one stop shop for all your commercial truck and van needs. We are located at Sierra Truck Center 1621 South Magnolia, Monrovia CA, 91016. 626-932-5652. www.sierratruckcenter.com.

Sigler Wholesale Distributors Booth 701, 703, 802

This year we celebrated the 117th anniversary of modern air conditioning thanks to Willis Carrier. As times have changed, Carrier and Bryant have continued to be in the forefront of new developments as consumer needs and government guidelines evolve. At Sigler, we are proud to partner with the industry leader.

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Sirris Abatement Booth 306

Sirris Abatement provides services for private residences, multi-housing complexes, commercial facilities, public utilities and governments.

Working closely with homeowners, HVAC contractors, building management, engineers, architects and government agencies, Sirris Abatement ensures strict compliance with regulations and provides the highest standard of control methods when dealing with asbestos and lead.

Slingshot Booth 709

Since 2014, Slingshot has helped home service providers adapt to the on-demand economy. Slingshot services help our clients elevate their brands, expand their customer bases, and instantly engage with current and potential customers 24 hours a day.

We believe in a world where conversations matter, where technology enhances human interaction instead of replacing it, and where people can effortlessly connect with service providers that help home feel like home.

SoCal Gas Booth 803

With over 150 years of service, SoCalGas® proudly delivers affordable, reliable, clean, and increasingly renewable natural gas service to 21.8 million customers across 24,000 square miles of Central and Southern California.

We understand the importance of caring for the environment while looking out for our customers. That's why we're working hard to ensure California's clean energy future maintains a balanced strategy—one that achieves greenhouse gas reductions while keeping energy affordable for families and businesses. SoCalGas offers energy efficiency programs that provide customers with incentives for making significant upgrades to their homes as well as buying more efficient appliances. For more information visit socalgas.com/upgrade.

SoCal Gas Multifamily Rebate Program Booth 809

Learn how SoCal Gas can help you save money on central hot water equipment, pool

heaters, furnaces, and more for your Multifamily property.

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qualifying equipment purchases.

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SoCal Sheet Metal JATC Booth 508

The Southern California Sheet Metal JATC is an apprenticeship program training sheet metal workers.

We offer free training and job placement to persons meeting our qualification standards. We also provide manpower to today's HVAC contractor who is signatory to Local Union 105 and to non-signatory contractors on prevailing wage jobs helping them reach their 20% requirement.

Soleus Air Booths 302, 304 SOLEUSAIR

We are proud to showcase Soleusair with our NEW line of 15 SEER and 20+ HIGHEST SEER Inverter Technology heat pump single zone wall mount mini splits, the largest line of 115v and portable air conditioners.

Come by booth # 302, 304 and say hello to Dave, Phil, Teresa & Rosa. Visit us at: www.soleusairwest.com

Southern California P.I.P.E. Trades Booth 313

Piping Industry Progress and Education Trust Fund (P.I.P.E.) is the Labor-Management cooperation committee and trust fund for the unionized plumbing, piping and HVACR industries in Southern

California. We are the vehicle through which union contractors and union pipe trades workers advance the industry. Call (800) 457-7473 or go to www.pipe.org.

Style Crest, Inc. Booth 504

Revolv® represents the sum of Style Crest's mobile home HVAC expertise, assembled under a single brand, and includes split-system air conditioners and heat pump condensers, indoor coils, furnaces, line sets, compact package coil cabinets and accessories. Revolv® advanced indoor comfort products are exclusively engineered for the manufactured housing industry.

<https://www.stylecrestinc.com/about-revolv/>

TSI, Inc. Booth 100

TSI is your one-stop-shop for ventilation and indoor air quality instrumentation. You can simplify your equipment portfolio while working with the most accurate instruments available on the market today. TSI offers a full line of capture hoods, micromanometers, hydronic manometers, velocity meters, thermal anemometers and IAQ air quality monitors.

Thermaflex Booth 606

Thermaflex is built stronger to last longer. When you choose Thermaflex, you're backed by a company with more than 60

Continued on Page 24

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New 2 ft. x 3 ft. hood/frame kit accessory mounts direct to the TSI-Alnor EBT731 Balometer® Capture Hood to efficiently expand your measurement capabilities.

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years of flexible duct experience. We offer the most comprehensive product line of flexible duct products, ideal for offices, schools, hospitals, and other commercial installations.

Thermostat Recycling Corporation Booth 111

Thermostat Recycling Corporation (TRC) was founded in 1998 as an industry-funded nonprofit.

With a network of over 3,000 collection sites nationwide, TRC has recovered over 2.5 million mercury thermostats, or 12 tons of mercury, to date. All costs to transport and properly dispose of recovered thermostats are assumed by TRC.

Thorson Motor Center Booth 813, 815

One of the largest GMC Truck and Isuzu Commercial Truck dealers in So. California; with a variety of road ready trucks available in stock, along with professional sales staff to assist in custom build of your commercial needs. Also, we have over a million dollars of GMC and Isuzu parts available on the shelf to make sure your trucks stay on the road, or bring to Service for your repairs.

For help visit our web site thorsonmotorcenter.com or thorsonisuzu.com or call 626-795-8851

TruTech Tools, LTD. Booth 203

We stock a hand-picked selection of quality tools and measuring instruments including process oriented kits and procedures. As a contractor, technician or business

owner, we recognize your life is tough enough. TruTech helps technicians get work done more efficiently. Much more than an online store.

US Air Conditioning Distributors Booth 401

US Air Conditioning Distributors is your One-Stop-Shop for equipment, compressors, supplies and parts for all brands of HVAC equipment. With 50 locations in California, Nevada, Utah, Idaho and Arizona, US Air Conditioning Distributors is one of the largest HVAC distributors in the country. At the show we will feature York, Luxaire, Guardian, Samsung and Marvair equipment; Source 1 Parts, QuietCool fans, and supply lines such as Modular Metals, Diversitech, Nu-Calgon, Malco, Venstar and Hart & Cooley. Count on US Air to have what you

need, when you need it, with free next-day delivery, crane service, incredible inventory selection and experienced, friendly personnel. Booth #401.

Uniweld Products, Inc. Booth 613

Since 1949 Uniweld has employed over 300 workers who help design, manufacture, and distribute quality U.S. made products! Stop by the Uniweld booth to see their HVAC products: New SmarTech Digital Manifold and Smartphone App, NitroVue Nitrogen Flow Indicator and Take the EZ-Turn Challenge! Sign up for a free hat.

Ventamatic, Ltd. Booth 210

Ventamatic, LTD. has provided the ventilation industry with AN AIR OF EXCELLENCE for over 70 years.

A pioneer in the ventilation industry since 1948, Ventamatic, Ltd. manufactures high quality products. Based in Mineral Wells, Texas, the company is an industry leader with a reputation for quality, value, and customer satisfaction.

Visual Service by IHACI (VS) Booth 619

Visual Service by IHACI (VS) is a contractor service platform designed to integrate into the business model of contractors by providing a pathway for live technician mentoring of entry level apprentices to senior technicians. VS guides technicians through different stages of HVAC troubleshooting from basic triage to pressure profiles of duct systems and airflow calculations. Using Bluetooth tools and live video, VS provides a platform for proper supervision, commissioning and certification of HVAC systems via ASHRAE and ACCA standards, in addition to those required by California Title 24. Come visit our booth to see the future of our industry.

Walter's Sprinter of Riverside Booth 129

More Professionals choose Walter's Mercedes-Benz of Riverside.

Walter's Sprinter in Riverside is an authorized dealer of Sprinter and Metris cargo work vans. We're dedicated to the needs of heating, ventilation and air conditioning professionals. We are proud to display at this year's IHACI Trade Show. Visit us at Booth #129, or contact our GM, Glenn Thackeray Gthackeray@waltsmb.com.

We are family-owned and operated, celebrating over 50 years of selling and servicing Mercedes-Benz vehicles. Because we are the largest retail Sprinter store on the West Coast, you can get into one for far less than you thought possible. www.waltsmb.com.

Western Enterprises Booth 418

875 Bassett Road
Westlake, OH 44145
(800) 783-7890

Wright Sales Company Booths 604, 605, 607

Wright Sales Company is a manufacturers' sales agency for the HVAC/R industry representing LG, Owens Corning, CPS Tools, and Hardcast Sealants.

LG Light Commercial/Residential Air Conditioning is all about efficiency with inverter technology and the importance of controls and connectivity going forward. Our newest home automation offering is new connectivity with Amazon and Google; while others talk about IoT, LG is able to deliver.

CPS Products, Inc. serves multiple industries with application-built, industry-specific innovations and advancements in technologies and products.

Owens Corning From Duct Liner and Wrap to Duct Board and more – Owens Corning has an extensive portfolio of solutions to meet all of your air distribution needs.

Hardcast has now received UL's GREENGUARD Gold certification on all its water-based liquid sealants. This rigorous testing compliments the proven performance characteristics of Hardcast sealants and gives LEED v4 compliance and an assurance for long-term safety for building occupants when using Hardcast water-based duct sealants.

ZONEFIRST Booth 603

ZONEFIRST's complete line Zoning Systems for residential, commercial, retrofit and new construction. Systems to 103 zones as well as fresh air ventilation and simple economizers. The By-Pass Eliminator and Energy Savings App will be demonstrated as well as the Plug-In Dampers with a Lifetime Warranty.



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Third-Generation Weil-McLain Representative Shane Hall Has Boilers in His Blood

“Boilers are in my blood,” explained 44-year-old Shane Hall, a third-generation Weil-McLain representative.

Hall, of Huntington, W.V., has been a Weil-McLain manufacturer’s rep for more than 25 years, but his involvement in heating and boilers stretches back much further.

“My father and grandfather were both in the business, so I grew up in the industry,” said Hall. “I like to say that I learned from the best.”

Hall’s grandfather, Herb Godschalk, opened his heating company HL Godschalk & Associates in 1968 in Huntington and immediately began selling Weil-McLain boilers. The company handled both commercial and residential projects and installed numerous

cast iron boilers and other heating and plumbing equipment across West Virginia.

“We’ve been selling boilers since way before I was even born,” said Hall. “Weil-McLain has a tradition of giving out die cast toy cars, and I remember receiving them as a child as gifts from my grandpa. Ever since I can remember, Weil-McLain has been a part of my life.”

Hall’s father, James Hall, began working with Shane’s grandfather in 1975. A young Shane Hall would help out with the family business as needed.

“My grandfather would pay me to assemble product catalogs, sweep the floor – whatever had to be done,” said Hall. “I believe he paid me a quarter an hour back then. I guess you could say I learned the business from the ground up!”

When Hall’s grandfather passed away in 1993, his father took over the company. Soon after, at the age of 19, Hall began working full-time with his dad.

“I started in the warehouse and worked my way up to inside sales and then outside sales and eventually took over the company,” said Hall.

Both Hall and his father witnessed many boiler product innovations, including the development of high efficiency condensing boilers such as Weil-McLain’s Ultra, and later, Evergreen units.

“They were really innovative products and helped move the entire industry forward,” he said.

Hall’s father ran the company until retiring in April 2007. Hall then took over and re-named it Hall Sales Agency. After oversee-



ing its growth for several years, he eventually merged it with Midwest Spec, a conglomerate of three other family-owned HVAC companies.

Today, Hall is a junior partner with Wickliffe, Ohio-based Midwest Spec and still manages the boiler business for the West Virginia territory. In 2015, Weil-McLain asked Midwest Spec to also represent them commercially in the expanded territories of Ohio, Kentucky and Western Pennsylvania, and Hall oversees that business as well.



(Top) Shane Hall and his father, James. (Above) Hall and his grandfather, Herb.

“Weil-McLain is the only line my grandfather offered that I still sell,” said Hall. “We’ve had a lot of heating and plumbing lines and brands come and go over the years, but that’s the only one that has been continuous for us since 1968.”


“The only boiler line we sell today is Weil-McLain because the company has such a broad product portfolio ranging from small residential 70,000 BTU units up to large 8 ½ million BTUs on the cast iron side and for high efficiency from 70,000 BTU’s up to 3 million BTUs.”

Hall has overseen numerous residential and commercial installations including at the Rock & Roll Hall of Fame, West Virginia capitol complex, West Virginia University and countless other schools and colleges,

churches and homes.

“We had a Weil-McLain boiler at a university that we inspected that at the time was 55-years-old and still functional,” said Hall. “The school had money in the budget to spend and thought it was a good time to upgrade the boiler. It was hard for me to see them pull it out after all of those years because it still worked like a champ!”


“Weil-McLain produces high-quality, American-made products, and has always stood behind their line,” said Hall. “You can walk through the foundry and shake hands with the guys that are pouring the iron, and those guys will thank you for selling their product. Weil-McLain has touched so many lives over the years, including mine. It’s really special.”



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Industry Events

ASHRAE Announces Technical Program for 2019 Winter Conference in Atlanta

The technical program has been announced for the 2019 ASHRAE Winter Conference, to be held in Atlanta, Ga., Jan. 12–16, at the Omni Hotel Atlanta at CNN Center and the Georgia World Congress Center. The conference technical program, which offers over 100 sessions, is now available in the ASHRAE 365 app and corresponding event website.

Registration for the conference provides free entry to the co-sponsored AHR Expo, to be held Jan. 14–16 at the Georgia World Congress Center.

The five-day event includes eight conference tracks, selected to represent areas of focus common among ASHRAE membership.

“We are very excited to announce this year’s technical program,” says Corey Metzger, chair of the 2018 ASHRAE Winter Conference. “The buildings industry has seen increased activity, competition and demand due to changes in technology, operational demands, codes and design. This event is uniquely positioned to provide industry professionals with a forum to facilitate collaboration and share knowledge for success.”

A new and anticipated track at this year’s conference, Renewables and Natural Systems, will explore topics such as energy technologies, renewable energy sources and the future of the smart grid.

Another new conference track,

The Engineer’s Role in Architecture, will examine the integral role engineers have toward the safe design of buildings and structures. Topics include designing resilient building using historical insight, equipment selection and strategies to facilitate integrated project delivery.

Conference tracks include:

- Systems and Equipment
- HVAC&R Fundamentals and Applications
- Refrigeration
- Construction, Operation and Maintenance of High Performance Systems
- Common System Issues and Misapplications
- The Convergence of Comfort,

Indoor Air Quality and Energy Efficiency

- Building Integrated Renewables and Natural Systems
- The Engineer’s Role in Architecture

PDH’s are available to attendees who attend any of the Technical Sessions or ALI Courses.

Additionally, ASHRAE will offer onsite administration of ASHRAE certification exams on Jan. 12 and Jan. 16. The exams being administered include: Building Commissioning Professional (BCxP and CPMP Recertification); Building Energy Assessment Professional (BEAP); Building Energy Modeling Professional (BEMP); High-

Performance Building Design Professional (HBPD); Healthcare Facility Design Professional (HFDP); and Operations & Performance Management Professional (OPMP). Applications must be submitted by Dec. 21.

ASHRAE President Sheila J. Hayter will provide an update on the 2018-2019 society theme, “Building Our New Energy Future” at the President’s Luncheon on Monday, Jan. 14.

For complete conference and expo information, visit the 2019 ASHRAE Winter Conference and the AHR Expo websites.

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 56,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow’s built environment today. More information can be found at www.ashrae.org.



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Industry News

Continued from Page 12

ice-makers.”

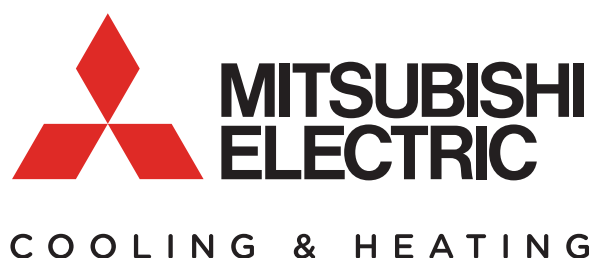
While individual household refrigerators may remain a long-term aspirational goal, EWB-USA wants to fill the refrigeration gap for the hundreds of millions of people who are projected to acquire electricity via “mini-grids” or solar home systems.

“Our mission is to lift people out of poverty and reliable, affordable and sustainable refrigeration is a huge step in the right direction,” said Cathy Leslie, executive director of EWB-USA. “Successful solutions to our refrigeration challenge will be a game-changer for millions of people. We are extremely proud to launch the Chill Challenge, catalyze new thinking, and see new developments. I’m excited.”

More information on the challenge can be found at <https://www.ewb-usa.org/chill-challenge/>.

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Case Study

Nineteenth-Century Detroit Building's Structure Dictates Retrofit HVAC Design

Limited interior space for ductwork and 118-year-old timber roof joists make VRF air conditioning, weight-distributing equipment mounts and baseboard a perfect HVAC match.

The light load-bearing capacity of a 19th Century timber roof dictated an innovative HVAC retrofit specification for a historic downtown building renovation that's now home to the state-of-the-art music academy, Detroit Institute of Music Education (DIME).

The six-story, former Bamlet

Building, owned and managed by Detroit's Bedrock Real Estate Services, was designed of brick and timber in the Neoclassical style by famed architect firm Spier & Rohns in 1897, long before specifications of cooling towers, chillers and other heavy rooftop HVAC systems were conceived. After considering a myriad of conventional HVAC methods, consulting engineer George Hopkins, principal, Peter Basso Associates (PBA), Detroit, chose comparably lighter weight variable refrigerant flow (VRF) technology and unique rooftop equipment mounts with footings for strategic weight distribution. Furthermore,

both technologies minimized roof penetrations from ductwork, curbs and more conventional labor-intensive fabricated I-beam supports, which ultimately saved tens of thousands of dollars versus traditional HVAC methods.

"We considered packaged rooftops, water source heat pumps with an evaporative closed-circuit cooler, four-pipe fan coil system with a rooftop chiller, and they all exceeded the roof's weight-bearing capacity," said Hopkins, a 2001 Regional Technology Award recipient of the ASHRAE Detroit Chapter for the HVAC systems he designed at the Roy G. French Office Building, Rochester, Mich.

Besides PBA and Bedrock, the DIME design team also included Detroit-based architect, Neumann/Smith Architecture and general contractor Sachse Construction. Bedrock, which oversaw the 36,000-square-foot mixed-use space's renovation, has invested more than \$1.8-billion since 2011 in acquiring, renovating and developing more than 80 downtown Detroit properties. The strategy of retaining and preserving historic building features, such as the case of the DIME building, complements the urban-style dining, shopping, technology, arts, business and residential environment Quicken Loans founder and chairman Dan Gilbert has envisioned and supported.

To offset the roof's weight-bearing limitations, the PBA team specified Big Foot Systems tubular, corrosion-resistant, hot dipped galvanized modular steel equipment mounts by RectorSeal Corp., Houston. They support seven groupings consisting of 20 Multi-City Series VRF condensers ranging up to 325,000-Btu, manufactured by Mitsubishi Electric Heating & Cooling, Suwanee, Ga. The VRF condensers provide refrigerant to 39 Mitsubishi fan coils that supply the majority of air conditioning and partial heating through open architectural ceiling, rectangular metal ductwork. Manufacturer's representative, Comfort Engineering Solutions, Ann Arbor, Mich., supplied both the equipment mounts and VRF equipment.

The equipment mounting system's 12 x 12-inch-square anti-vibration nylon footing pads were strategically positioned over roof joists to preserve the roof's structural integrity and for the VRF units' distributed



A closer look at the Big Foot mounts from RectorSeal that support the Mitsubishi Multi-City Series VRF condensers.

weight support. The pads' anti-vibration attributes are critical in minimizing vibration and noise transmission to the music rehearsal and performance spaces and the third floor recording studio. "The anti-vibration feet allowed us to eliminate the expense of conventional spring isolators and other equipment," said Hopkins, who has also engineered other high profile PBA projects such as Detroit's Renaissance Center, a waterfront site of seven interconnected skyscrapers; the landmark Guardian Building retrofit; and the LEED-certified Oakland County International Airport, Waterford, Mich.

Custom-designed for the project by RectorSeal's in-house engineering team, the equipment mounts saved the venture 30-percent in installation labor and materials versus traditional mounting methods, according to Robert Smith, project manager, Complete Mechanical Contracting (CRC), Westland, Mich., which performed or oversaw all HVAC work.

The equipment mounts also eliminate roof-penetrations associated with I-beams or timber supports, according to Smith. Furthermore, the adjustable legs provided easy equipment leveling without the use of shims to accommodate the DIME building's roof slope of approximately 1-inch/foot, which is 3/4-inches/foot more than modern-day roof slopes. When the building is re-roofed someday, roofing surfaces can be replaced underneath one leg at a time while the other three legs allow the units and piping to remain connected and functional.

The PBA design also uses a 7,500-cfm air-to-air energy recovery ventilator (ERV) manufactured by RenewAire, Madison, Wis., to supply outdoor air to each floor's Mitsubishi fan coil. The ERV return air is supplied

by ceiling plenums, bathrooms and janitor closet exhaust air. PBA located it on the third floor due to the roof's weight limitations. Ventcom, Allen Park, Mich., was the project's sheet metal contractor.

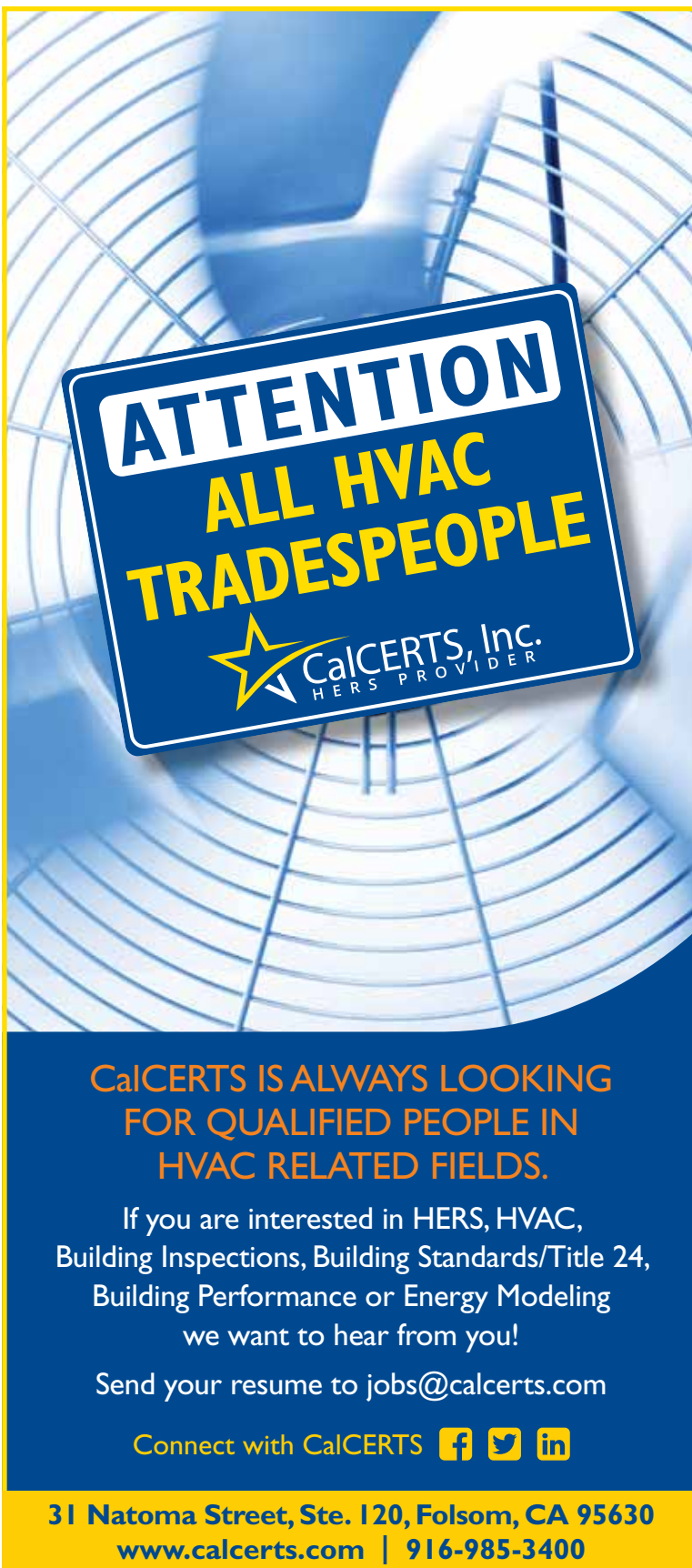
The VRF system provides supplemental heating on extremely cold days, however the building's primary heating source is two Harsco Industrial Patterson-Kelley, East Stroudsburg, Pa., Mach I boilers that supply more than 1,200-linear-feet of 1-1/4-inch perimeter baseboard manufactured by Sterling Hydronics, Westfield, Mass.

All control functions are handled with the facility's building management system installed by Michigan Environmental Controls, New Hudson, Mich., comprised of Niagara head-end equipment by Tridium, Richmond, Va., and control and sensing equipment by Johnson Controls, Milwaukee, Wis.

PBA's HVAC design delivers energy-efficiency and indoor air comfort compared to the formerly vacant building's build-out-ready, residential split-system A/C-furnace units on every floor. Besides enhancing a quiet environment for music education, performance and recording by innovative, up-and-coming artists, the HVAC system promises to preserve the roof's structural integrity.

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Product Spotlight

School District Uses Venstar to Manage Energy Use

Venstar®, a leading thermostat and energy management systems supplier, today announced that Imperial Unified School District is using Venstar's Skyport® Cloud to remotely control more than 340 Venstar ColorTouch® commercial touchscreen thermostats in classrooms and auditoriums at its campuses in Imperial City, Calif.

Challenge: Remotely Control HVAC Performance in Classrooms and Auditoriums

Brandon Machado is responsible for maintenance utilities and HVAC for the Imperial Unified School District. Located in Southern California near the Arizona and Mexico borders, Imperial City has temperatures that range from below freezing on winter nights to more than 120 degrees on hot summer days, making efficient HVAC essential. With more than 340 thermostats across six campuses, Machado wanted to be able to remotely monitor, control and make global changes across all the thermostats via the district network as well as be alerted remotely of any HVAC issues.

Solution: Venstar's ColorTouch Thermostat With Skyport Wi-Fi Services

Using Venstar's ColorTouch commercial thermostat, Machado uses his mobile phone or desktop computer to remotely access and control ColorTouch thermostats anywhere on the district's six campuses. Whether he's in his office, at home or traveling, he can quickly and easily access the ColorTouch thermostats using Venstar's free Skyport Mobile App via the on-campus Wi-Fi® networks or virtually anywhere there is Internet access.

Machado relies on Skyport's global changes feature, which allows him to make the same change to all the thermostats on the network. At the beginning of the school year, he checks to make sure the system run times are appropriate and updates all the holidays and school vacation days. On days when school is not in session, the thermostats are set to the unoccupied setting. Being able to program the thermostats for 365 days per year helps to ensure that HVAC systems are not running unnecessarily. ColorTouch also

has an automatic time change for daylight savings time.

In addition to managing room temperatures, Machado also uses Skyport to monitor the temperatures of two or three walk-in freezers in the cafeterias at each of the campuses. If the temperatures vary outside of the setpoints, he is automatically notified so he can quickly take care of the issue.

The classroom thermostats are programmed with setpoint limiting,

giving occupants some flexibility of temperature within reasonable limits. They can change the room temperature by a few degrees without a passcode, allowing them to set their own comfortable temperatures while maintaining the security of the thermostats. Since the keypads remain locked, no other changes can be made. If there are complaints about classrooms being

Continued on Page 32



Brandon Machado uses his mobile phone to remotely control ColorTouch thermostats across the district



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Product Spotlight

Venstar Sky Cloud

Continued from Page 31

too hot or too cold, Machado can use Venstar's Skyport to check the room temperatures, allowing him to respond quickly to any potential problems.

The Skyport Mobile App also allows Machado to send text messages directly to the thermostats, which display the messages right on the color touchscreen. He uses the messaging feature to send text messages to teachers to let them know when the thermostats are being serviced.

Before the ColorTouch thermostats were installed, the schools had non-programmable thermostats, and anyone could change the temperature. During hot days,

they were frequently turned down to 60 degrees, which ran up energy costs and could even damage the HVAC system. It was also time-consuming for Machado and his team to manually program each thermostat, which took days.

The school district also uses Venstar's remote-mounted temperature sensors in school gyms and some cafeterias where thermostats are located in separate rooms. According to Machado, the remote sensor gives an accurate reading to help ensure comfortable environments.

Results: Remote Control for Comfortable Classrooms, Energy Savings

Venstar's ColorTouch with Skyport Cloud Services helps ensure consistent, comfortable tempera-

tures in all buildings at the Imperial Unified School District campuses, no matter how hot or cold it is outside. Skyport Cloud Services provide remote access to the thermostats so Machado can easily access, monitor and program the thermostats from virtually anywhere there's Internet access, including his mobile phone.

Using Skyport's global changes feature saves Machado and his team days' worth of work. Because all the changes can be done for all 340+ thermostats at the same time from a computer or mobile device, there's no need for them to visit each of the thermostats to make programming changes.

Since the ColorTouch thermostats were installed, the district has had a significant savings on its energy costs. The thermostats are also helping to extend the life of the HVAC

equipment at the schools since notifications are sent whenever the temperatures are outside of the setpoint limits, allowing Machado and his team to solve issues before they become real problems.

Machado said, "Venstar's ColorTouch with Skyport is the Ferrari of thermostats, and we have the key to ensure a smooth-running and powerful experience."

The ColorTouch commercial thermostat is a multi-functional, simple-to-use, touchscreen, smart thermostat designed for commercial installations. The ColorTouch commercial model includes a 365-day holiday programmer, automatically updatable firmware and added security for public display.

Select ColorTouch models offer Wi-Fi inside for remote monitoring and control of multiple thermostats

at numerous locations using Venstar's free Skyport Cloud Mobile App on their Apple iOS®, Android™, and BlackBerry® mobile devices or directly from the Web. Select models also include humidity control. ColorTouch thermostats are compatible with Venstar's Wireless Temperature Sensor, which can be used for remote temperature sensing, outdoor temperature sensing, supply air temperature or return air temperature.

With the ColorTouch commercial model, users can display their business logos, advertisements or promotions on their thermostat screens as a slideshow screensaver or background wallpaper. ColorTouch is priced at approximately half the cost of competitive touchscreen thermostats.

Imperial Unified School District is committed to maximizing each student's potential to learn so they graduate with the knowledge and skills necessary to achieve significant educational, civic and personal goals to enrich society. The district encompasses six campuses in the City of Imperial, California.

Venstar Inc. is a leading thermostat and energy management system (EMS) manufacturer, known for providing value to its customers via ease of use and installation, proven cost savings, improved energy efficiency, quality and reliability. Founded in 1992, Venstar is one of the largest thermostat suppliers in the world and designs and produces Venstar-branded products, as well as OEM thermostat products for the biggest names in HVAC. Venstar's Surveyor is a leading energy management system, typically saving small-box retailers 20-35 percent of their energy costs, which translates to tens of millions of dollars in savings each year and dramatic reductions in CO2 emissions. Surveyor currently controls the energy usage of 25,000+ retail locations across the United States, Canada, Puerto Rico and Mexico.

Imperial Unified School District is committed to maximizing each student's potential to learn so they graduate with the knowledge and skills necessary to achieve significant educational, civic and personal goals to enrich society. The district encompasses six campuses in

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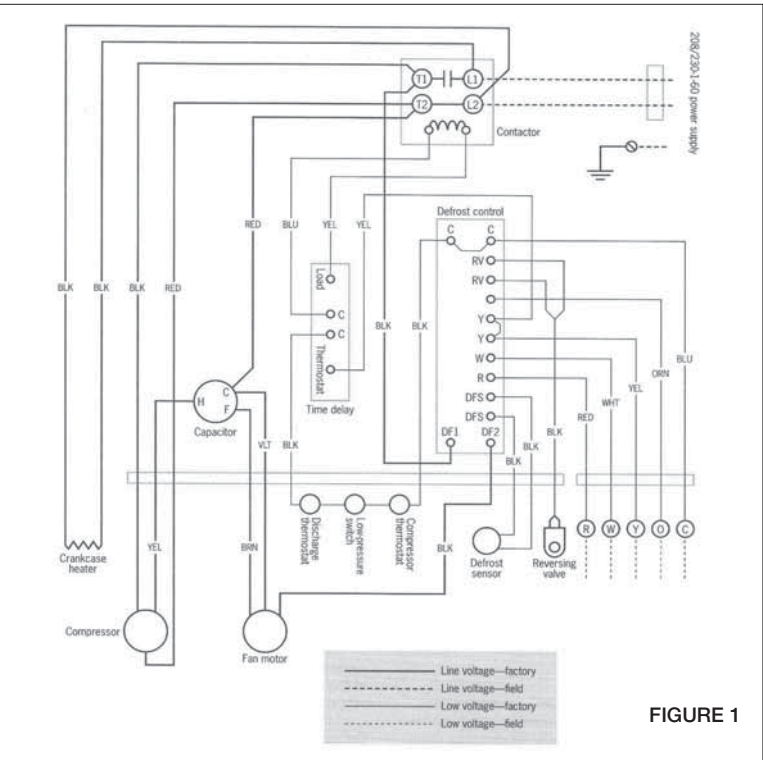
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Troubleshooting



A Four-Ton Heat Pump That's Not Operating

By Jim Johnson
Contributing Editor

In this month's troubleshooting situation, the equipment is a four-ton heat pump and the customer's complaint is that the unit is "blowing cool air."

When you arrive, you confirm that the thermostat is properly set for the heating mode, and that the indoor air handler is operating with normal air flow.

As your next step you check the outdoor unit and find that the compressor and outdoor fan motor are not operating. Consulting the wiring diagram shown in **Figure One**, your first electrical check at the L1 and L2 connections of the contactor, which shows 230 VAC.

Your next electrical checks are:

1. At the contactor coil: Result 24 VAC.
2. At T1 and T2 of the contactor: Result 0 VAC.

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 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."

Solution to Last Month's Problem

The next step is to replace the glow coil igniter. A resistance reading of more than 90 ohms proved that the igniter is failing and unable to provide the proper current draw in order to accomplish the operation of the gas valve.

The winner of last month's problem is:
Phillip Walker

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Venstar Sky Cloud Continued from Page 32

the City of Imperial, California.

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By Jim Johnson
Contributing Editor

In this segment, we'll take the idea of proper air flow through a furnace air handler to a step beyond measuring the temperature of the return and supply air and then performing simple arithmetic to arrive at the difference between the two factors. This

When considering this pressure from an inverse perspective, while the static pressure in a supply duct presses outward in all directions, static pressure in the return segment of an air handling system pulls

If the chart shows that the TESP is excessive, the technician's task is to track down the source of the problem and correct it in order to ensure that the equipment will be able to operate efficiently according to manufacturer's specifications.

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Industry Education

Rees Scholarship Foundation Awards \$62,000 to Aid Aspiring HVACR Technicians

The Clifford H. "Ted" Rees, Jr. Scholarship Foundation, a 501(c)(3) charitable foundation of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI), and the Air Conditioning Contractors of America (ACCA), announced scholarship awards totaling \$62,000 to 36 students, including five military veterans, studying to become technicians in the HVACR and water heating industry.

"We are pleased to award scholarships to these qualified and dedicated students and veterans, and we look forward to welcoming them into the industry," said AHRI President and CEO Stephen Yurek. "Each year, the Foundation provides aid to these aspiring technicians, helping to promote careers in the industry and fill good-paying jobs that cannot be outsourced."

"Supporting workforce development and employee retention programs are ACCA's highest priorities and we're pleased to work with the Rees Scholarship Foundation and AHRI to help contractors recruit and retain skilled workers," said ACCA President and CEO Barton James. "These scholarship awards also support ACCA's work with President Trump and his pledge to America's workers, which is focused on providing educational opportunities to develop a strong workforce. Congratulations to these very deserving young men and women, we look forward to you advancing in our industry and becoming tomorrow's leaders."

HVACR and Water Heating Technician Program Recipients:

Adam Tarnowski, Pennsylvania College of Technology, Williamsport, PA

Aiden Chestnut, Pennsylvania College of Technology, Williamsport, PA

Anthony Mahar, Vista College, Fort Smith, AR

Austin Reynolds, Pennsylvania College of Technology, Williamsport, PA

Bart Clement, Beville State Community College, Jasper, AL

Charles Sweet, Front Range Community College, Fort Collins, CO

Christopher Biringer, Brownson Technical School, Anaheim, CA

Christopher Joseph, Milliken, Pennsylvania College of Technology, Williamsport, PA

Colby Buntin, Minneapolis

Community and Technical College, Minneapolis, MN

Collin Engler, Southcentral Kentucky Community and Technical College, Bowling Green, KY

Emily Gavrilenko, California Polytechnic State University, San Luis Obispo, CA

Henry Grills, Southeast Kentucky Community and Technical College, Harlan, KY

Jamie Lee, Des Moines Area

Community College, Ankeny, IA

Jonnell Bailey, Georgia Piedmont Technical College, Clarkston, GA

Jorge Kanlilar, Brownson Technical School, Anaheim, CA

Joshua Yadon, Moore Norman Technology Center, Norman, OK

Joshua Kelsey, Monroe Community College - Applied Technologies Center, Rochester, NY

Justin Vazquez, Johnston Community College, Smithfield, NC

Lisa Gragg, Front Range Community College, Fort Collins, CO

Luke Brambley, Pennsylvania College of Technology, Williamsport, PA

Matthew Mase, Bellingham Technical College, Bellingham, WA

Maurice Sears, Brownson Technical School, Anaheim, CA

Meghan Bence, Oklahoma State University Institute of Technology,

Okmulgee, OK

Peter Bennett, Pennsylvania College of Technology, Williamsport, PA

Philip Blaylock, Beville State Community College, Jasper, AL

Rickey Gunby Jr., Georgia Piedmont Technical College, Clarkston, GA

Robert Gardner, Sheridan Tech-

Continued on Page 39

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For Personalized Workplace Warmth, Opt for Portable Radiant Heaters

By Jim Herring
Marley Engineered Products

When creating the right office atmosphere, comfort is key. Employers want to ensure teams are not too warm where they may get sleepy, but also not too cold that they cannot concentrate. Unfortunately, many different types of workplaces face year-round temperature challenges and struggle to strike the perfect balance to keep all employees comfortable and focused.

In the winter, it is important to keep cold drafts at bay without overheating, while in the summer a

cool and comfortable environment is ideal. Discovering the right level of comfort by adjusting the temperature throughout an entire facility can be inefficient and unnecessarily costly. When workstations, desks and counters leave some team members in the cold, supplemental electric radiant heating can keep temperatures comfortable and workers happy.

In fact, there are portable radiant heaters specifically designed to provide personalized, targeted warmth to employees that also are energy efficient. Here are a few attributes to consider when selecting a portable radiant heater to counter

a workplace chill.

Silence is Golden

The physical work environment can have a significant impact on worker productivity – whether it's the temperature, the layout or the resources available. When improving the temperature of a facility, it is vital to ensure the solution does not create a separate issue by increasing sound levels. Buzzing heaters or loud fans can quickly become a source of frustration (and possible safety hazard) for individuals trying to concentrate or communicate with one another in a quiet space.

Radiant heating technology functions without using a fan or blower, allowing units to heat up without creating a distraction or moving any air. Employees will barely notice when a unit is running, aside from the targeted warmth silently filling their space.

Out of Sight, Out of Mind

When providing heat to a specific area in a facility, it can be difficult to find room for a large, bulky heater. Depending on the type of workspace, it also can be hazardous to expose certain materials to direct heat, creating a need to adjust the layout to accommodate a hefty heater.

Look for portable radiant heaters designed to tuck away into small spaces without impacting workplace design. A freestanding unit with a thin profile can easily slide under tables or desks without taking up excess space. In addition, a slim unit that fits into a variety of spaces can be used and moved throughout a facility to heat specific areas based on employee needs throughout the year.

Gentle Warmth

Part of the temperature dilemma many workplaces face is differing levels of comfort preferences amongst employees. While some workers feel a facility is frigid in the summer, others may be quite comfortable or find it too warm.

Soft heat provided by portable radiant heaters is less harsh than other heating sources. These heaters provide a consistent, gentle warmth to objects and individuals in the immediate area, without pushing intense heat that can get lost in the air. An under-the-desk heater should be safe to the touch and also offer controls to regulate how much heat is distributed in the area to ensure just the targeted spots are affected.



A plug-and-go, portable radiant heater can be a perfect workplace companion for those cold winter days.

This creates a pleasant work environment while lowering heating costs.

Plug and Go

A portable heater should be just that – fully portable from one location to the next. If wiring is involved or a thermostat is needed, the unit is not truly portable. One employee may only need a heater in the winter months, while another may require additional warmth when the AC kicks on in the summer. Likewise, certain areas of a facility like a warehouse or garage may run cold depending on the time of year, prompting a need for a portable heater that is easily accessible with a simple plug into the wall.

A convenient power cord and three-pronged plug ensures a portable heater can warm almost any space without the need for extra wiring, complicated installs or a thermostat connection. In addition, the unit should offer versatility for where it can be situated within a space – such as mounted on a wall or supported on a floor stand.

Easy Operation

Under a desk, inside a nook or behind a workbench are all ideal spots for a portable heater. But these areas can be poorly lit, making it difficult to see and use the heater's controls. Fumbling in the dark to turn on/off or adjust a unit can be frustrating or potentially dangerous.

Opt for a portable radiant heater with an on/off switch that features a built-in light showcasing the important controls even in dark spaces. This light will allow employees to safely use the heater without straining into

uncomfortable positions to flip a switch.

When selecting a portable heater, choose convenience and efficiency over bulk and heft, and look for units designed to meet specific heating demands – such as under-the-desk warmth – to ensure the right amount of warmth is provided. For example, the Qmark 202SL radiant plug-in under desk portable heater offers personalized, energy efficient warmth for offices, workstations, conference rooms, reception areas and more.

To ensure year-round comfort in the workplace it is vital to find a portable radiant heater that is flexible enough to address fluctuating temperature concerns all year long. Visit MarleyMEP.com for more portable heating solutions designed and engineered to bring the right warmth and comfort to any facility.

About the author

Jim Herring is the supervisor of Total Custom Solutions & Technical Services at Marley Engineered Products®, a leading North American designer and manufacturer of reliable comfort heating and ventilation solutions for residential, commercial and institutional buildings. Recognized by contractors, architects, engineers and HVAC professionals for providing a wide range of high-performance, reliable heating and ventilation solutions, Marley Engineered Products' brands include QMark®, Berko®, Fahrenheit® and Leading Edge®.

Marley Engineered Products' manufacturing operations are based in Bennettsville, S.C., with regional sales representatives located throughout the U.S. and an administrative office in Burr Ridge, Ill.

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New Products

Nu-Calgon Gel Tabs



Nu-Calgon has launched new contractor pack sizes of Gel Tabs™, the condensate drain pan treatment with advanced gel locking technology. The 40-count and 80-count containers are the perfect sizes for contractors to stock on their trucks without taking up much space.

Gel Tabs keep air conditioning drain pans and lines from clogging and eliminate foul and musty odors. Nu-Calgon's unique gel formulation locks the tablet into place and completely dissolves, providing up to three months of protection.

The 3-ton size tablet now comes in an 80-count contractor pack, while the 5-ton size is available in a new 40-count contractor pack. Both are also available in larger bulk pack sizes, as well as smaller 12- and 6-count packages.

More information: www.nucalgon.com.

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Interplay Learning Training Solutions

Interplay Learning, a leading provider of online training for skilled trades utilizing virtual reality (VR) and 3D simulations, announced the availability of its first-of-kind HVAC industry training solu-

tion. The company introduces a new way to on-ramp to an HVAC career or advance HVAC skillsets for industry professionals with a catalog that includes dozens of interactive HVAC video courses by top industry experts and state-of-the-art 3D troubleshooting simulations. Course materials are accessible by desktop, laptop or VR-headset and provide an immersive learning experience for engagement and field-like experience.



For the professional market, Interplay's training solution delivers both cost-effective NATE CEU hours and an administration capa-

bility that allows service managers to track their team's skill advancement.

"This is online training that technicians will actually use because the simulations mimic on-the-job training," said Doug Donovan, CEO of Interplay Learning. "As a company, we've helped more than 70,000 people build key technical skills, so we're confident in our ability to change the way the HVAC industry trains its professionals."

From entry-level to seasoned HVAC professionals, individuals

can access at their convenience more than 100+ hours of scenario-based exercises across different equipment types – Ranging from a Commercial A/C unit to Residential Gas Furnace. Simulation has been the training method of choice for the medical, aviation and military industries because of its proven ability to better prepare professionals for real-world experiences. It also

Continued on Page 40

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nical College, Hollywood, FL
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Tyler Fabish, Illinois Central College, East Peoria, IL
Tyler Andersen, Des Moines Area Community College, Ankeny, IA
Veterans Program Recipients:
Alejandro Lopez, San Joaquin Valley College, Temecula, CA
Eric Larson, InterCoast College, Fairfield, CA
Rene Avendano, South Texas College, McAllen, TX
Steven Layer, Fortis College, Centerville, OH
Tommy Juarez, Brownson Technical School, Anaheim, CA

New Products

Continued from Page 39

allows for faster skill development and fewer on-the-job mistakes. Interplay Learning's training solution is subscription based. With a monthly option at \$19 per month or an annual subscription for \$199, users have unlimited access to training content, including video and simulation courses and knowledge checks. More than 100 hours of learning material includes basic, intermediate and advanced troubleshooting techniques. New courses are added each month. The team subscription package lets companies track their technician's progress through the admin dashboard and monitor the team's growth.

More information: www.interplaylearning.com.



Taco Comfort Solutions' 0018e high-efficiency, Bluetooth®-enabled circulator brings a new level of control to residential and light commercial hydronic systems. The ECM-powered 0018e is a solution for contractors who want the durability, efficiency and

simplicity of other Taco ECM circulators, while looking for more system feedback and control than has been previously available. The circulator features Bluetooth communication to a mobile app, providing real time control, diagnostics and reporting, such as installation history, power consumption, performance and runtime. Installers can select between multiple constant speed, proportional pressure, and constant pressure modes as well as activeADAPT™, Taco's self-adjusting proportional pressure mode. Taco's BIO Barrier® protects the pump from system contaminants, especially black iron oxide that otherwise tends to collect around strong ECM magnets. Also, Sure-Start®, which automatically unblocks a locked rotor and purges air from the circulator. The 0018e features 18 feet maximum head with a maximum flow of 16 GPM. It's also double insulated, which eliminates the need for a ground wire. The circulator qualifies for most state, regional, and utility efficiency incentive programs. An integral flow check is included, and both two-bolt or two-way flange models are available.

More information: www.Taco-Comfort.com

• • • • •

Epson Moverio Assist

Epson announced Epson Moverio Assist – an easy-to-use, “see-what-I-see” remote assistance and inspection solution using Moverio smart glasses for difficult repairs or work tasks out in the field. By enabling real-time collaboration between remote experts



and on-site field personnel, Moverio Assist helps make repairs quicker and with fewer mistakes, leading to increased productivity, improved customer satisfaction and reduced travel costs.

“Most popular remote support solutions today are phone and tablet based, and thus not hands free. There is a real market need for an affordable, turnkey, easy-to-use remote support solution for smart glasses that allows companies to connect in-field personnel with remote experts to collaborate on tasks,” said Leon Laroue, technical product manager, Augmented Reality, Epson America, Inc. “Our new solution is optimized specifically for Moverio® smart glasses to easily and efficiently connect experts with field personnel for real-time communication, inspection, instruction, and sharing of documents and videos.”

When assistance is required, a field technician wears the Moverio BT-300 or BT-350 ANSI smart glasses with built-in camera, powers it on to connect to the Internet using Wi-Fi® or a mobile hotspot, and then launches the Moverio Assist app to initiate the call to company experts logged into Moverio-Assist.com via a Chrome™ or Firefox browser. Unlike those using handheld tablets or smartphones, field technicians wearing Moverio glasses have their hands free to make repairs while collaborating in real-time.

Powered by Epson's breakthrough Si-OLED display technology, Moverio smart glasses allow field technicians to view instructions, photos, PDFs, and videos in high quality, while also giving them a wearable display that minimizes visual obstruction and can be virtually transparent when necessary. Available on a per-glasses, monthly subscription basis, Moverio Assist offers an affordable, hands-free remote assistance and inspection solution for small, medium and large enterprises.

More information: www.epson.com/moverioassist or www.moverioassist.com.

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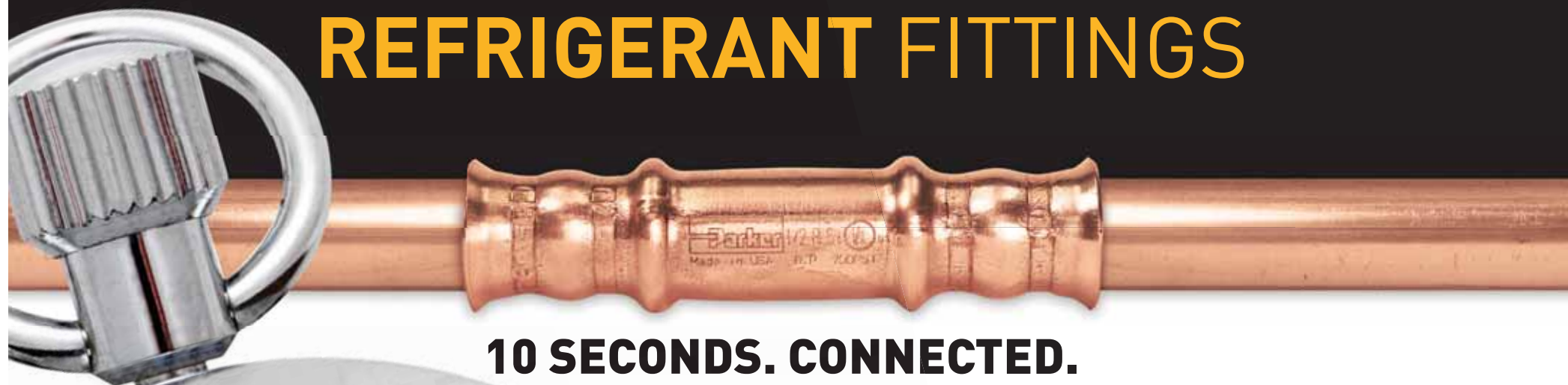


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Indoor People



MARISSA GRANADOS



SEAN MOSELEY



CHUCK WALSH

Fresh-Aire UV, Jupiter, Fla., a leading manufacturer of indoor air quality (IAQ) products, has promoted **Sean Moseley, Marissa Granados and Chuck Walsh** as the company records continued growth in its ultraviolet germicidal irradiation (UVGI) and activated carbon media air treatment products.

Moseley moves to vice president-residential sales, a position vacated by Fresh-Aire UV co-principal, Ron Saunders, who now assumes the role of director of sales for the 18-year-old company. Granados and Walsh will share national sales manager duties.

Moseley, who joined Fresh-Aire UV in 2011 as a regional sales manager, will oversee the efforts of national sales managers and the company's vital training and sales development with wholesale distributors, manufacturer's representatives and contractors.

Granados' national sales manager position will cover the northeast, central and western states. Granados joined the Fresh-Aire UV team in 2016 as a sales and training manager, which was also her previous position at refrigerant recovery

machine manufacturer Appion, Englewood, Colo. She has been instrumental in helping Fresh-Aire UV develop an online training and certification portal for contractors, according to Moseley. Besides training, she'll also be positioning Fresh-Aire UV reps for a more aggressive approach in training contractors as well as wholesalers.

Walsh, who joined the company's inside sales team in 2017, will share national sales manager duties with Granados. He'll cover the southeast, a territory he began developing last year in four states. Walsh will be responsible for training and supporting manufacturer's representatives, distributors and contractors in the expanded territory of Florida, Alabama, Georgia, Mississippi, Tennessee, Louisiana, Arkansas and Oklahoma.



JEFF ALLISON

IAC Supply Solutions Inc. has hired **Jeff Allison** as its new vice president of construction business. Allison will focus heavily on the development of effective growth strategies for IAC's construction customers. He will also provide direct sales and operational leadership for IAC's branch in Bartlett, Tennessee.

Before joining IAC, Allison served

in multiple leadership positions at Johnson Controls (formerly Simplex Grinnell). He brings 30 years of leadership experience to IAC's team.

"Jeff's industry knowledge is exactly what our company needs to successfully meet our construction business objectives," said Darrell Smith, president of IAC. "He's been a successful leader for three decades, and I'm excited to see what he will bring to the table in his new leadership role here at IAC."

.....

KAI Enterprises announces the promotion of **Dan Forgunson** to Chief Financial Officer (CFO). Forgunson has been with KAI since June 2018 when he was hired as Vice President of Finance.



DAN FORGUSON

As CFO, Forgunson will work closely with the Leadership Team as he leads, manages and is accountable for the activities of KAI's Finance Team, which includes major functions of accounting, budgeting, cash flow analysis, project controls and financial planning.

Continued on Page 44



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Indoor People

Continued from Page 43

He is also responsible for work progress, policy management and the oversight of KAI's Enterprise Resource Planning software.

"We have assembled a high caliber team of thinkers and changemakers in our Finance Department. Now we are going to focus on leveraging technology and business intelligence to allow them to do just that," said Forguson.

"We are constantly benchmarking and allowing industry consultants from firms such as PSMJ, FMI and CFMA to look under the hood, and we are taking action on their recommendations. I am a firm believer that consistent adherence to well-defined processes and procedures produces consistent results, so we will be utilizing our team's experience to strategically align our protocols and drive performance."

Forguson has 11 years of experience in the AEC industry. Prior to KAI, he was the Regional Project Controls Director at Jacobs in St. Louis. Forguson has a bachelor's degree in finance from Southern Illinois University – Edwardsville and a Master of Business Administration from Lindenwood University in St. Charles, MO. He is currently working on a Master of Science in Accountancy from DePaul University – Chicago. He is a member of the American Association of Cost Engineers (AACE).

"As KAI's CFO, Dan is charged with looking forward—to the next quarter, year, three years and 10 years—to predict trends and to help guide KAI's financial stability," said Michael Hein, AIA, PMP, Chief Operating Officer/Chief Integration Officer at KAI Enterprises.



JOHN WATWOOD

Motion Industries Inc. has named **John Watwood** group senior vice president of the company's Southeast Group.

A graduate of University of North Alabama (MBA) and University of Alabama at Birmingham, (B.S. Industrial Distribution/Marketing), Watwood has over 20 years of experience in the industry. He joined Motion Industries in 2008 as a fluid power specialist based out of Mississippi. John worked his way up to branch manager positions in Columbus, Mississippi, and Nashville, Tennessee, before earning a promotion to division vice president, general manager of the Nashville division in 2014.

"John's experience, expertise, and leadership style are well-suited for this expanded role and will allow him to move with agility toward success," said Kevin Storer, Motion Industries executive vice president U.S. Operations. "We are excited that he has accepted the challenge to grow our Southeast market and enhance our initiatives with a fresh perspective."

"John brings an intensity we need in the current market, along with the ability to drive strategic change through efficient operational execution," said Motion Industries President Randy Breaux.

Dewberry announced that **Seth Talmadge** has joined the firm's Roanoke, Virginia, office as the design manager for plumbing and fire protection projects in the mechanical, electrical, and plumbing (MEP) group.

Talmadge has more than two decades of experience in plumbing and fire protection design, and joins the firm most recently from Lawrence Perry and Associates Inc. in Roanoke. His background is primarily in commercial and institutional buildings, historic renovations, museums, and residential, healthcare higher education, K-12, and correctional facilities. Currently, Talmadge is working on a fire pump replacement project at a large healthcare facility in Roanoke. His noteworthy project experience includes the Wright-Patterson Air Force Museum, Virginia Commonwealth University's Sanger Hall Research Lab, and a variety of projects for the Federal Bureau of Prisons.

"Our Roanoke office is thrilled to welcome Seth to the team," said Dewberry Senior Vice President Shepard Hockaday, P.E., LEED A.P. "He has a diverse background and skillset that will help support our clients and their needs."

Talmadge served in the U.S. Army from 1985-1988, and



SETH TALMADGE

earned an associate's degree in architectural drafting and design technology from J. Sergeant Reynolds Community College (1995). He is a member of the American Society of Plumbing Engineers, where he has served in various leadership positions.

.....

LEEANNE ROSE

Nebraska, Plumbing, Heating & Cooling, an award-winning Hudson Valley business, announced that it has appointed **Leeanne Rose** as its Office Administrator and Special Projects Coordinator.

In her new role, Rose is responsible for providing support and coordination for the company's Founder and President, Paul Nebraska, and the accounting and office managers. Additionally, she assists in supporting the company's overall operations, and is the project lead and coordinator for all special company projects. Rose works closely with the management team to ensure company vision and goals are clearly defined and realized, and she also provides customer service and other administrative duties.

Prior to joining Nebraska Plumbing, Heating & Cooling, Rose served as the Administrative and Leasing Assistant for HUD properties and privately-owned properties in the City of Newburgh.

.....



LEEANNE ROSE



BRADLEY SNYDER

Bradley (Brad) Snyder has been named Senior Vice President and President of the Goodman Business Unit for Goodman Manufacturing Company, L.P. effectively immediately. The move coincides with the announcement that Satoru Akama assumes the leadership role as President and Chief Executive Officer of Goodman Global Group, Inc.

Previously, Snyder was the Senior Vice President of North American Sales and Distribution. Brad joined Goodman as a Divisional Vice President and has been instrumental to the growth and success of the Goodman and Amana brands of energy-efficient residential and light commercial HVAC systems.

Commenting on his new role, Snyder said, "I have a strong team that achieves outstanding results. I am fortunate to have their full support as we continue the success that has made it a strong contributor to not only the company but to the HVAC industry. As a recognized leader, we will continue to provide the products and services that have helped to make our customers successful too."

Snyder indicated that loyal customers of the Goodman and Amana brands will soon experience several new products and support tools designed to enhance the customer experience from end-to-end.

"I'm excited about the future of our business, our customer focus and the channel enhancements that will keep everyone associated with us to remain strong and profitable," he said.

In his new position, Snyder will have full responsibility for the Goodman and Amana brand product lines, including parts, supplies and accessories. He will continue to oversee both company-owned and independent distributor relationships.

"Brad's knowledge, leadership and background are well suited to support the success of the Goodman and Amana brands," said Satoru Akama. "I'm certain that he will continue the legacy of the organization and help lead it to even greater achievements in the future."

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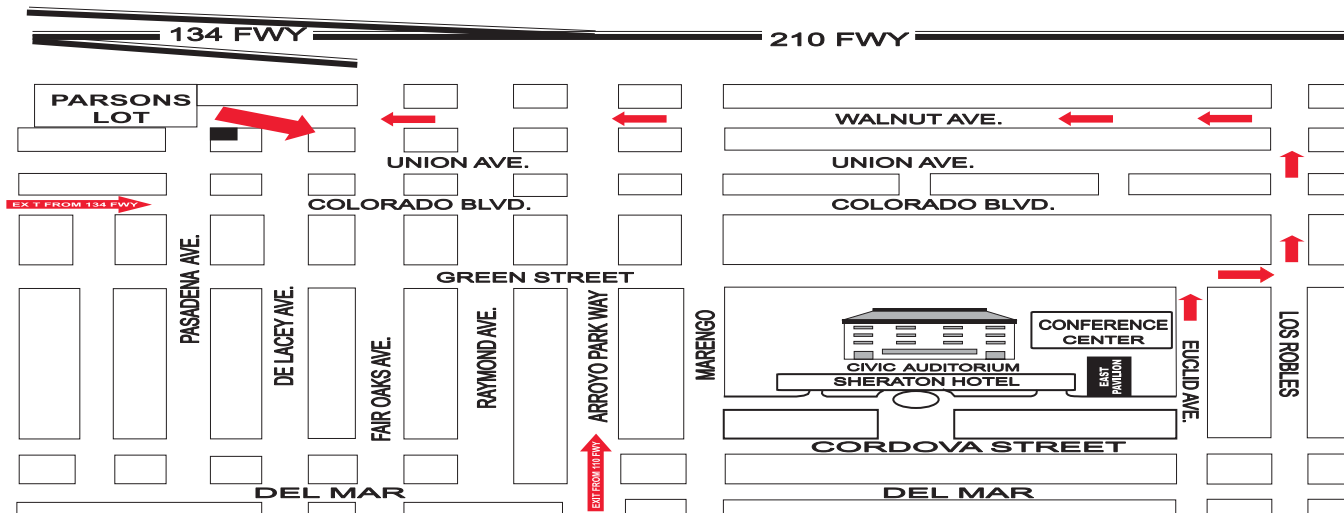
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112			218	216	318	316	418	416	518	516	618	616	718	716	818	816
110			214	212	314	312	414	412	514	512	614	612	714	712	814	812
108			210	208	310	308	410	408	510	508	610	608	710	708	810	808
106			206	204	306	304	406	404	506	504	606	604	706	704	806	804
104			202	200	302	300	402	400	502	500	602	600	702	700	802	800
102			200	198	300	298	400	398	500	498	600	598	700	698	800	798
100			198	196	298	296	398	396	498	496	598	596	698	696	798	796

IHACI's 40TH HVAC/R/SM TRADE SHOW FLOOR PLAN

SUPERHEROES



IHACI'S 40th Annual HVAC/R/SM – Performance Contracting Product and Equipment Trade Show

WEDNESDAY November 20, 2019

Pasadena Convention Center • 11:00 a.m. - 7:00 p.m.

SEMINAR SCHEDULE

SEEKING A CAREER IN HVAC/R/SM PERFORMANCE CONTRACTING?

Time: 11:00 a.m. – 12:30 p.m.
Location: Sheraton / Justine's Room

This seminar is targeted to students seeking a career in HVAC as well as existing employees seeking career direction and educational opportunities. Employers will have a candid conversation with attendees regarding what they are looking for in future employees as well as the different job opportunities available in the HVAC/R/SM Performance Contracting industries. The question and answer period will allow students to ask questions about their career opportunities, advancement, growth, development and longevity in the HVAC field.

This is a panel presentation that includes industry leaders: Mark Ramirez, President, IHACI, and President, Comfort Climate Control, Azusa, CA. Bob Wiseman, Chairman of the Board, IHACI, and President, Canoga Park Heating and Air Conditioning Company, Canoga Park, CA; Dean Gilford, Secretary/Treasurer, IHACI, and President, Kilowatt Heating, Air Conditioning & Electric, Sherman Oaks, CA; Tyler Miner, Past President, IHACI, and President, Redlands | Henry Bush Plumbing Heating and Air Conditioning, Redlands, CA; John Dalton, CM, Co-Chairman, IHACI's Education Committee, Universal Air Conditioning; as well as industry leaders from manufacturing, distribution, and utilities.

ENERGY REGULATIONS GO INTO EFFECT JANUARY 1, 2020

Time: 1:30 p.m. – 3:00 p.m.
Location: Sheraton / Justine's Room

Don't miss this important seminar! Leadership from the California Energy Commission will cover the following topics:
Title 20 requirements for certified equipment • Acceptance Test Technician (ATT) Program Update • 2019 Title 24 requirements.

CEC Certification Requirements for Title 20, the Appliance Regulations. An overview of what you need to know about offering for sale and installing regulated equipment in CA. This seminar will cover the basics of CA's appliance efficiency regulations and certification process for devices such as HVAC, ductless mini-splits, refrigeration and miscellaneous refrigeration products, water heaters, wine coolers, walk-in coolers, etc.

Presenter: Bruce Helft, CEC, Appliance Office. Lead spokesperson for the CEC's Title 20, appliance program's outreach and education unit since 2012.

Building Energy Efficiency Standards, Title 24, Part 6. Acceptance Test Technician Certification (ATTCP) Program. This presentation covers the status and compliance requirements related to the ATPCP Program and the Home Energy Rating System (HERS) Program. Presenter: Lorraine White, Manager of the Standards Compliance Office in the Energy Efficiency Division of the CEC. One of Lorraine White's responsibilities includes the Acceptance Test Technician (ATT) Program to increase compliance with, and enforcement of the California Building Energy Efficiency Standards, Title 24, Part 6.

What's New in Title 24, Part 6 for HVAC Energy Efficiency Requirements?

This presentation will highlight the new requirements for HVAC systems and components for both residential and nonresidential buildings. Topics include new heat pump options, fan efficacy, ventilation, filtration, HERS testing, and kitchen range hoods. Presenter: Kelly Morairty works as a mechanical engineer in the Building Standards Office, Outreach, and Education Unit. He specializes in HVAC requirements and helps develop training, tools, and resources to assist building industry stakeholders with compliance to Title 24, Part 6 Energy Standards.

SCAQMD ISSUES COMPLIANCE ADVISORY NOTICE RULE 1111 – LOW NOX FURNACE REQUIREMENTS INDUSTRY UPDATE – WHAT YOU MUST KNOW!

Time: 4:00 p.m. – 5:00 p.m.
Location: Sheraton / Justine's Room

As of October 1, 2019, condensing and non-condensing furnaces offered for sale, supplied, sold or installed within the South Coast Air Quality Management District must comply with a NOx emission limit of 14 ng/J. Any party offering for sale, supplying, selling, or installing non-compliant condensing or non-condensing furnaces after September 30, 2019, will be in violation of Rule 1111. Violators of this rule will be liable for penalties of up to \$10,000 per day or more. This includes inventory that was purchased prior to September 30, 2019.

Presenter: Manufacturer/Distributor Technical Experts and IHACI leadership.

Classifieds

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

Help Wanted

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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HVAC Technicians

UEI College-Encino is seeking professional HVAC technicians who are interested in teaching or have a passion for instructing others on the HVAC profession. No experience in Education needed,

Help Wanted

but preferred. Training given on the job. Position is for part-time, but possibility for full-time position is also possible. Schedules are available for evenings.

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Editor

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Ted Rieger
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Jim Johnson
Contributing Editor

Rick Torres / Calavera Graphics
Pre-Press Consultant

Lourdes S. Marta
Program Coordinator

Alice Marquez
Program Coordinator

Ari ManSonHing
Accounting

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