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NOVEMBER 2022

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NEWS

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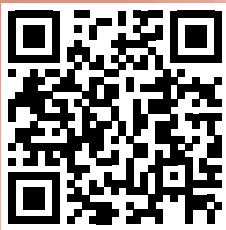
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2023 D.O.E. REGULATION CHANGES



WE ARE READY FOR WHAT'S NEXT

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- Five stages of variable-speed compressor operation
- 10-Year No Hassle Replacement™ Limited Warranty*
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- Two-stage compressor; Two-speed fan
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- Displays indoor/outdoor temperature and indoor humidity levels
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N4A7T

- Two-stage compressor; Two-speed fan
- 10-Year Parts Limited Warranty*

N4A5S | N4A4S

- Single-stage compressor
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R-SERIES: Economical, budget-friendly and maintains comfort even in the hottest of summers, coolest of winters. air conditioners are paired with our Ion System.



R4A5S

- Scroll compressor
- 5-Year Parts Limited Warranty*

90% GAS FURNACES:



G97CMN | G96CTN | G96VTN

- 10-Year No Hassle Replacement™ Limited Warranty*
- 10-Year Parts Limited Warranty*
- Lifetime Heat Exchanger Limited Warranty*

G95CSU

- Ultra-Low NOx model
- 5-Year No Hassle Replacement™ Limited Warranty*
- 10-Year Parts Limited Warranty*
- Lifetime Heat Exchanger Limited Warranty*

N95MSU | R95MSU

- Ultra-Low NOx ModelS
- 10-Year Parts Limited Warranty*
- 20-Year Heat Exchanger Limited Warranty*

80% GAS FURNACES:



G80CTL

- 10-Year No Hassle Replacement™ Limited Warranty*
- 10-Year Parts Limited Warranty*
- Lifetime Heat Exchanger Limited Warranty*

G80VTL

- 5-Year No Hassle Replacement™ Limited Warranty*
- 10-Year Parts Limited Warranty*
- Lifetime Heat Exchanger Limited Warranty*

N80VSL

- 10-Year Parts Limited Warranty*
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N80MSN | N80MSL | R80MSN | R80MSL

- 10-Year Parts Limited Warranty*
- 20-Year Heat Exchanger Limited Warranty*

G80CTU

- 5-Year No Hassle Replacement™ Limited Warranty*
- 10-Year Parts Limited Warranty*
- Lifetime Heat Exchanger Limited Warranty*

N80MSU | R80MSU

- Ultra-Low NOx Models
- 10-Year Parts Limited Warranty*
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2023 D.O.E. REGULATION CHANGES



PREPARING YOU FOR WHAT'S NEXT

On January 1, 2023, the Department of Energy's new minimum efficiency standards will go into effect. These changes will impact the minimum efficiency requirements for all new split air conditioners, heat pumps, packaged units, and ductless.



To meet these new standards, Trane® is proud to introduce their new lineup of DOE compliant split systems, packaged products, air handlers and coils.

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TEM6
TEM4

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Industry News



CALIFORNIA



California Bans Natural Gas Furnaces

Sacramento, Calif. – A new proposal passed by the California Air Resources Board (CARB) cements the state as the first to ban natural gas heaters and furnaces. The decision, which was passed unanimously, aims to phase out sales of the space heater and water heater appliances by 2030. The commitment is part of a broader range of environmental efforts passed by the board to meet the federal 70 parts per billion, 8-hour ozone standard over the next 15 years.

Residential and commercial buildings in California account for approximately five percent of the state's total nitrogen oxide emissions due to natural gas combustion, according to the originally proposed plan, released in August 2022. In addition, space and water heating make up nearly 90 percent of all building-related natural gas

demand. When burned, natural gas does emit less carbon dioxide than oil or coal. However, natural gas leaks pose health risks to homeowners, as they contain varying levels of volatile chemicals linked with cancer.

The new regulations will rely on adoption of heat pump technologies, which are being sold to electrify new and existing homes. Although the proposal does not include gas stoves, several cities and towns in the state currently ban or discourage use of gas stoves in new buildings. California's Public Utilities Commission also eliminated subsidies for new natural gas hookups last week, marking the first state to do so. The move will help reduce greenhouse gas emissions and lower utility bills for consumers.

"While this strategy will clean the air for all Californians, it will also lead to reduced emissions in the many low-income and disadvantaged communities that experience greater levels of persistent air pollution," said CARB Chair Liane Randolph in a statement.

"California needs more federal action to clean up harmful diesel pollution from primarily federally controlled sources, from locomotives and ocean-going vessels to aircraft, which are all concentrated in communities that continue to bear the brunt of poor air quality.

We simply cannot provide clean air to Californians without the federal government doing its part."

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EGIA Foundation Names HERO Scholarship Winners

Sacramento, Calif. – The EGIA Foundation announced its fifth annual class of HVAC HERO Scholarship recipients – a group of dedicated students pursuing education to prepare themselves for career paths in HVAC. Each one exemplifies the mission of the EGIA Foundation, a 501(c)(3) nonprofit organization dedicated to building a bigger, brighter future workforce for the home services trades.

Nineteen students are receiving \$2,500 apiece toward tuition as they pursue technical HVAC degrees or certificates from a variety of trade schools, colleges, and other technical training programs as part of the EGIA Foundation's HVAC HERO Scholarship Program. Over the last five years, the HERO Program has distributed over \$225,000 to 91 HVAC students, helping to increase the pipeline of talented workers between post-high school training programs and contractors actively seeking new hires.

"We're extremely proud of this

latest group of HERO Scholarship recipients, each of whom was selected based on their clear academic and community qualifications, as well as the compelling reasons they shared with us as to why they're passionate about this industry and these careers," said Bruce Matulich, chairman of the EGIA Foundation. "We feel certain each will make a tremendous impact both among the contractors who hire them and the communities they serve."

This year's recipients also include two honorary awards: the Women in HVACR HERO scholarship, awarded to Diana Montiel Silva in collaboration between the EGIA Foundation and Women in HVACR, a likeminded nonprofit organization working to uplift the industry and broaden diversity within it; and the Rob Falke HERO scholarship, awarded to Zachary Sale and named in honor of the trailblazing father of modern air-balancing and diagnostic testing. Rob "Doc" Falke, who passed away in May, was co-founder and president of National Comfort Institute (NCI).

"Increasing diversity within our industry isn't about optics – it's one of the most impactful things we can do to improve and expand the HVAC workforce, which is one of the top priorities among contractors right now,"

said Colleen Keyworth, president of Women in HVACR. "Diana is rife with potential, and emblematic of an increasing number of young women with the skills, passion, and motivation to excel in HVAC and help move the industry forward – exactly what Women in HVACR was founded to do and what we're working hand-in-hand with the EGIA Foundation to accomplish."

The HERO scholarship in Rob Falke's name, likewise, was established to celebrate the memory of someone who thought outside the box to help advance the industry.

"NCI was co-founded by 'Doc' Falke with an eye toward helping foster a new generation of contractors with better training, tools, and processes to better serve their communities," recalled David Holt, director of national accounts for NCI. "Based on Zachary's background and application, he's perfectly suited to develop into just the kind of contractor that Doc envisioned and that the EGIA Foundation helps to create. We at NCI are confident his future in the industry will honor Doc's memory."

The EGIA Foundation's next HVAC HERO Scholarship cycle began accepting applications in October 2022 from interested students pursuing studies in HVAC during the 2023-24 academic year. Students wishing to learn more about the benefits of a career in the trades, or to apply for the scholarship when it opens up, can visit [AlwaysInDemand.com](https://www.alwaysindemand.com).

Contractors, businesses, or other organizations interested in working with the EGIA Foundation to expand the benefits it provides contractors and students, can visit [EGIAFoundation.org](https://www.egiafoundation.org) to learn more about the Foundation's mission and how they can collaborate, contribute, or coordinate to amplify current initiatives.

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Hospeco Brands Acquires ChemCor Chemical Corp.

Chino, Calif. – Hospeco Brands Group, an industry-leading manufacturer and supplier of personal care, cleaning, and protection products serving the entire away-from-home marketplace, is adding another influential name to its formative brands by acquiring ChemCor Chemical Corp. Based

Find the GOLD KEY and UNLOCK a PRIZE

Somewhere hidden inside the pages of Indoor Comfort News lies a golden key ! If you've discovered it, please email us the page number and location (e.g., page 4, inside USACD advertisement). The first correct email will receive a prize, courtesy of Indoor Comfort News!

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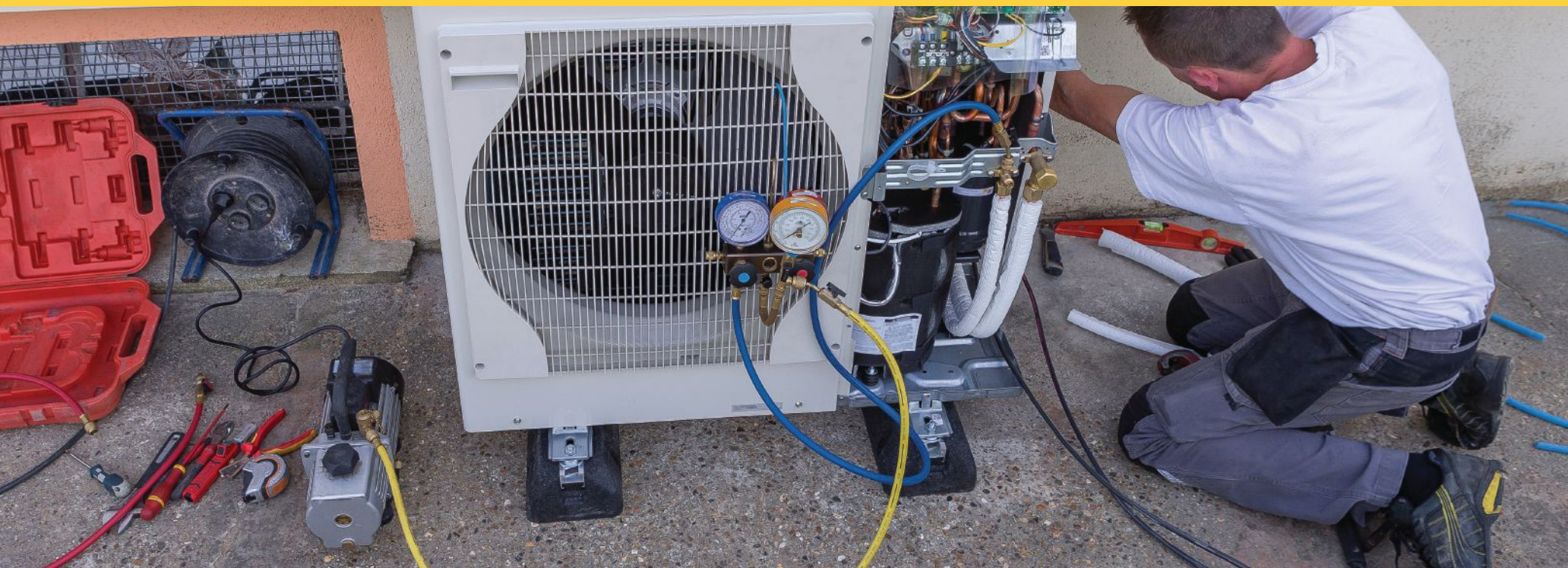
Note: Winners cannot win more than once in 12 months.



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Programs are funded by California utility customers and administered by Southern California Edison under the auspices of the California Public Utilities Commission.

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Continued from Page 4

in Southern California, ChemCor is a leading manufacturer and distributor of specialty chemical products for the foodservice, healthcare, industrial, and janitorial markets. With the acquisition, the formative brands of Hospeco Brands Group now include Acute Care, Adenna, ChemCor, Hospeco, High-Tech Conversions, and Nilodor.

ChemCor core products include cleaners targeting floor care, kitchens, restrooms, and laundry, as well as disinfectants, sanitizers, degreasers, and hand soaps. The company boasts more than 3,000 SKUs as well as proprietary formulations and in-house chemical blending capabilities. ChemCor is highly sought-after for private label products and forges strong relationships with its customers, resulting in an impres-

sive 99% customer retention rate.

Its California base of operations opens up strategic opportunities for Hospeco Brands Group to serve its customers in the western half of the U.S. even more efficiently, while an existing East Coast footprint will expand national availability of ChemCor products.

The acquisition expands product availability for Hospeco Brands Group, giving customers an even deeper bench of cleaning, disinfecting, and sanitizing products from which to choose, while ChemCor products are complemented by the wide offering of Hospeco Brands Group products for the same and other markets.

With the synergies between existing product lines, the acquisition makes sense for both parties. "We're excited to join Hospeco Brands Group," said Brett Tarquin, senior

vice president of operations at ChemCor. "Our existing customer base gains additional value and experience. Because our product lines are complementary, this partnership aligns to position our customers for greater success."

Following the acquisition of Acute Care and Nilodor in 2019, Hospeco Brands Group has fast become a leading specialty cleaning chemical company, including R&D of new formulations, boosting market share in the air care and floor care categories. The acquisition of ChemCor builds on this success and adds new facets. There will be zero disruption in product availability and no other changes at this time.

"We are excited to welcome Brett and his team at ChemCor into the Hospeco Brands Group family of companies. This acquisition

reinforces our mission to provide a national program of best-in-class product/supply solutions in personal care, cleaning, and protection products for the away-from-home market," said Bill Hemann, executive vice president of Hospeco Brands Group.

.....

Pfister Continues Docuseries for Third Season

Lake Forest, Calif. — Pfister Faucets, a trusted leader in the plumbing industry since 1910, is publishing its third season of American Plumber Stories, a popular docuseries that features the lives of plumbers throughout the US. The first two seasons have garnered millions of views by plumbers and tradespeople

in just over a year.

American Plumber Stories aims to promote the plumbing trade to the next generation of professionals. The show highlights the stories of plumbers around the nation including how they got started in the plumbing trade and the passion they have for their profession. These stories show how they built a career that allows them to lead financially rewarding and fulfilling lives.

Over the past year, the docuseries built up a large following in the plumbing industry who passionately support the mission that Pfister Faucets, the creator of the docuseries, is pursuing. From plumbing businesses, plumbing product manufacturers to industry associations, many were inspired to join forces to turn American Plumber Stories into the movement it has become today.

Leading plumbing tool manufacturer, RIDGID, has partnered with Pfister Faucets to distribute American Plumber Stories episodes on its high-reach social media platforms and helps promote the docuseries at its trade show booths across the country.

"It's always our goal at RIDGID to support and celebrate the work of skilled trade professionals whenever and however we can. Getting to see and hear from the people who put their hearts into this profession is inspiring for those considering entering the plumbing field. We're thrilled to continue to support the way Pfister Faucets and American Plumber Stories bring these personal experiences to life." - Becky Brotherton, Director of Engagement Marketing — RIDGID

The Plumbing-Heating-Cooling Contractors — National Association (PHCC), the premier trade organization for plumbing and HVAC professionals, has teamed up with American Plumber Stories and supports its message on a national level to its members, as well as in state and local chapters throughout the country.

"We are delighted to support this important initiative to raise awareness of the rewarding careers in the industry. The real-life stories shared by the people spotlighted on the series — including several PHCC members — are an inspiration not just for those considering a career in the trades, but for all of us who have chosen this path and never regretted it. We look

Continued on Page 8

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Industry News

Continued from Page 6

forward to Season 3, when PHCC member company Hiller Plumbing, Heating, Cooling & Electrical will be one of the featured guests.” - Joel Long, President – PHCC National Association

New episodes of American Plumber Stories can now be watched on www.AmericanPlumberStories.com.

Interested plumbers who would like to share their own story can do so here: <https://www.american-plumberstories.com/pages/i-am-an-american-plumber>.

ARIZONA



Rite Way Acquires Southern Arizona Plumbing

Tucson, Ariz. – Rite Way Heating, Cooling & Plumbing (“Rite Way”), a people-focused heating, air-conditioning, plumbing and electrical company serving the

Tucson market, today announced it has acquired Southern Arizona Plumbing (“Southern Arizona”).

Southern Arizona was founded in 2007 by Mike Nagal and Aaron Rice, and has become a leading residential plumbing service provider across Pima County. The Southern Arizona team has developed an expertise in sewer inspections, pipe lining, sink, toilet and faucet repair, drain cleaning, gas piping, water heater installations, well pumps and water treatment.

“We are excited to welcome the Southern Arizona team into the Rite Way family. With the addition of Southern Arizona’s plumbing and sewer expertise, we are now better positioned to serve the needs of homeowners across Tucson,” said Rick Walter, President of Rite Way. “Mike and Aaron have built a fabulous business and share our passion for taking care of people. Under their leadership, we will now be able to offer expanded plumbing services – specifically sewer services – to current and future Rite Way customers.”

As part of the transaction, Nagal, Rice and the Southern Arizona team will join the Rite Way family and operate under the Rite Way name and brand.

“The opportunity to combine Southern Arizona into the Rite Way business made sense for us,

our team, and our customers. Given that Rite Way is one of the largest home service providers in the city, we now have access to resources and tools that we never thought possible. I’m looking forward to working with Rick, Chris Sundin, and the entire Rite Way team,” said Mike Nagal, co-founder of Southern Arizona.

Founded in 1959, Rite Way Heating, Cooling & Plumbing is a people-focused heating, air-conditioning and plumbing company. Rite Way is one of the largest Residential HVAC, Plumbing and Electrical service providers in Tucson, currently serving over 13,000 active residential customers with more than 200 team members. For more information, visit RiteWayAC.com.

TEXAS



Morrison Products Breaks Ground on Plant Expansion

Mesquite, Texas – Morrison Products broke ground on a 24,000 square-foot expansion to the com-



MORRISON PRODUCTS OFFICIALS AT THE GROUNDBREAKING CEREMONY FOR THE COMPANY'S EXPANDED TEXAS FACILITY.

pany’s Mesquite, Texas facility. The expansion will increase the total square footage of the plant to 102,000 square feet and expand production capacity.

“The expansion to our Mesquite facility will allow us to double our production volume,” said Mike Chapman, vice president of manufacturing for the company. “Adding capacity allows us to grow our business and respond quickly to the changing needs of our customers.”

Morrison Products opened its Mesquite facility in 1984, with 24,000 square feet of production and office space. In 1994, the company doubled the size of the facility, and further expansions in 2004 and 2006 brought the plant to its current size of 78,000 square feet.

Morrison Products, which also sells under the Lau brand, is a manufacturer of fans for the heating, ventilation, and air-conditioning industry. With eight strategically located facilities in two countries, Morrison Products can react quickly to the needs of its customers, shortening the supply chain and saving time and money.

NATIONAL



Danfoss Forms New Employee Resource Groups

Baltimore, Md. – Danfoss has announced five new global Employee Resource Groups (ERGs), alongside ten new Regional Inclusion Councils, where employees can come together based on shared characteristics, life experiences or

interests.

The new Danfoss’ ERGs and Inclusion Councils reflect the company’s ambition to take a leading position on Diversity and Inclusion.

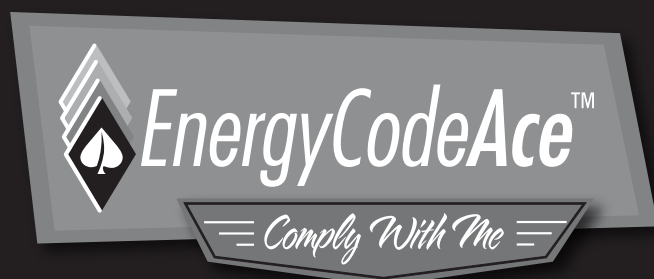
ERGs are recognized as a central instrument for business growth. Danfoss ERGs provide employees with an outlet to help shape the organizational culture and create an environment of belonging through communities of shared identity, experience, and interests, as well as providing resources that empower leaders and teams to foster inclusion. Each Global ERG is sponsored by two executives, including a member of the Group Executive Team (GET) and a business or functional leader, ensuring D&I is embedded in Danfoss’s purpose and strategic priorities and fostering stronger inclusivity across the employee experience.

The Regional Inclusion Councils represent global perspectives across all Danfoss regions to provide equitable solutions by identifying and eliminating systemic barriers. They will meet monthly to discuss what is being actioned, assess how it’s working, and provide advice on next steps in expanding the company’s D&I posture.

Ilonka Nussbaumer, Senior Vice President and Head of HR, Danfoss says: “With the new Global Employee Resource Groups and Inclusion Councils, we are taking active steps to identify barriers we might have overlooked in the organization to be able to provide an even more inclusive workplace for everybody.”

Nussbaumer adds: “Danfoss is expanding our global footprint with the strategic intention to lead the green transition and build a better future – this cannot be achieved without attracting, retaining and ensuring proper representation of all kinds of people. We must do everything to ensure we do not exclude anyone

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to help you decode Title 24, Part 6 and Title 20

SCAN
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HVAC Brochure!

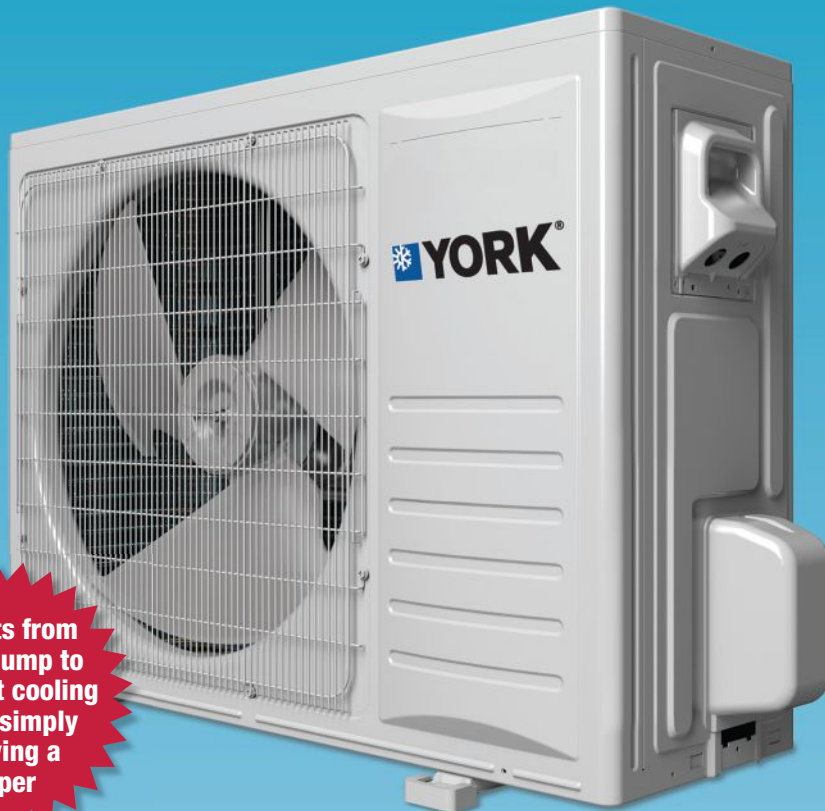


This program is funded by California utility customers and administered by Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E) and Southern California Edison Company (SCE) under the auspices of the California Public Utilities Commission.

Continued on Page 10

The York® HMM7 Horizontal Discharge Heat Pump:

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



Converts from a heat pump to a straight cooling unit by simply removing a jumper

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

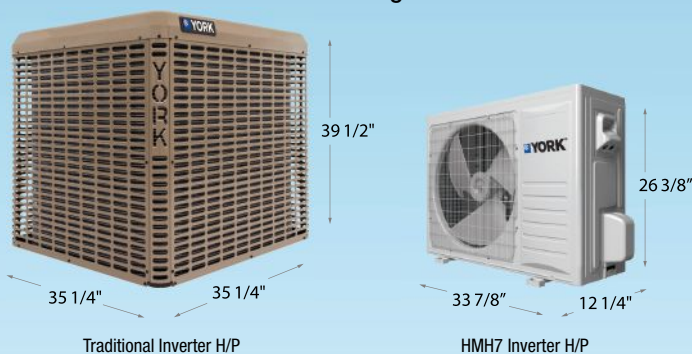
The YORK® HMM7 Heat Pump is designed to provide all the comfort and technology of a high efficiency unit at the cost of a base-tier vertical unit for residential customers. It's an ideal solution for homes that require a compact design and comes in several models and tonnages with flexible installation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



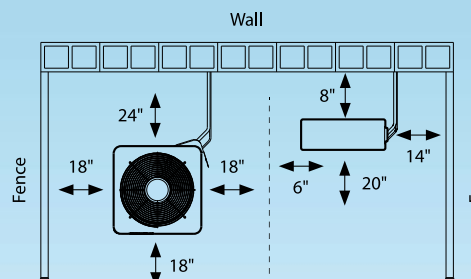
Model	Tons	SEER	HSPF	Height (Inches)	Width (Inches)	Depth (Inches)	Operating Weight (Lbs)	Sound Range (dBA) Low-High*
HMM72B241S	2	17.5	9.0	26 3/8	33 7/8	12 1/4	112	54-65
HMM72B361S	3	18.0	10.5	33	37 3/8	13 3/8	155	56-68
HMM72B481S	4	18.0	9.5	54 5/8	37 3/8	13 3/8	227	62-69
HMM72B601S	5	17.0	10.0	54 5/8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

*High sound rated in accordance with AHRI Standard 270.

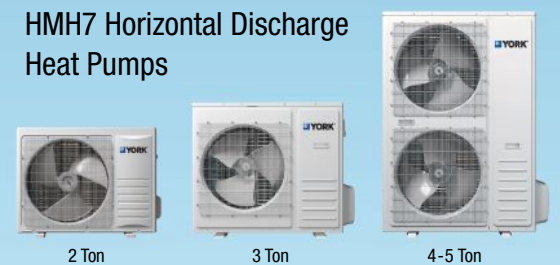
40% smaller footprint compared to traditional vertical discharge units



Traditional, Vertical Unit Minimum Clearances vs. HMM7 Minimum Clearances



HMM7 Horizontal Discharge Heat Pumps



Product registration required.

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Continued from Page 8

who is able to help us fight climate change. We're asking colleagues in the communities represented to join these groups, as well as allies who can champion along with their colleagues."

The five new Global Employee Resource Groups launched by Danfoss include:

- Danfoss MULTICULTURAL & NATIONS – focusing on employees of all ethnicities/nationalities and allies
- Danfoss GENDERS – focusing on employees of all gender identities (i.e., women, men, non-binary) and allies
- Danfoss ABILITIES – focusing on employees of mental and/or physical disabilities and allies
- Danfoss GENERATIONS – focusing on employees of all age groups and allies
- Danfoss PRIDE – focusing on employees of the LGBTQ+ community and allies

Nussbaumer added: "Diversity & Inclusion is one of three pillars of our ERG ambitions. It's embedded in our overall Core & Clear 2025 strategy, and it will work as a business enabler for strong employee engagement, increased customer satisfaction, societal impact, and business growth. Our people are the engine of our business, and we are reframing our approach to building a diverse and inclusive workforce. The more diverse our workforce is, the more diverse the ideas and experiences are while we engineer tomorrow to build a better future."

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Fujitsu Launches Global Rebrand

Pine Brook, N.J. – Fujitsu General America, Inc. announces a global shift in the branding of its VRF and mini-split heat pump product lines. From October 3, 2022 onwards, all existing and future VRF and mini-split lines will be labeled as Fujitsu branded Airstage products. Timing for labeling varies depending on the model.

Leading with a new, modern teal logo symbolizing innovation, opportunity and sustainability, the rebrand will provide a fresh look for its most well-known products while Fujitsu continues to deliver the same energy efficient, reliable products with exceptional support. Model numbers will not change.

Aside from the updated logo, Fujitsu J-Series and V-Series VRF products retain their Airstage branding. The existing Halcyon mini-split line is now known as the Airstage H-Series.

The rebrand unifies and strengthens Fujitsu's global positioning and helps facilitate expansion into new areas of business.

"Moving forward, Airstage will take on a much broader meaning," said Fujitsu General America VP of Marketing, Erin Mezle. "It now embodies a more cohesive brand family, bold new thinking, dynamic product performance, and a finely-calibrated focus on innovation, sustainability and electrification."

The rebranding effort does not impact business operations. Fujitsu's unitary and Westinghouse brands are not involved with the rebrand, and are unaffected by this



change.

The Fujitsu company name, vision and values remain intact, and Fujitsu's unwavering commitment to its distribution channels and consumers are stronger than ever.

For more information, please visit www.FujitsuGeneral.com.

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Malco Announces Trade-Pro of the Year Winners

Annandale, Minn. – Malco Products, SBC, one of the nation's leading manufacturers of high-quality tools for the HVAC trade (Heating, Ventilation and Air Conditioning), announced the winners of its annual HVAC Trade-Pro of the Year Award program. The 2022 HVAC Trade-Pro of the Year Award recognizes and celebrates outstanding, experienced HVAC professionals who are dedicated to the industry and on-the-job safety, as well as giving back to their communities.

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

- Tammie Nixon, Sheet Metal Journeyman, GEM Inc., Berkey, Ohio
- Ricardo Lopez, HVAC Trade Pro, Hoffman Brothers, Moscow

Mills, Missouri

- Kenneth Hudson, CEO, HawkEye Services, Fort Washington, Maryland

- Robert Hartman, HVAC Installer & Servicer, Philadelphia, Pennsylvania

- Chris Sanders, Owner & Installer Service Technician, Sanders A/C & Heating, Inc., Cub Run, Kentucky

"Malco is proud to honor this year's diverse group of HVAC Trade-Pro of the Year winners for service and commitment to their customers and communities," said Malco president and CEO Rich Benninghoff. "These HVAC professionals are representative of the excellence in the industry and are dedicated to working safely and efficiently in the field."

Each of the winners will receive a Malco tool kit valued at \$1,000, awarded by their local distributor. Nominations for Malco's 2023 HVAC Trade-Pro of the Year program will open in February 2023.

As a strong supporter and advocate of careers in the trades, Malco donates significant quantities of in-kind products and apparel annually to a variety of skilled trade education programs, competitions and events across the country, including high school, post-secondary technical and apprenticeship programs, regional apprenticeship contests and SkillsUSA state and national conferences. Malco also coordinates the "Head of the Class" Student Recognition Program that partners with education programs across the country to recognize high-achieving students and entire graduating classes in the HVAC/

sheet metal, building construction and autobody repair fields.

For more information about Malco Products, SBC, visit www.malcoproducts.com.

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Munch's Supply Buys Total Air Supply, Spiral Air

New Lenox, Ill. – Munch's Supply, the HVAC division of Marcone, has acquired Total Air Supply and Spiral Air Manufacturing, including three branches servicing Manchester, Derry and Nashua, New Hampshire. This will expand Munch's geographic footprint to 74 locations serving 17 states and one Canadian province.

Munch's Supply is a Marcone company that has been operating in the Chicagoland area for more than 65 years and is consistently ranked as a top 10 HVAC distributor in the United States. Marcone, a distributor of home appliance, HVAC and plumbing repair parts and equipment across North America acquired Munch's Supply in 2021. Together, the companies operate with a singular goal — to become the hub for parts and services to the home for both technicians and consumers.

"This acquisition marks our very first partnership with Goodman, a subsidiary of Daikin Industries. This is an established equipment brand and working with them, we are pleased to expand our reach on the east coast," said Kevin Baxter, president HVAC, Munch's Supply/Marcone.

"This business has been in my family for almost 50 years. We are proud to provide our customers quality Goodman equipment along with parts and custom sheet metal," said Sue Quintiliani, owner, Total Air Supply. "We are excited to be part of a company with similar values – one that puts people first, both customers and employees."

"The Quintiliani family has done a fantastic job building a successful, customer-focused organization with superior dedication to their family of contractors," added Baxter. "We look forward to working with Sue, Dave, Greg and the rest of their talented team."

The acquisition demonstrates Munch's ongoing dedication to

Continued on Page 12



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LINEGATE
Residential



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Residential



Learn more at www.InabaDenko-America.com

Continued from Page 10

the HVAC and plumbing marketplace and reinforces its commitment to partnering with family and customer-service focused businesses looking for either a long-term partnership or an exit strategy.

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Munters Opens New Factory for Climate Controls

Daleville, Va. – Munters is relocating operations from its plant in Buena Vista, Va., to a new, expanded facility with twice the manufacturing capacity in Daleville, Va.

“The demand for innovative and sustainable data center cooling is expected to remain strong. I am very



MUNTERS' NEW FACTORY WILL INCREASE THE PRODUCTION CAPACITY OF COOLING AND HUMIDITY CONTROL EQUIPMENT AND ADD MORE THAN 150 JOBS.

excited about our new factory that gives us the infrastructure we need to continue to provide world-class, energy-efficient solutions to our customers,” said Stefan Aspman, group vice president and president of the Data Center Technologies business area.

The new 365,000 square-foot manufacturing facility is Munters’ largest plant in the Americas. The factory will increase the production capacity of cooling and humidity control equipment and add more than 150 jobs.

“The new modern factory

will offer the best possible working environment for our employees. It is designed with Munters’ net-zero emissions target in mind. The upcoming installation of solar panels on the roof, which is estimated to cover a large part of the daily energy consumption, is an example of this,” said Aspman.

Munters’ business area Data Center Technologies specializes in advanced climate cooling solutions using a wide range of heat rejection technologies.

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HPC Fire Inspired Opens New R&D Facility in Ohio

Dayton, Ohio – HPC Fire Inspired™, a leading gas fire pit manufacturer, recently opened a new R&D Center.

The new building is a dedicated 13,000 square-foot CSA certification facility. It will have a state-of-the-art training, R&D, and education amenities.

“The R&D investment will expand our capabilities for development of new technology and products,” said Sean Steimle. “What truly sets HPC’s fire designs apart from other brands is the cutting-edge technology that elevates the customer experience.”

The new R&D center will provide the capacity and tools to launch the next generation of projects such as: The new SmartArctm, Universal Gas Orifice, and Home Automation.

In addition to the new facilities innovation infrastructure, the company will be expanding its capabilities for training and education. The new training center will host customers and the center will display the latest products and technology. Bolstering the training and education continues to strengthen the HPC partnership with its customers.

HPC, based in Dayton, Ohio, is a leading manufacturer of gas fire features and fire-and-water features for residential and commercial applications. Its products are available through hundreds of specialty retailers and select online merchants. HPC Fire Inspired™ – www.hpcfire.com.

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Winsupply Buys Hydrologic Distribution Company

Dayton, Ohio – Winsupply’s strategic growth continues with the company’s largest year of acquisition investments.

Hydrologic Distribution Company joins the Winsupply Family of Companies with 12 locations servicing plumbing contractors throughout the state of Florida. Collectively, the locations have a quarter billion dollars in annual revenue.

“To find a company whose culture aligns so perfectly with Winsupply is a once-in-a-lifetime opportunity,” said John McKenzie, President, Winsupply Inc. “I can’t wait for customers and contractors in the Florida market to see what we will be able to accomplish together.”

Continued on Page 14



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Pacific Gas and Electric Company is pleased to offer the following HVAC/R training courses specifically designed to advance the skills of HVAC/R professionals.

NOVEMBER 2022

NATE AC/HP Refrigeration & Air Distribution Training (Four-Night Class)
Instructor: Mitch Bailey
Mon., Nov. 7 – Part 1
Tues., Nov. 8 – Part 2
Wed., Nov. 16 – Part 3
Thurs., Nov. 17 – Part 4

Exam: Saturday, 11/19/2022 @7:30 am

DECEMBER 2022

System Diagnostics Module (Four-Night Class)
Instructor: Mitch Bailey
Wed., Dec. 7 – Part 1
Thurs., Dec. 8 – Part 2
Wed., Dec. 14 – Part 3
Thurs., Dec. 15 – Part 4

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

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



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**AZ - Phoenix & Northern AZ
Bryce Knudsen
602-758-1400**

**NM, TX - El Paso
Ray Portugal
915-276-1139**

**MT, WY, ID, CO, UT, NE, SD, NV, OR, WA
& CA - Northern CA, Sacramento, LA County,
Orange County, Riverside County (West of Beaumont)
Kirk Jensen
801-458-6331**

**All Other Locations
Jim Henderson
602-799-1703**



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Continued from Page 12

Supported by six regional distribution centers around the country, Winsupply has the unique ability to provide each newly acquired location with timely product availability, not previously attainable.

“We couldn’t be more excited to join forces with such an incredible company,” said Christopher Lynch, President, Hydrologic Distribution Company. “From the moment I first met the Winsupply leadership team, I found a group of hungry yet humble entrepreneurs that believed in honest, good old-fashioned hard work. Winsupply’s one-of-a-kind structure positions Hydrologic’s current companies to be even more successful going forward.”

“Every now and then I meet people and think to myself,” that’s a Winsupply person but they just don’t know it yet. A Winsupply person is entrepreneurial, full of energy, caring and driven to help others succeed,” said Monte Salsman, President, Winsupply Acquisition Group. “When I met the team at Hydrologic, this is exactly what I felt. Hydrologic is filled with people who believe what Winsupply believes.”

SMACNA Names Georgia Business Owner Contractor of the Year

Colorado Springs, Colo. – The Sheet Metal and Air Conditioning Contractors’ National Association (SMACNA), the leader in promoting quality and excellence in the sheet metal and air condition-



ANGIE SIMON, SMACNA IMMEDIATE PAST PRESIDENT, WITH JACK KNOX, SMACNA'S CONTRACTOR OF THE YEAR.

ing industry, announced Jack Knox, president of R.F. Knox Company, Inc., is this year’s Contractor of the Year. Announced at SMACNA’s 78th Annual Convention in Colorado Springs, Colorado, this prestigious award is given to a professional who exceeds all expectations of serving and promoting the industry.

“Jack’s passion for innovation and his commitment to developing the next generation of sheet metal professionals has not only bettered his business, but SMACNA and the industry as a whole,” said Aaron Hilger, SMACNA’s chief executive officer. “No one is more deserving of this award than Jack. He has been an exemplary SMACNA member for more than two decades, having served on more than 20 committees over the years, as well as serving on our Executive Committee. I join with all of our SMACNA members to say I am thrilled for him to receive this much-deserved recognition.”

Knox is a fourth-generation owner of a family business with more than 100 years in the trade. He’s risen through the ranks holding various roles ranging from estimator to project manager to construction manage-

ment and now, president. Knox has also played a significant role within SMACNA. He served as SMACNA’s 2017-18 board president, as well as served on the Budget and Finance Committee, Technical Resources Committee, and the Investment Committee. An advocate for positive legislative change, Knox has been a longtime member of the SMACNA’s legislative and political action committees, and a member of the SMAC PAC donor clubs for almost 20 years. He is also the management trustee of the Sheet Metal Workers’ National Pension fund.

Locally, Knox is an active member of the board of directors for Georgia SMACNA and serves on several standing committees, including the joint apprenticeship & training committee, health and welfare committee, and the industry fund.

Watts Launches 2nd Annual Water Champion Training Challenge

North Andover, Mass. – Watts has announced the second annual Water Champion Online Training Challenge to be held Oct. 17 – Nov. 30, 2022.

Customers will earn double tokens to redeem towards free lifestyle merchandise by completing specially-selected training modules on Watts Works Online.

The modules focus on water conservation, energy efficiency, safety/regulation, and sustainability-inspired products and solutions.

Watts Works Online offers industry professionals more than 400 “bite size” training modules (averaging less than 7 minutes long) on a variety of topics to help them develop their knowledge of Watts products and solutions. All



training is free and available 24/7 from any device.

For more information on all the training opportunities provided by Watts and to access Watts Works Online, go to watts.com/training.

Founded in 1874, Watts designs, manufactures, and sells an extensive line of flow control, water safety, water filtration & treatment, radiant heating, and drainage products for the commercial, residential, and institutional markets. Watts is committed to helping its customers optimize system performance and reliability and conserve critical resources. For more information, visit www.watts.com.

Greenheck Supports Healthy IAQ in Schools

Schofield, Wisc. – A recently released White House Fact Sheet, Back to School 2022: Giving Every School the Tools to Prevent COVID-19 Spread and Stay Safely Open All Year Long, cites improving indoor air quality across America’s school buildings through effective ventilation and filtration as an important part of COVID-19 prevention. In addition to other layered prevention strategies, taking action to improve indoor air quality can also reduce the risk of exposure to particles, aerosols, and other contaminants, and improve the health of building occupants. Proper ventilation and good indoor air quality have also been shown to improve student academic performance in schools.

Greenheck is in a unique position to support school districts seeking to improve their heating, ventilation, and air conditioning (HVAC) systems to improve indoor air quality (IAQ) in their buildings. A manufacturer of ventilation systems for commercial and institutional buildings, Greenheck offers a complete line of ventilation products for educational facilities that create a safe, comfortable, and productive environment for students and staff while keeping operating and installation costs low. Of particular benefit to school facilities, Greenheck’s dedicated outdoor air systems (DOAS) with energy re-

covery provide an energy-efficient solution to bring fresh outdoor air into a building, helping to cool in the summer and heat in the winter. Energy recovery ventilators help reduce energy costs and improve indoor humidity levels by capturing energy (heat) from exhausted air to precondition (warm or cool) air before bringing it back into the building.

A member of Air Movement and Control Association (AMCA) International, Greenheck products undergo stringent testing to adhere to the performance standards of the AMCA Certified Ratings Program ensuring products perform as specified. AMCA offers certification for 18 performance parameters, including air performance, sound, fan energy index (FEI), and leakage.

A vast majority of school buildings in the U.S. are 20 to 50 years old and fail to meet current ventilation requirements. Likewise, many newer buildings also have technologically outdated HVAC systems or do not meet current codes. The Fact Sheet goes on to explain the American Rescue Plan and other federal dollars may be used to make indoor air quality improvements and the White House will continue to provide support to schools to help in making these improvements including connecting schools with experts to provide support for indoor air quality. In addition to helping schools plan and implement indoor air quality improvements, including through the use of federal funds, the fact sheet also encourages connecting schools with experts to provide support for indoor air quality.

“Greenheck continues to work with school administrators, educating them on the importance of indoor air quality and solutions to improve ventilation rates and bring more fresh outdoor air into our schools,” said Mike Wolf, P.E., Greenheck director of regulatory business development. “Ventilation is a necessity and we need to shift the narrative from indoor air quality to indoor air safety. Moving fresh, outside air in and cycling that fresh air in a room is the quickest and most cost-effective way to remove the majority of harmful pollutants in the air. Additionally, it’s the only effective way to mitigate carbon dioxide levels, especially in large gathering areas holding a lot of people such as school gymnasiums and auditoriums.”

Greenheck and its nationwide network of manufacturer’s representatives are ready to help schools

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NOVEMBER CLASSES

2-PART SERIES

HVAC - Motors & Adjustable Speed Drive/VFDs

November 8 & 10 | 5 p.m. - 7 p.m.

2-PART SERIES

Electrification in the Built Environment

November 15 & 17 | 5 p.m. - 7 p.m.

4-PART SERIES

IHACI - NATE Core Gas Heating

November 21, 22, 28 & 29 | 6 p.m. - 8 p.m.

ON-DEMAND

ITsAboutQ.net - Online Training Program - Technician Education & Certification

hvacredu.net/sdgetraining

ON-DEMAND

D&R International - Commercial Heat Pump Water Heating Online Education

learn.drintl.com/commercial-hpwh-training-sdge

ENERGY CODE ACE

Codes & Standards - 2019 Title 24, Part 6 Essentials

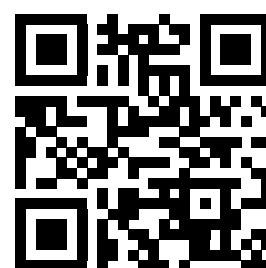
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Reserve your seat today and check out other classes at **seminars.sdge.com** or simply scan the QR code.

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plan and implement energy-saving indoor air quality improvements. To find your nearest Greenheck rep, visit <https://www.greenheck.com/find-my-rep>.

For more information about Greenheck school ventilation systems, visit <https://www.greenheck.com/resources/building-types/schools>.

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Yanmar America Signs Agreement to Buy Controlled Air

Adairsville, Va. – Yanmar America has signed a definitive agreement to acquire Controlled Air, a privately-owned HVAC solutions provider

in Connecticut and surrounding states in the northeastern US.

“Yanmar was drawn to Controlled Air for its engineering excellence and focus on delivering customer value,” said Jeff Albright, president of Yanmar America.

“With Controlled Air’s full-service capabilities and Yanmar’s advanced technology, we will transform our energy systems business to deliver exceptional service combined with HVAC and building management solutions to customers. Furthermore, this acquisition is a natural fit to Yanmar America’s growth strategy for North America.”

For over a century, YANMAR has grown to become a major supplier of YANMAR branded industrial and marine diesel engines, diesel generators, micro cogeneration and gas heat pump energy

system solutions, compact construction equipment and compact utility tractors, employing thousands of dedicated team members throughout the world.

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ASHRAE, IBPSA-USA Wrap Up Conference

Atlanta, Ga. – Building better buildings while pursuing low carbon strategies was the focus of the 2022 Building Performance Analysis Conference and SimBuild, co-organized by ASHRAE and IBPSA-USA.

The two-and-a-half-day conference, held from September 14-16 at the Palmer House Hilton in Chicago included keynotes, paper sessions, seminars, vendor demonstrations, panel discussions and debates from

more than 100 presenters. The conference drew 265 building industry professionals in addition to a strong virtual audience.

“The transition to low-carbon building solutions is presenting our industry with a significant opportunity to share practical outcomes of modeling and simulation strategies that come out of the Building Performance Analysis Conference on a wider scale,” said 2022-23 ASHRAE Treasurer Dennis Knight, P.E., Fellow ASHRAE. “We all benefited from the collective expertise of this year’s conference presenters and the focus on ‘better buildings, less carbon’ is at the core of how to proactively tackle the challenges of achieving sustainability and establish climate-friendly, integrated building systems to serve all people.”

Keynote sessions featured presentation from Luke Leung, P.E. and Amber Mahone on whole life carbon and integrated energy systems.

Top In-Person Sessions

Seminar 2: Modeling Existing Buildings

Panel 2: Fishbowl Session

Paper Session 9: Lifecycle Carbon Assessment

Top Livestreamed Sessions

Seminar 16: Advances in Modeling Tools, Approaches and Workflows III

Seminar 10: Approaches to Modeling Future Weather, Climate and Extreme Events II

Paper Session 9: Lifecycle Carbon Assessment

For the first time, three interactive programs were offered to encourage attendee participation. Participants discussed modeling-related issues such as carbon, renewables, weather data and risk assessment/uncertainty.

In conjunction with the conference, the LowDown Showdown modeling team competition was held. The competition is designed to engage architects, engineers, designers and energy modelers by working on integrated teams in the creation of outstanding designs that solve real-world building efficiency challenges.

This year’s competition asked teams to design a K-5 school in Albuquerque, NM to serve 450 students in an educational setting that provides appropriate spaces for elementary education as well as community uses – and can be adapted to future challenges and changes.

First place was awarded to team “Zero Heroes.” See the team’s complete project overview on the 2022 ASHRAE LowDown Showdown Modeling Challenge webpage.

All sessions will be recorded and posted for on-demand viewing within 72 hours of the originally scheduled session. Presentations will remain available online for approximately 12 months after the conference has taken place.

ASHRAE remained committed to the health and safety of conference attendees. In addition to strongly recommending mask wearing while indoors, ASHRAE provided complimentary COVID-19 testing to international travelers requiring a negative test to return to their countries of origin.

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2022 California Legislative Review: CSLB-Sponsored Bills to Impact Industry

By Ted Rieger
Northern Calif. Correspondent

September 30 was the last day for Governor Gavin Newsom to sign or veto bills passed by the California Legislature during the regular legislative session in 2022. Indoor Comfort News presents the following annual review of new laws impacting HVAC contractors and business operations, and the outcome of other industry-related legislation followed this year.

The Contractors State License Board (CSLB) sponsored and monitored several bills related to contractors and CSLB operations. Two CSLB-sponsored bills signed into law potentially impact C-20 HVAC contractors – one requires workers' compensation insurance for all licensed C-20 contractors effective July 1, 2023; and another increases the maximum fine for failure to obtain required building permits from \$5,000 to \$30,000 for all contractors.

Mandatory Workers' Compensation Insurance

SB 216 Dodd (D-Napa) – Worker's Compensation Insurance, Mandatory Coverage. This new law precludes the CSLB from accepting certificates of exemption from workers' compensation (WC) insurance from active license classifications C-20 HVAC, C-8 Concrete, D-49 Tree Service and C-22 Asbestos Abatement beginning July 1, 2023, and from all licensed contractor classifications beginning January 1, 2026. Thus, all contractors (including licensees without employees) will be required to have WC coverage and a certificate of WC insurance on file with the CSLB by January 1, 2026. Joint venture licensees are exempt from the WC requirement when one or more of the licensees forming the joint venture have a WC policy. This legislation was supported by contractor and labor organizations including the American Subcontractors Association, Cal-SMACNA, and the Plumbing-Heating-Cooling Contractors of California.

According to the CSLB, despite years of enforcement efforts, the number of WC exemptions on file with CSLB, and the number of contractors in violation of WC laws remains a significant problem. CSLB confirms that many of the 50 to 60 percent of licensed contractors who currently claim a WC exemption (stating that they have no employees) do in fact have employees.

Building Permit Violation Fine Increase

AB 1747 Quirk (D-Hayward) – Contractor Disciplinary Action and Fines. This new law adds the violation of willful or deliberate disregard of any state or local law relating to the issuance of building permits to the list of violations for which the CSLB is authorized to assess a civil penalty up to \$30,000. This CSLB sponsored bill arose out of consultation with the California Energy Commission (CEC) on ways to increase compliance with Title 24 energy and quality installation standards for HVAC equipment. Construction projects not installed to code place owners at risk, and in the case of HVAC systems, prevent consumers from achieving energy savings and compromise California's building decarbonization efforts. The CSLB already has authority to discipline contractors for failure to comply with permit requirements. To clarify and address the seriousness of this issue, this law creates a generalized subdivision for permit violations, along with other serious health and safety violations, that increases fines for such violations from a maximum of \$5,000 to \$30,000. This legislation was supported by the California Building Officials (CALBO), the American Subcontractors Association of California, the Western Electrical Contractors, and sheet metal workers associations and local unions.

Other New Laws: CSLB Operations, Appliance Standards, Bulk HFCs, School HVAC Systems

AB 2105 Smith (R-Apple Valley) – Contractors, Initial License Fee Reduction for Veterans. This new law authorizes the CSLB to grant a 50 percent license fee reduction for applicants who are veterans of the U.S. Armed Forces, including the National Guard and Reserves, if they were not dishonorably discharged.

AB 2916 McCarty (D-Sacramento) – Contractors, Disclosure of Letters of Admonishment. This new law provides the CSLB discretion to publicly disclose a Letter of Admonishment on a contractor's license for either one year, or for two years, depending on the severity of the alleged violation.

SB 1063 Skinner (D-Berkeley) – Appliance Standards. This new law authorizes the CEC, when



TWO CSLB-SPONSORED BILLS SIGNED INTO LAW POTENTIALLY IMPACT C-20 HVAC CONTRACTORS – ONE REQUIRES WORKERS' COMPENSATION INSURANCE FOR ALL LICENSED C-20 CONTRACTORS EFFECTIVE JULY 1, 2023; AND ANOTHER INCREASES THE MAXIMUM FINE FOR FAILURE TO OBTAIN REQUIRED BUILDING PERMITS FROM \$5,000 TO \$30,000 FOR ALL CONTRACTORS.

adopting new appliance efficiency standards or revisions, to make the standards effective sooner than the currently required one year after their date of adoption or revision. An earlier effective date must be based upon making a finding of good cause after considering specified factors including the availability of such products on the market and impacts on manufacturers. This legislation was sponsored and supported by the CEC. It was opposed by the Association of Home Appliance Manufacturers (AHAM).

SB 1206 Skinner (D-Berkeley) – Bulk HFCs, Sale and Distribution. Prohibits the sale, distribution, or entering into state commerce of bulk hydrofluorocarbons (HFCs) or bulk blends containing HFCs that exceed global warming potential (GWP) of 2,200 after January 1, 2025, GWP of 1,500 after January 1, 2030, and GWP of 750 after January 1, 2033. The goal of this legislation is to lower emissions from short-lived climate pollutants, specifically bulk HFCs that are commonly used to replenish existing refrigeration and HVAC systems as they leak, by establishing a phase-out schedule and encouraging the use of refrigerants with lower GWP levels that are currently available. This does not restrict the California Air Resources Board from establishing by regulation GWP limits for HFCs that are below the maximums set in this legislation.

AB 2232 McCarty (D-Sacra-

mento) – School Facilities, HVAC Systems. This law requires California schools, colleges and universities to ensure that facilities have HVAC systems that meet specified minimum ventilation rate requirements and to install filtration that achieves minimum efficiency reporting value (MERV) levels. Also requires for the next triennial update of the California Building Standards Code that the appropriate state agencies research, develop and propose for adoption mandatory standards for carbon dioxide (CO2) monitors in classrooms.

Bills of Interest That Did Not Pass

SB 1164 Stern (D-Los Angeles) – Building Energy Efficiency, HVAC Equipment Sales Registry, Compliance Tracking System, Document and Data Registry. This bill would have required the CEC, by January 1, 2026, to adopt rules to develop and implement an electronic statewide HVAC equipment sales registry and compliance tracking system designed to identify HVAC equipment that is installed without permits and without completion of required documentation. The bill would have also required the CEC by January 1, 2025 to adopt rules to develop and implement an electronic statewide compliance document and data registry to register and store compliance, installation and acceptance test documentation required by regulations under the Title 24 California Energy Code.

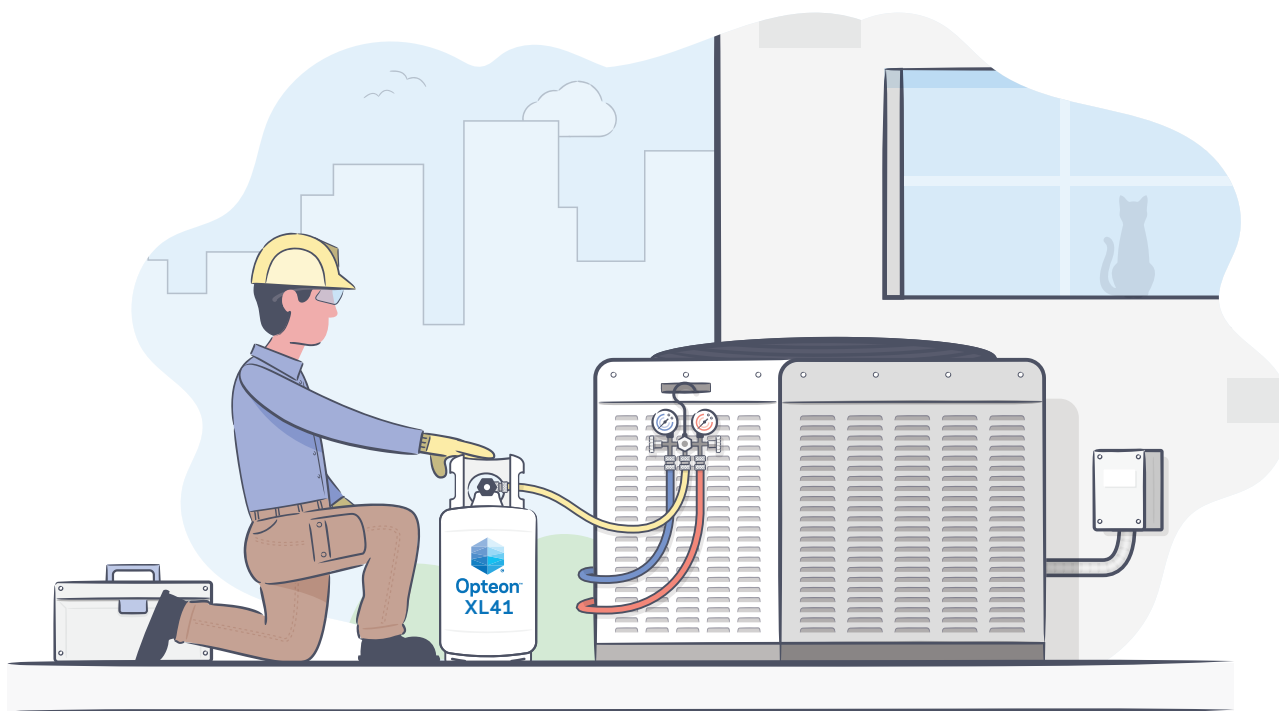
Under the proposal, stores and dealers that sell HVAC equipment would have to register the sale of HVAC equipment, the contractor license number of the purchaser and other information including equipment serial numbers. Data from the sales registry and tracking system would be made available to local building departments and the CSLB for enforcement of permit and compliance violations. This bill was held in committee in August 2022.

AB 2894 Cooper (D-Elk Grove) – Workers Compensation Insurance, Reporting of Classification Codes. This would have required licensed contractors who have WC insurance to inform the CSLB of their WC classification code (WCC) as developed by the Workers' Compensation Insurance Rating Bureau or approved by the Insurance Commissioner. Rates for WC insurance are based on the four-digit WCC code used. Some contractors could intentionally misclassify employees to receive lower rates. The intent was to protect workers by requiring contractors to provide information to the CSLB to ensure employees are properly insured and prevent unscrupulous contractors from purchasing less expensive coverage. This bill was held in committee in August 2022.

The full text of all bills can be found at <http://leginfo.legislature.ca.gov>.

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Michigan Village Housing Annual Energy Costs Cut 32% Thanks to METUS Equipment

Project Highlights:

- All-electric, cold-climate heat pumps helped the Ontonagon Village housing commission (Ontonagon, Michigan) save 32% (\$30,000) on its annual energy costs.
- The commission's annual energy savings averaged out to \$500 for each of the 60 units.
- Heat pumps allow the housing commission to keep the property all-electric (instead of bringing in a \$750K gas pipeline).
- New Deluxe Wall-mounted System with H2i plus® technology from Mitsubishi Electric was installed in Phase III of the project providing 100% heating down to -5° F.

Nestled in a remote part of Michigan, Ontonagon is a village sitting on the edge of Lake Superior. With a population of about 1,500, Ontonagon residents are used to beautiful but humid summers on the lake and bitter cold winters. After years of enduring expensive and uncomfortable electric-resistance heat, Ontonagon Village Housing, a subsidized housing facility, decided to consider alternative HVAC options.

"The electric bills kept getting higher, and we decided to price out bringing in natural gas lines," explained Karen Jackson, executive director, Ontonagon Village Housing. With a projected cost of nearly a million dollars, local utility provider Upper Peninsula Power Company (UPPCO) swiftly proposed a solution.

"I looked at them and said, 'Why would you want to introduce that infrastructure? That cost?'" said Andrew McNeally,



SELECT HOMES IN THE ONTONAGON VILLAGE HOUSING SUCCESS STORY INCLUDE THE MITSUBISHI ELECTRIC DELUXE WALL-MOUNTED INDOOR UNIT (MSZ-FS). THIS UNIT PROVIDES 100% HEATING TO -5° F.

energy-efficiency program administrator, UPPCO. "My experience being from New England says cold-climate heat pumps will take care of your problem without negatively impacting your tenants." UPPCO's heating and cooling selection for Ontonagon Village Housing: M-Series mini-split heat pumps from Mitsubishi Electric.

A MODERN-DAY ALTERNATIVE TO BASEBOARD HEAT

UPPCO has been working on energy-efficiency programs since 2009, when Michigan law went into effect, incentivizing utilities to help customers move beyond fossil fuels. A 60-unit, all-electric, 15-building property, Ontonagon

Village Housing had always used electric resistance for heating. Unfortunately, the electric-resistance systems struggled to keep up with the freezing temperatures. "Electric resistance can be quite expensive, especially now, and heat pumps do a phenomenal job," noted Mike Duquaine, warehouse manager, Stop's Heating and Cooling. Additionally, heat pumps solve comfort challenges year-round. With no central air conditioning in the summers, Ontonagon residents depended on box fans and inefficient window AC units. Heat pumps provide gas-free heating and energy-efficient air conditioning.

Working with Stop's, Mitsubishi Electric M-Series systems featuring hyper-heating capability were installed on the property in phases. "During these cold winter periods, these systems can be two to four

hundred percent more efficient during the course of the "heating season," noted Kevin DeMaster, senior manager, utilities and electrification. "Phase three of this project included our Deluxe Wall-mounted Indoor Unit. This new unit provides 100% heating to -5° F.

Each residence was outfitted with one compact, wall-mounted indoor unit and one outdoor unit. Installation was efficient with Stop's completing each phase in four days total. Being a Mitsubishi Electric Elite Diamond Contractor®, Stop's technicians have completed comprehensive manufacturer-led training to ensure the heat pumps are installed and sized correctly for each project. "We pride ourselves in knowing our product and providing the best experience possible for our customers," said Duquaine. "When it comes to ductless mini-splits, Mitsubishi Electric is the only brand we trust to install."

EXCEPTIONAL AIR QUALITY + COMFORT

Since receiving their new heating and cooling systems, residents have been vocal about their positive experiences. "Residents say the air seems to be cleaner. With our baseboard heat, it was just radiant heat — you didn't get any circulation or filtration," said Jackson.

From a maintenance standpoint, Ontonagon Village Housing also avoided worry about the pilot lights and carbon monoxide associated with natural gas. "Think of the air



THE MUZ-FS H2i PLUS® HEAT PUMP KEEPS ONTONAGON VILLAGE HOUSING HOMES WARM AND COZY IN THE WINTER AND COOL IN THE SUMMER.

quality benefits of not having to combust natural gas or any other deliverable fuel. They don't have that here," said McNeally. The Deluxe Wall-mounted Indoor Units also feature Dual Barrier Coating to enhance indoor air quality. Applied to the internal parts of the indoor unit, the coating prevents dust, particles and grease build-up on the system, enhancing overall performance.

Beyond the filtration benefits, the residents were delighted when the systems stood up to Michigan's harsh winter season. "In spring of 2021, there was a polar vortex that made national news because power plants in Texas were freezing," explained McNeally. "The units here at Ontonagon Village experienced 25° F below zero temperatures and not a single tenant had any issue or even needed to turn on their electric resistance as backup."

"We've had below zero weather up here — it handles it," said Carlene, a resident at Ontonagon Village Housing. "I've lived so much better since we've had this new unit."

THE COST BENEFITS OF DECARBONIZATION

Ontonagon Village Housing also reaped the benefits of a more efficient heating and cooling system. "Dollar-value-wise, the total energy costs have gone from \$95,000 a year to \$65,000 for the whole facility," explained McNeally. The Housing Commission can also rest assured knowing residents have an effective heating and cooling solution for all seasons. Also, the town no longer has to worry about the addition of a pipeline.

"One of the benefits of this

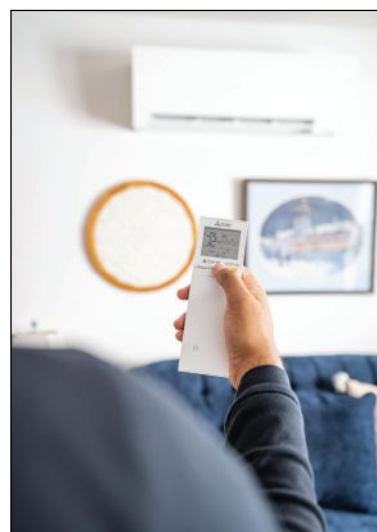
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Continued on Page 46



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Booth(s) 803

Style Crest, Inc.
2450 Enterprise Street
Fremont, OH 43420
419-333-5794
Booth(s) 203

SUPCO
(Sealed Unit Parts Co., Inc.)
2230 Landmark Place
Allenwood, NJ 08720
800-333-9125
Booth(s) 112

-T-

TECH Clean California
449 15th St. #400
Oakland, CA 94612
510-482-4420
Booth(s) 319, 321, 323, 325,
327, 329, 418, 420,
422, 424, 426

Teslong
17795 Sky Park Circle Suite G
Irvine, CA 92614
949-877-7666
Booth(s) 220

The New Flat Rate Company
404 McGhee Dr
Dalton, GA 30721
706-259-8892
Booth(s) 211

Thermaflex
381 Carwellyn Rd.
Abbeville, SC 29620
864-366-3073
Booth(s) 608

TrickleStar, Inc.
4859 Kendrick St SE
Grand Rapids, MI 49612
616-554-3576
Booth(s) 207

Trinity Warranty Solutions
1919 S. Highland Ave, Suite
D250
Lombard, IL 60148
224-775-1020
Booth(s) 519

TruTech Tools
3425 Gilchrist Rd. Suite B
Mogadore, OH 44260
888-224-3437
Booth(s) 406

-U/V-

UEI College
339 N Azusa Ave
West Covina, CA 91791
310-988-0607
Booth(s) 210

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

**US Air Conditioning
Distributors**
16900 Chestnut St.
City of Industry, CA 91748
626-854-4500
Booth(s) 401

Visual Service by IHACI (VS)
454 W. Broadway
Glendale, CA 91204
818-551-1555
Booth(s) 621

-W/Z-

**Walter's Mercedes-Benz
Sprinter of Riverside**
7979 Auto Drive
Riverside, CA 92504
951-441-6281
Booth(s) 129

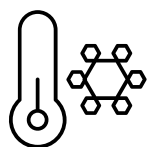
**Wells Plumbing and Heating
Supplies**
1711 S California Ave
Monrovia, CA 91016
626-775-4440
Booth(s) 109

Wright Sales Company
112 Harvard Ave. #281
Claremont, CA 91711
760-634-7601
Booth(s) 602, 603, 604, 605,
606, 607, 610, 611

ZoneFirst
6 Aspen Drive
Randolph, NJ 07869
201-794-8004
Booth(s) 609

Introducing the New intelli-HEAT™ Product Line

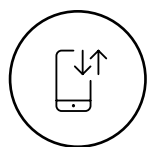
Mitsubishi Electric has launched a new product series - intelli-HEAT™. The intelli-HEAT Dual Fuel System provides cost-effective, efficient, and environmentally friendly cooling and heating all year round. intelli-HEAT mounts in-line with an existing thermostatically controlled furnace* and ductwork. During periods of extreme cold, intelli-HEAT switches to the current gas furnace based on capacity and economic balance points, creating a true dual fuel system.



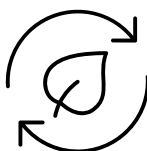
Cold Climate heat pump with furnace integration



Superior efficiency AC replacement solution



Intelligent comfort control manages operation between heat pump and furnace



Reduces fossil fuel consumption and emissions to align with greenhouse gas reduction goals



Compatible with single or multi-zone systems which provides a true zoning solution



Blending of technologies for comfort, cost effectiveness and environmental benefit

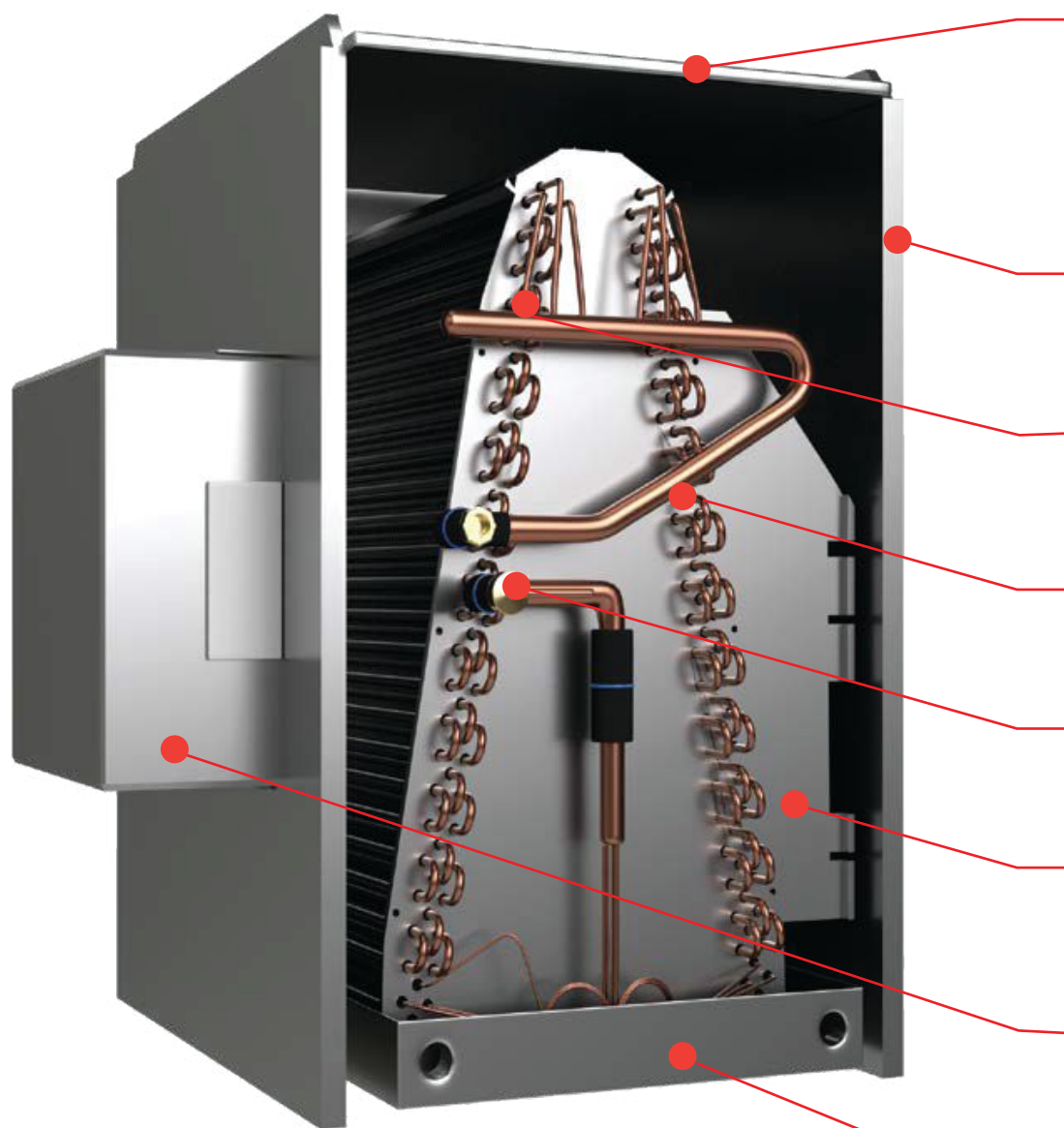


Compatible with thermostatically controlled furnaces*

*Mitsubishi Electric air conditioner and heat pump systems should only be connected with ANSI-Z21.47/CSA2.3 certified furnaces

intelli-HEAT

Key Benefits and Features



Available in multiple sizes and capacities:

- 18, 24, 30 kBtu/h | 14.5", 17.5" wide | 26.4" height
- 36, 42 kBtu/h | 17.5", 21" wide | 31" height

Single-zone: PUY, PUZ, and PUZ H2i

Multi-zone: MXZ, MXZ H2i, MXZ-SM, and MXZ-SM H2i

Flexible Installation:

- Vertical, downflow and horizontal left/right
- Control box can be mounted anywhere

Oxygen-free copper coils provide up to six times the longevity of standard copper coils

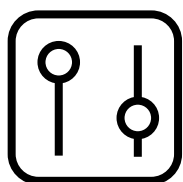
Smaller tube diameters with grooved design technology provide a higher heat transfer efficiency

Flare piping connections for quick, clean, and simple installations with no need for brazing

Best in industry condensation management

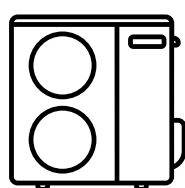
Intelligent comfort control system automatically switches between heat pump and furnace operation to ensure comfort and maintain efficiency

High quality drain pan material with low moisture absorption and high heat capability



Optimum Switchover Control

Economic and capacity balance points ensure homeowner comfort by automatically switching between heat pump and furnace operations as needed.



Single and Multi-Zone Options

New and unique whole-home solution when combined with single or multi-zone heat pumps.



Hyper-Heating Options

intelli-HEAT™ is the only dual fuel system available capable of maintaining 100% of heat pump heating capacity down to 5°F with hyper-heating heat pumps.

2022 EXHIBITOR DIRECTORY

3M

Booth(s) 510

Extreme weather. Stricter code requirements. Difficult deadlines. It's clear your job is more challenging than ever – but problem-solving is 3M's business. We make smart solutions by applying the best of materials science to your toughest HVAC and refrigeration challenges.

AC Pro

Booth(s) 617

AC Pro is a family-owned wholesale distributor that has been delivering outstanding customer service while supplying HVAC equipment, parts, and supplies to Southern California, Nevada, Arizona, and Utah for over 30 years. Our unwavering commitment to add value drives us to launch products, services, and locations to help your business grow. We provide the latest technologically advanced equipment and products, easy returns, instant warranty credits, extended hours at no charge, custom sheet metal, and free trash drop off. At AC Pro, we are committed to integrity, quality craftsmanship, and long-term relationships with our customers. Visit acpro.com for more details!

Air Conditioning Trade Association (ACTA)

Booth(s) 308

Air Conditioning Trade Association (ACTA) is a non-profit, contractor member association. We specialize in training in the HVAC industry through our state and federally approved Sheet

Metal Apprenticeship Programs, Service Technician Training, and other industry related training... for both contractor employees and individuals.

Action Duct Cleaning

Booth(s) 404

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 is a former NADCA board member and has served as Chairman of the Ethics Committee. Contact us: 800-371-2284 or actionduct.com.

A-Gas

Booth(s) 304

A-Gas excels at providing complete lifecycle management for your refrigerants including on-site recovery, reclamation, recertification, and destruction on a full range of refrigerants to build a more sustainable future.

Airex Manufacturing

Booth(s) 417, 419, 518

Airex Manufacturing designs unique aesthetic component products for the outdoor HVAC equipment piping area, designed, and engineered to support sustainable energy efficient system performance. We provide and educate the building industry on implementing our optimum solution products that improve the indoor environment, reduce energy consumption, and reduce carbon footprint.



Airzone

Booth(s) 303

Meet Wayne Schoeneberg, Regional Sales Manager for Airzone North America – West Region, to get to know the most sustainable Inverter/VRF control & zoning solutions in the West Coast today. Exclusive Airzone partnership and rep opportunities will be disclosed during IHACI trade show. Schedule your meeting with Wayne today:

<https://www.linkedin.com/in/wayne-schoeneberg-6b069818/>
www.airzonecontrol.com
 Contact: azna-staff@airzonecontrol.com

Alliance Environmental

Booth(s) 403

For over 25 years, Alliance Environmental has been a leader and trusted partner for environmental remediation and indoor air quality services. Our highly trained and certified technicians are committed to providing exceptional customer service while delivering quality workmanship. Now with locations in California, Arizona, Nevada, Oregon, and Washington.

ApooDr Inc

Booth(s) 413

ApooDr Inc. is a manufacturer and wholesaler of air conditioners in California, specializing in the production and sales of mini split air conditioners, packaged terminal air conditioner and new-style central air conditioners in the United States. ApooDr has ENERGY STAR® products and is an advocate of high efficiency and energy conservation.

Website: www.apoodr.com Sales Email: sunny@apoodr.com

Appion

Booth(s) 408

Appion leads the industry with quality recovery and evacuation machines and service tools. Starting with the creation of the

industry-favorite G5Twin Recovery Machine, Appion has continuously engineered an expansive line of machines and AC service tools with the needs of an HVAC/R technician at the forefront of their inspiration.

AQC Industries

Booth(s) 305

AQC Industries has revolutionized underground air-duct systems for use in residential, commercial & industrial applications. The Blue Duct® pre-insulated & complete Duct Systems offer faster/easier installation, energy & labor savings, corrosion avoidance, and leak-testability prior to backfill. AQC consistently provides high-quality products, CAD & quotation services, and direct contractor sales/training/webinars.

Benoist Co.

Booth(s) 106, 108, 110

- Mason Industries Inc., for over 60 years has created "The Standard" in vibration control products for the HVAC industry. See our live demonstration on how Mason products can quiet down disturbing vibration problems. Also see our other products such as rubber flexible connectors, braided stainless steel hoses and seismic restraints.

- ATCO Rubber Products Inc. is the world's largest manufacturer of flexible air ducts used for heating, ventilating, and air conditioning systems for residential systems and commercial applications.

- Sterling HVAC Equipment- A division of Mestek, has been a leading producer of quality engineered and manufactured HVAC equipment for over 40 years.

- Reflectix is the Industry Leader we manufacture the highest quality, most extensively tested, readily available, reflective-based insulations and radiant barriers in the world! R4.2, 6 and 8 available.
- McDaniel Metals manufac-

tures Filter Housings, Economizers, Power Exhaust, Roof Curbs, Curb Adapters, Plenums, Transitions and Drain Pans and various other products.

Brownson Technical School

Booth(s) 410

Brownson Technical School has offered hands-on HVACR training for 38 years. HVAC/R training is 1040 hours and one of only four HVAC Excellence schools in California and one of two schools offering training and testing for Mechanical Acceptance Test Technicians which became mandatory in 2021. (800) 799-9891 or visit: www.brownson.edu.

CalCERTS

Booth(s) 102

Visit CalCERTS Booth #102 to learn about CalCERTS HERS Rater Training for Title 24 compliance including EPA, HERSH20 and BPI programs. CalCERTS' Training is based on HVAC best practices and CalCERTS provides the largest, most comprehensive data registry for HVAC contractors to easily complete compliance forms. For more information: www.calcerts.com.

California Energy Commission (CEC)

Booth(s) 202

The California Energy Commission updates the Energy Code (Title 24, Part 6) every three years. The 2022 Energy Code encourages efficient electric heat pumps, strengthens ventilation standards, increases equipment efficiencies, adds requirements for electric-ready, DOAS, fans, indoor horticulture, and more. The 2022 Energy Code takes effect on January 1, 2023.

Capital One

Booth(s) 709

Capital One Business credit card gives 2% unlimited cash



2022 EXHIBITOR DIRECTORY

back.

Cash never expires, redeem whenever

\$1,200 cash spend bonus

\$200 annual bonus if you spend \$200K annually

No preset spending limit card, the more you use, the more you can spend

JR Cortez; 310-365-8894; jr.cortez@capitalone.com

CARR

Booth(s) 718

Employees working out of their pick-ups and vans have the highest rate of injuries compared to other drivers. CARR engineers our van & truck accessories to provide the highest level of ergonomics, safety, reliability, and productivity. CARR vehicle accessories help you protect your bottom line and your greatest asset, your team.

CHEERS

Booth(s) 411

CHEERS is the online registry where HVAC contractors register Title 24 alteration & new construction jobs. Contractors register their ALT-02 for FREE. Trades always use CHEERS at no cost. See why more projects are registered with CHEERS!

CI Web Group:

Booth(s) 208

A digital marketing agency with 20 years of experience, CI Web Group specializes in getting businesses found on Google! When a business's website isn't on page 1, they're not an option for prospects. However, through our

12-Step Roadmap, we provide a results-driven plan of action to increase leads and profitability.

CLEAResult Consulting, Inc.

Booth(s) 119

Comfortably CA is a statewide program offering incentives to distributors and contractors for selling and installing high efficiency residential and commercial HVAC equipment.

Golden State Rebates is a statewide program offering instant rebates on high-efficiency smart thermostats, heat pump water heaters, gas water heaters and room air conditioners to residential customers.

Climatech International

Booth(s) 619

Climatech (Clim) has been the largest European manufacturer of accessories and rooftop support systems for the HVAC and Insulation industries since 1985. Our products follow SMACNA standards, with UL/NFPA 701 certification. Large stock in the USA available.

Our featured product at the IHACI show will be the battery-operated F-100 Cordless Portable Stud Welder machine, an AHR Expo 2022, Tool Category Innovation Awards finalist. Contact us at americas.sales@climatech.be or at (516) 250-4100.

Commercial Van Interiors

Booth(s) 713

Commercial Van Interiors is widely recognized as the industry's leading upfitter of working vans



and trucks. As your partner, we work closely with you through the entire planning, design, and installation process to create the best organized and most accessible interior upfit configuration for the gear you carry in your van or truck.

You have a job to do, and a vehicle upfit by Commercial Van Interiors will help you do it more quickly, efficiently, and safely.

ComStar Refrigerants

Booth(s) 218

Learn about the lowest GWP refrigerants to replace R410a, R22, R404a, and R507 in EXISTING systems. ComStar's RS-53 (R470A) is the only drop-in replacement for existing R410a systems with a GWP of 909 or 56% lower than R410a. ComStar's RS-51 (R470B) has a GWP of 717 or 80% less than R404a, R507, and 1/2 of R448A and R449A. RS-44b (R453a) is the lowest GWP replacement for R22. See us at Booth 218!

CoolAutomation

Booth(s) 307

CoolAutomation is the industry leader of local & cloud-based control, monitoring, and analysis for VRF & mini-splits. We offer integration via BACnet, Modbus and natively into home automation platforms – including SnapOne, Lutron, Crestron, and others. Our best-in-class cloud-based professional & consumer software is the industry's sole solution for universal VRF diagnostics.

CY HVAC Supply

Booth(s) 204, 206

CY HVAC Supply is the first stop for all your HVAC needs. CY HVAC strives to provide the best HVAC equipment on the market. We carry various products such as Ductless Mini-Split, Central Air Conditioners, Linesets, Metal fittings, Condensate Pumps,

Thermostats, and the list goes on. Website: cyhvac.us; Email: cyhvac888@gmail.com; Phone: 626-905-0248.

Danko Mechanical Sales Company

Booth(s) 521, 523, 525, 527

• Booth 521: RenewAire

Indoor air quality has always been critical, as it impacts health, cognitive function and productivity. Amid the COVID-19 pandemic, increased ventilation has been paramount in creating a safe environment. Cognizant authorities recommend increased ventilation as a mitigation strategy. Energy recovery ventilation can provide increased ventilation without increasing ventilation energy costs.

• Booth 523: RGF

RGF® was incorporated in 1985 for the purpose of designing, engineering & manufacturing total turnkey environmental systems to provide the world with the safest air, water and food without the use of chemicals. We at RGF® strive to make the world a safer, cleaner and better place to live for us, our children and the next generation.

• Booth 525: Cool Air Products, LLC

Cool Air Products is a producer of chemical solutions AC and refrigeration. Our unique products solve problems common in the field, and serve a specific purpose, with unique features and benefits. We have stringent manufacturing standards that are backed by a technical staff and a R and D laboratory.

• Booth 527: The Delta Breez

The Delta Breez FRS200 is a new fresh air ventilation system featuring an HVI airflow rating of 30-200 CFM with an ENERGY STAR-qualified ECM motor that runs continuously. Using only 33W at 200 CFM, homeowners can reduce their energy costs and

carbon footprint.

Denco

Booth(s) 221, 222, 223, 224, 225, 226, 227

Denco Manufacturing Representatives is Proud to Represent:

• Samsung HVAC – Superior Quality Mini Splits including Residential, Light Commercial & VRF. Come check out our working trailer.

• 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. Live demonstrations showing off the newest in wireless technology.

• Blue Diamond – Condensate removal pumps and accessories for use in air conditioning and refrigeration. We pride ourselves in being one of the quietest in the market.

• Lucas Milhaupt – Innovative Metal Joining Solutions to connect the world around us. Come see live brazing demonstrations by Bob the Brazer

• Phenomenal Air - Plasma generators, cold plasma generator technology which kills viruses, bacteria, mold spores, fungus spores, eliminates allergens, odors and more.

• PDM – High Quality Polyethylene Preinsulated Linesets made in the USA.

• Eco2 – Heat Pump Water Heaters

DiversiTech

Booth(s) 405

DiversiTech is the leading supplier of parts and accessories to the HVAC industry. We support our distributors and contractors with complete training programs offered through DiversiTech University. We offer more than 100 training modules on the complete



Continued on Page 28

2022 EXHIBITOR DIRECTORY

Continued from Page 27

range of DiversiTech product categories including Equipment Mounting, Condensate Management, Electrical, Chemicals, Tools, Indoor Air Quality and more.

Divvy Booth(s) 310

The Divvy Visa® Business Card is the smarter, simpler way to manage business expenses. With Divvy's free, card-plus-software solution, small and medium-sized businesses save time and money by automating expense reports, setting budgets, and processing reimbursements — all in one place. Track company spend in real-time, and never have to save a receipt again.

EGIA - OPTIMUS and Contractor University Booth(s) 517

Contractor University Powered by EGIA is the leading provider of training – on-demand online systems plus in-person and virtual workshops & conferences – along with discounted products & services, giving home services contractors the knowledge they need to sustainably grow and build the businesses they've always dreamed of. Learn more at MyContractorUniversity.com.

OPTIMUS Financing is the home services industry's first consumer financing program that features every loan type for every job and every credit profile – prime and near-prime to subprime and lease – all in one simple platform. No more waterfalls: Know before you go. Learn more at OPTIMUSFinancing.com.

El Comino College Booth(s) 121

Accredited by the HVAC Excellence Accreditation Review Committee, El Camino's air conditioning and refrigeration programs get you ready for an in-demand career. Our accessible, affordable paths to the workforce also have options to upgrade your current skills for job advancement.

Emerson Booth(s) 205

Considering rising operational costs, it's more important than ever to find ways to reduce expenses. Emerson | White-Rodgers universal controls are designed to help you get more jobs done in one truck roll, increasing productivity and profitability. Trust Emerson's comprehensive line of White-Rodgers universal electronic controls, gas valves, thermostats, and cooling controls to take any job from start to finish, in one call. Come by Booth 205 to how we can help you REPLACE MORE. CARRY LESS.

Energy Code Ace Booth(s) 402

EnergyCodeAce.com is a "one-stop shop" offering no-cost tools, training and resources to help decode the requirements of California's Title 24, Part 6 building energy code and Title 20 appliance standards. It's funded by utility customers under the auspices of the CPUC and implemented by PG&E, SDG&E and SCE.

Energy Masters Booth(s) 808

Energy Masters HERS Testing is focused primarily on help-



ing contractors receive accurate and passing testing and balancing results for commercial and residential HVAC systems. From same to next day testing available, competitive pricing, and trained technicians we will have the job done yesterday! Visit our IHACI booth or visit www.energymastersinc.com.

ESCO Institute/HVAC Excellence Booth(s) 807

New equipment utilizing slightly flammable and flammable refrigerants will be arriving soon. New protocols require a well-ventilated cage to store them, and they must be transported upright. To help you transition from legacy refrigerants, ESCO Institute has a Low GWP training program to help you. Learn more at esco-group.org.

EWC Controls Booth(s) 421

EWC is a forced air zoning manufacturer located in NJ. 3rd generation family-owned company proudly making products in the US since 1961. Our product line, since 1988, includes zone panels, supply dampers, and bypass dampers.

Zach Ponnequin, Regional Sales Manager CA & NV
(916)220-1878 cell, (800)446-3110 Factory
zponnequin@ewcccontrols.com

Ferguson HVAC® Booth(s) 201

Ferguson® has supported HVAC Contractors and Dealers with new HVAC technologies and innovations at the Annual IHACI Tradeshow for over 40 years. We are an industry leader and national distributor of residential and commercial heating and cooling equipment, systems, parts, and supplies. At Booth #201, we're showcasing

premier HVAC brands, launching the latest equipment and ductless systems, Connected SmartHome and IAQ products. Contractors can enter to win one of three promotional giveaways at 12pm, 2pm, 4pm. Easily scan our QR Codes to access trade resources, events, training calendars that will help you stay up to date with changing HVAC market conditions, M1, AQMD, Utility trends, and how we're growing. Contractors can get access now to premier residential and commercial equipment brands- Day & Night®, Trane®, RUUD®, Mitsubishi Electric Ductless®, VRF systems from local stocking branches in CA, AZ, NV. Start today: <https://www.hvacbusinessresourcecenter.com/>

Ferguson HVAC® Booth(s) 301

Ferguson® has supported HVAC Contractors and Dealers with new HVAC technologies and innovations at the Annual IHACI Tradeshow for over 40 years. We are an industry leader and national distributor of residential and commercial heating and cooling equipment, systems, parts, and supplies. At Booth #301, we're showcasing premier HVAC brands, launching the latest equipment and ductless systems, Connected SmartHome and IAQ products. Contractors can enter to win one of three promotional giveaways at 12pm, 2pm, 4pm. Easily scan our QR Codes to access trade resources, events, training calendars that will help you stay up to date with changing HVAC market conditions, M1, AQMD, Utility trends, and how we're growing. Contractors can get access now to premier residential and commercial equipment brands- Day & Night®, Trane®, RUUD®, Mitsubishi Electric Ductless®, VRF systems from local stocking branches in CA, AZ, NV. Start today:

<https://www.hvacbusinessresourcecenter.com/>

Fieldboss Booth(s) 209

Fieldboss is an end-to-end HVAC contractor management software built within Office 365, Dynamics 365 Sales, Service, Business Central, and Power BI. It's a job costed based service, maintenance, and project system that enables you to accommodate customers, better control your business, and deliver a familiar Microsoft experience to your staff.

Fieldpiece Instruments Booth(s) 317

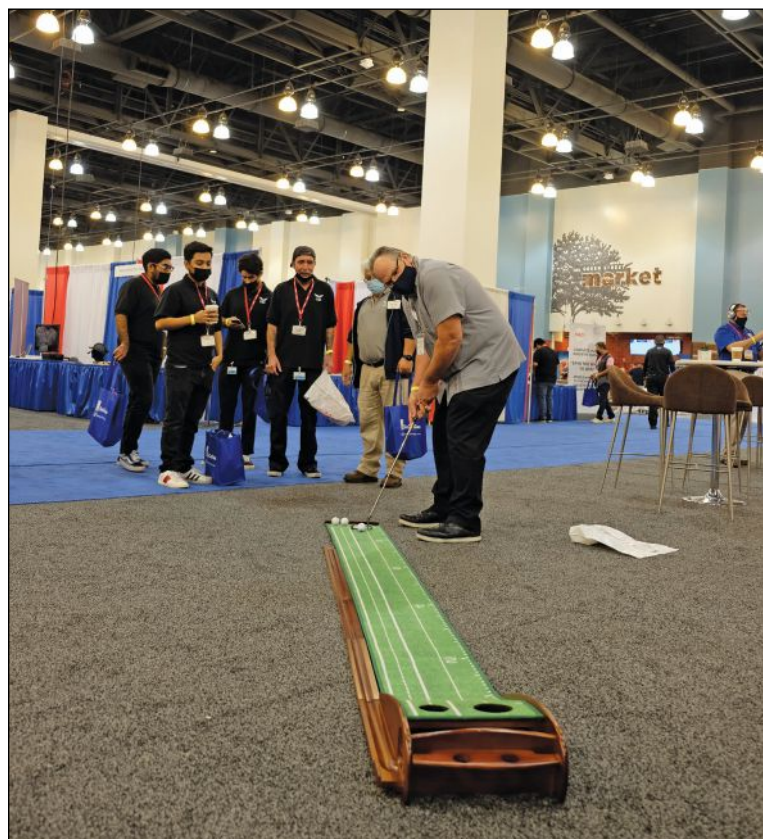
At Fieldpiece, we didn't start with the goal of leading an industry but with the idea that every HVACR professional in the field needs the best tools possible. It's a simple premise, and one that we've held tightly to as we've grown into a best-in-class innovator of industry-leading tools for HVACR pros. Our suite of products is designed, tested, and built for HVACR professionals. From digital manifolds to multimeters; vacuum pumps to recovery machines; pipe clamps to tool bags; and now combustion analysis, Fieldpiece has a full range of products to get the job done right easier, faster, and better.

Flaretite, Inc. Booth(s) 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.



2022 EXHIBITOR DIRECTORY

Gary Lorge State Farm Agency Booth(s) 111

The Gary Lorge State Farm Agency has been providing insurance expertise to contractors for many years. Our staff knows your business and what is required. Stop by our booth and take the “lower your premium” challenge for your commercial vehicles. You will be amazed by the savings. (714) 598-3060, gary@garylorge.com.

GE Appliances Air & Water Solutions Booth(s) 529

GE Appliances Air & Water Solutions is dedicated to serving the unique needs of IHACI members with unmatched service and support. Visit us at booth #329 to experience our pro-centric lineup of water heating, water filtration, and residential/light commercial HVAC solutions, including a new GE Unitary line.

Global The Source Booth(s) 302

Global is a leading master distributor of HVAC/R components to wholesalers throughout the U.S., offering superior products and outstanding service. Family-owned for 40 years. Our growing line of product offerings includes our exclusive line of USA-Made Capacitors and Turbo200 products, relays, transformers, contactors, disconnects, whips and more.

GoGreen Financing Booth(s) 708

Administered by the State of California with support from utilities, GoGreenFinancing.com is where California contractors go to find attractive financing options for their energy upgrade customers. GoGreen Home and GoGreen Business help contractors increase sales through quick approvals and flexible project scopes while customers enjoy exceptional rates and terms. Visit GoGreenFinancing.com for details.

Google Nest Pro Booth(s) 811

Join Google Nest Pro at booth 811 to explore our products and learn more about how you can grow your business by becoming a Nest Pro. Earn amazing rewards and get access to exclusive products, deals, and stay connected to your customers all year with HVAC monitoring. Sign up now at g.co/nestpro.

GREE ELECTRIC Booth(s) 503

GREE is:

- Is the number one brand of

air conditioners in the world in 2021

- 1 in 3 of all the world's air conditioners are made by Gree
- Efficiency leader in the ductless market, up to 38 SEER

GRG Dispenser Booth(s) 311

GRG Dispenser prioritizes your safety and convenience as a contractor. Our patented GRG Dispenser N30 and P23 models are the world's first dispensers that house sharp metal hanger straps used in HVAC and plumbing work for easy, safe dispensing. Both dispensers feature a handle and belt loop for easy transport. Website: www.GRGdispenser.com; Email: George@GRGdispenser.com.

Howard Industries Booth(s) 318, 320, 322, 324, 326

Howard Industries, founded in 1960, is a family owned and operated independent wholesale distributor of air conditioning, heating, and refrigeration equipment, parts, and supplies. Our goal is to provide our customers with the highest quality products, unrivaled support, and the most expansive inventory selection in Southern California.

The relationships we build with our customers of all sizes go beyond business partnerships. We consider our customers an extension of our family. We are committed to providing our customers the product information, technical support, program offerings, and sales training that will help our customers grow and develop their companies.

As your dedicated HVAC supplier, just remember that the cornerstone of our business model will always be commitment to our customers' success.

Hudson Technologies Booth(s) 103

Hudson Technologies will pay you for your recovered refrigerant. Through our simple, hassle-free reclaim program we can turn your used refrigerant into a resource and put money back into your pocket. Stop by our booth to learn more about our buyback process and begin reaping the financial rewards!

Inaba Denko America Booth(s) 513

Inaba Denko America supplies HVAC accessories engineered by Inaba Denko of Japan and provides support for distributors and contractors throughout North America. For over 40 years we've



been manufacturing and providing the best quality products worldwide. Our products consist of insulated linesets, commercial and residential lineset covers, drain hoses and more.

Slimduct SD Lineset Cover is the ideal solution conceal, protect, and beautify exposed linesets. Easy to install Slimduct SD is available in four colors and three sizes. Stop by booth #513 for a chance to win a Slimduct SD Black residential lineset cover kit!

Institute of Heating & Air Conditioning Industries, Inc. / Indoor Comfort News Booth(s) 625

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 42nd 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(s) 809

Interplay Learning is the world's leading, always-on immersive learning solution for HVAC pro-

fessionals and other skilled trades, delivering a growing catalog of courses and a comprehensive suite of measurement and engagement tools for businesses and educators. Interplay Learning makes training efficient and scalable while saving you time and effort.

iO HVAC Controls Booth(s) 309

iO HVAC Controls manufactures unique, state-of-the-art controls built with technicians in mind. They're established to serve wholesale distributors across the country. From the brand-new CO2 Temperature and Humidity Monitor to the trusted and award-winning Universal Smart Wire Module, iO carries the best product solutions for the job.

iPermit Booth(s) 704

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.B. Warranties Booth(s) 802

The Nation's leading provider of HVAC and Plumbing extended warranties, JB has a dedicated sales, support, and claims staff across the country. We thrive on supporting our dealers and look forward to helping them increase revenues, guarantee service calls, and ensure additional sales opportunities in the home for years to come.

JP Lamborn Booth(s) 505

JP Lamborn will be showcasing several products and innovative ways to reduce waste, cost, and improve acoustical performance in air distribution systems. Stop by Booth 505 to learn about JPL's, quality products, and creative ways to enrich your business. Don't forget to enter for a chance at winning a Raffle Prize!

Kwik Model 3D Booth(s) 104

Kwik Model with Energy Gauge Loads is an award-winning new 3D residential HVAC design software. It combines our innovative 3D user interface, Kwik Model, with Florida Solar Energy Center's (FSEC) ACCA approved EnergyGauge Loads. Fast, simple, and intuitive. Free training available. Visit Booth #104 for a live demo.

LG Electronics, USA Booth(s) 501

As a leading player in HVAC, LG offers a range of innovative products that deliver whole-home comfort, efficiency, and control. LG residential and light commercial HVAC products comprise of cutting-edge technologies contributing to their efficiency, quality, and performance. From the impressive Art Cool™ Series of duct-free products to the advanced heating capabilities of LGRED® Technology to the connectivity of LG ThinQ, LG offers numerous possibilities for comfort and design. And, with ducted and duct-free options available in single and multi-zone configurations, LG's HVAC works to customize and maintain a temperature that's most comfortable for the occupant, no matter the room.

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L.H. Dottie Company Booth(s) 710

Since 1965 L.H. Dottie's mission has been to exceed the expectations of our customers. Thus, year after year, that quest has led to new innovative products, packaging, merchandising, print media and a brand recognized across North America. Our product continues to be used on the largest construction projects in the country.

MarketAir, Inc. Booth(s) 229

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

ML Filters Booth(s) 105

You can count on M L Filters to manufacture and supply the highest quality air filtration products available for all your needs. We provide custom air filtration products with the latest in technology for Commercial, Industrial and Residential Heating, Ventilation and Air Conditioning (HVAC) applications. Corporate contact information: M L Filters 13891 Oaks Ave Chino, CA 91710 (909)627-3635 info@mlfilters.com.

Multipoint Development Booth(s) 707

We offer Title 24 Calculations, HERS Rating, Permit Expediting, Property Inspections, Energy Audits, Architectural, and Engineering. We strive to provide the best customer service and professionalism guaranteed. With our 35 years of combined experience, you won't regret choosing us. Looking forward to doing business with you!

National Comfort Institute, Inc. (NCI) Booth(s) 511

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 #511 to learn how to take advantage of this advanced training. 800-691-1690 / www.NationalComfortInstitute.com.

North American Technician Excellence (NATE)

Booth(s) 702

North American Technician Excellence (NATE) is the largest nonprofit certification organization for heating, cooling, ventilation, air-conditioning, and refrigeration (HVACR) technicians. NATE exams 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.

NEBB Booth(s) 520

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.

Pacific Systems Group Booth(s) 703, 705

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, Aldes, Beckett, HMAX and Hi-Velocity. Contact: www.psghvac.com; (888) 909-HVAC; info@psghvac.com.

PacWest Sales Booth(s) 217

Proudly serving and supporting manufacturing, distribution, and contractor partners in the Western United States since 2005. With an extreme focus on innovation, quality, energy efficiency, and installation/support costs, Pac West represents industry leading products in the Hydronics, HVAC/R, Fire Sprinkler, and Plumbing spaces. Supporting products for both residential and commercial applications.

Panasonic Life Solutions Booth(s) 113

Panasonic Life Solutions is committed to providing high quality ventilation products to meet constant changing codes. Performance driven ventilation is a key path to a better living envi-



ronment 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 Cadillac Booth(s) 717, 719, 721, 723, 725, 727, 729, 818, 820, 822, 824, 826

Paradise Chevrolet Cadillac located in Temecula, Ca received their 8th 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 United States.

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."

Particles Plus Booth(s) 813

Particles Plus offers a line of advanced-technology particle counters, air quality monitors, and sensors. As the most vertically integrated particle counter manufacturer and technology licensing company in the industry, Particles Plus engineers and manufactures its own sensor technology. We deliver products with superior

performance, extended features, accuracy, reliability, and value.

PHCC Booth(s) 507

Since 1968, the Plumbing Heating Cooling Contractors of the Greater Los Angeles Area has been providing skilled personnel for the PHC industry. Call today for hands-on training in Plumbing, HVAC, and Backflow. We offer several seminars throughout the year to meet the demands of today's job market. PHCC Los Angeles Training Program is a NCCER and DOL accredited program. www.phccglaa.org, 323-913-7335

QwikProducts® by Mainstream Engineering Booth(s) 801

QwikProducts® will be showcasing:

- QwikSwap® X1, X3 & V3 Universal ECM replacement boards
- QwikPad® for Generators and QwikPad® for Condensers
- 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 Section 608 Training/Certification
- QwikBright® Coil Cleaner and Protectant

Please stop by Booth #801 to see the QwikPads in person!

Rapid Duct Testing Booth(s) 509

Need HERS testing or Air Balancing at an affordable rate? Rapid Duct Testing opened its doors 16 years ago and has grown simply by putting the customer needs first. No job is too small or too big. Greet us at our booth or call 818-552-2050 to discuss our services.

R.E. Michel Company Booth(s) 601

The R.E. Michel Company was founded in Baltimore, Maryland in 1935. Over the past 87 years, we have grown to be one of the largest distributors of HVACR and propane equipment, parts, and supplies. With over 300 locations operating in 31 states, we are the largest privately held HVACR/Propane distributor in the nation. Our branches stretch from coast to coast and individually tailor their inventories for their local markets. Visit us today to experience our commitment to industry leading customer service, robust inventory, and cutting-edge technology!

Resideo/Honeywell Home Booth(s) 219

Resideo is a leading global manufacturer and distributor of technology-driven products and solutions that provide comfort, security, energy efficiency and control to customers worldwide. Our line-up includes, Smart thermostats, combustion, water, IAQ, and even security. Stop by and see our newest and most innovative product offerings for your Residential and Commercial comfort needs.

Robertshaw® Booth(s) 804

Robertshaw® offers the highest-quality residential and commercial HVACR controls through trusted brands including Robertshaw, Ranco®, Paragon®, Ranco® Rocket™, Robertshaw® IgnitorPro™ and partnership brands including Mersen, Skytech, Kidde, Tork, and Fenwal. Our portfolio includes new Pro-Series wall thermostats (industry-leading 6-year warranty) and Ranco Refrigeration System Solutions. Visit Robertshaw at booth #804.

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Rotobrush Booth(s) 100

Expand your opportunities with Air Duct Cleaning & Rotobrush. Stop by booth #100 to check out the new BrushBeast DR! The DR is the future of the air duct cleaning industry and features a direct drive system, more vacuum power, speed rotation settings, and more!

Rottiers Sales Associates Booth(s) 213

DuraVent is a California vent manufacturer. Engineered Excellence, consistently first to the market with new innovations in venting systems.

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 thermostat company designed for the professional trade. Color coded terminal blocks, large ease to read displays and a free private label color badge program.

UEI Test Instruments offers a complete line of test instruments. The new HUB series will eliminate gauges. Rethink Combustion – Flue Gas Analyzer with direct CO2 measurement.

Smartlock is a manufacturer of a cutting-edge metal to metal sealing technology. These fittings eliminate brazing and flaring without leaks and no special tools required.

Royal Service Supplies Booth(s) 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 our products, including variable air volume zone diffusers and packaged BACnet line of VAV controls operating on BACnet TCIP network systems. We stock VAVs with/without DDC controls. Our mechanical CAVC-controlled regulating volume dampers satisfy Title 24-Compliance. Our popular stainless steel 304 exterior ventilation caps are an excellent alternative for custom homes and multifamily complexes. They are easily installed for fresh-air, bathroom, kitchen, and dryer ventilation terminations. For more information about our products, please visit: royalservicesupplies.com.

RSES / CARSES Booth(s) 504

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.

Sealed Unit Parts Co. (SUPCO) Booth(s) 112

Technician Focused Always. Since day one it's been SUPCO's mission, and we are proud to showcase new products that continue to make technicians' jobs easier. Explore the Pipe Vise™ brand of premium pipe tools, Solderweld brazing and soldering products, and our exclusive

TradeFox product line that brings technicians' inventions to life.

Service Roundtable Booth(s) 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.

Sigler Wholesale Distributors Booth(s) 701

This year we celebrated the 120th 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

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THIS IS EFFICIENCY



Puro-green®
Extended Surface
Air Filters

Title 24, Part 6 compliant
MERV-13 rated
Standard 2" depth for easy installation

Save 10% on "Will Call" HVAC filter customer pick-up. Three easy steps!

- Send your order including logistics contact
- Parker will stage the order and call you for pick-up
- Load it and go!



Improving the quality of indoor air and outdoor air has never been more critical. Our durable, moisture-resistant, 100% synthetic media provides exceptionally high filtration efficiency with low-pressure drop. Visit parker.com/HVAC or call us to locate a Parker distributor near you.

Visit **Booth 603**, the 42nd IHACI Annual Trade Show at the Pasadena Convention Center.

866-247-4827
www.parker.com/HVAC

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ENGINEERING YOUR SUCCESS.

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and government guidelines evolve. At Sigler, we are proud to partner with the industry leader.

Sirris Abatement Booth(s) 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.

SoCal P.I.P.E. Trades HVAC/R Booth(s) 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 HVAC/R 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.

SoCal Sheet Metal Local 105 Booth(s) 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 West Booth(s) 101

Soleus Air "Saddle" air conditioner is one of the coolest solutions in this category due to its internal pump progressive cooling cycle. Ultra-quiet, safe and easy "over the sill" installation, still keeps the window fully operational with the outside view. Soleus Air new addition to the line is a powerful 10,000 BTU with heat pump suitable to work all year around.

Also available its Window kit accessory which enables the "Saddle" AC to be used with Horizontal Sash Windows, slides side-to-side, without limiting to Vertical Sliding Window. Visit us at Booth 101 at IHACI Show and www.soleusair-west.com.

Southern California Edison Booth(s) 407, 409

Southern California Edison's (SCE) Energy Education Centers (EEC) in Irwindale and Tulare offer a wide range of resources and courses to teach you how to make better energy decisions for your home or business. View our class calendar for a full list of online and in-person offerings at sce.com/classes.

Southern California Gas Company Booth(s) 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.

Style Crest Booth(s) 203

Manufactured housing HVAC is a distinct animal all its own and is once again a rapidly growing market which shouldn't be ignored by an HVAC contractor. Untap these market opportunities to grow your business with Revolv HVAC products, uniquely designed for manufactured housing and exclusively available from Style Crest.

TECH Clean California Booth(s) 319, 321, 323, 325, 327, 329, 418, 420, 422, 424, 426

TECH Clean California receives \$145 million to expand decarbonization efforts! Come visit the TECH Clean California aisle for a special "show within a show" focused on advancing Heat Pump technologies.

Check out the Heat Pump Water Heaters on display and chat with reps from ENERGY STAR, A.O Smith, Bradford White, ECO2 Systems, Nyle, and Rheem about expanding your HVAC Business.

We'll also be hosting Mini Master Sessions for Heat Pump



HVAC. Learn from Subject Matter Experts about Measured System Performance, Equipment Sizing, Demystifying Heat Pump Technologies & How to Sell Them, Electrical Panel Sizing, and More! COOL GIVEAWAYS ALERT!

Teslong Booth(s) 220

Teslong's mission is to solve problems fast and make your job easier! Inspection cameras from Teslong feature high resolution color screens, long lasting batteries, rugged housings, durable probes, and multiple lens options. Teslong inspection cameras are simple to operate and quickly pay for themselves. See the solution, with Teslong!

The New Flat Rate Booth(s) 211

Imagine making more money with happier customers. The New Flat Rate can do that for you! We offer done-for-you menu pricing and training for technicians and owners. Watch the power of the menu at work as your customers buy more from you than you could ever sell! Visit The New Flat Rate at Booth 211. www.thenewflatrate.com. 706-259-8892.

Thermaflex Booth(s) 608

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

TrickleStar Booth(s) 207

The TrickleStar Wi-Fi Smart

Thermostat and Electric Water Heater Controller provide demand response capability for two of the most energy-intensive applications in most households namely, HVAC and water heating. Both provide industries first with multiple features in design, functionality, remote and energy management. Raffle: Tricklestar Wifi Smart Thermostat & Tricklestar Water Heater Controller. Contact: Salem.hamidi@tricklestar.com.

Trinity Warranty Booth(s) 519

Trinity Warranty is a leader in Extended Warranty solutions for HVAC & Refrigeration industries, helping contractors protect their customers after the OEM warranty expires. We offer 1/2/3/5/10 year Parts/Labor options and cover all brands/sizes of residential & commercial equipment. We work with multiple insurance companies to better protect our customers.

TruTech Tools Booth(s) 406

TruTech Tools is your online source for HVAC Test and Measurement tools. We carry everything from Fieldpiece Vacuum Pumps and Digital Manifolds to NAVAC Cordless Flaring and Tube Expanding Tools and more.

Visit our booth at this year's Trade Show and enter our giveaway and get a special discount!

UEI College Booth(s) 210

Founded in 1982 as United Education Institute, UEI College is an employee-owned, accredited institution that provides students with post-secondary career education programs in high-demand fields such as healthcare, skilled

trades, and business. The hands-on training programs at UEI provide students with the skills they need to be successful in their futures.

Uniweld Products, Inc. Booth(s) 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 MaxEvac Evacuation Kit, Electric/Manual Ratchet + Clutch Flaring Tool and Take the EZ-Turn Challenge! Sign up for a free hat.

US Air Conditioning Distributors (USACD) Booth(s) 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 Eubank 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.

Visual Service by IHACI (VS) Booth(s) 621

Visual Service by IHACI (VS) is a contractor service platform that provides for live system documentation and live mentoring of entry level apprentices by senior technicians. VS guides techni-

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cians 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. Customer reporting provides a clear path to explaining and documenting the current status of an HVAC system. Come visit our booth to see the future of our industry!

Walter's Mercedes-Benz Sprinter of Riverside Booth(s) 129

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

Walter's Mercedes-Benz Sprinter of Riverside is an authorized dealer of Sprinter 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 Sales Manager, Isaid Barragan IBarragan@waltsmb.com. We are family-owned and operated, celebrating over 50 years of selling and servicing Mercedes-Benz vans. As a leading provider of the Sprinter brand, you can be sure to get the finest in customer service at Walter's Mercedes-Benz Sprinter of Riverside. www.WaltersMercedesBenzSprinter.com.

Wells Plumbing and Heating Supplies Booth(s) 109

Wells Plumbing and Heating Supplies, Inc., established in 2002, is a privately-owned factory-direct HVAC/R importer and distributor. WELLS MONROVIA by I-210 Myrtle serves the Western States, featuring GREE VRF (solar compatible), TOSOT Mini-Split and Multi-Zone, TOSOT Central, Oxbox, and Daikin. Please feel free to contact us at 626-775-4440 or wellshvac@wellsplumbing.com to inquire about our competitive pricing and incentive opportunities.

Wright Sales Company Booth(s) 602, 603, 604, 605, 606, 607, 610 & 611

Wright Sales Company is an industry leading manufacturer rep agency representing top manufacturers in the pacific western states of CA, AZ, NV, HI, NM & ELP. Stop by our isle 602-611 for giveaways,

raffles and demonstrations!

- 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. Put more money in your pocket with ProCat® Professional Loosefill Insulation System. It is designed for contractors for use in open attic and closed cavity applications – AOR or RNC.

- Navac is a manufacturer of HVAC/R tools committed to technical innovation and R&D to deliver solutions that have taken over HVAC/R social media platforms. So, swing by for hands-on tool demonstrations and training with NAVAC_TOOL_GUY (IG) to see why NAVAC dares to be different.

- Purolator is a premier source for HVAC air filtration for home,

commercial, industrial and institutional applications. With MERV ratings from MERV 4 to HEPA, the Purolator comprehensive line offers products in every category from disposable panel filters and pleated filters to high efficiency extended surface filters, including a wide variety of specialized applications.

- Dust Free® is a family owned and operated business headquartered in Royse City, TX, east of downtown Dallas. Dust Free® was established in July of 1982 as a manufacturing company specializing in air filtration equipment designed to benefit allergy patients who needed a clean indoor environment.

- RectorSeal is home to some of your favorite brands, Aspen Pumps, AC Leak Freeze, Slimduct, RSH Surge Protection, Safe-T-Switch, Novent Locking Caps, ProFit Quick

Connect and more. Stop by the booth to spin the sample wheel and win while learning more about how to stock your trucks to make money.

- TRUaire manufacturers the highest quality, most affordable residential and commercial grilles, registers and diffusers. Stop by our booth to see the difference that our 100% Powdercoat coverage, Smooth glide technology, Zinc-coated rivets, and no spotweld marks make on your next job.

- Gastite/Python is the leader in Corrugated Stainless-Steel Tubing (CSST) flexible gas pipe. Python is a new, innovative industry changing, flexible plastic line set (PERT). You want to be the first to check it out!

- Modine Coatings - there are

no more recognizable names in protective coatings than Electro-Fin® E-Coat and Insitu® Spray Applied Coating by Modine. These two names are synonymous with quality and service.

ZONEFIRST Zone Controls Booth(s) 609

ZONEFIRST's Award Winning Bliss Zoning System with the world's first combination Light Switch and Thermostat eliminating thermostats. Perfect for zoning both new and existing homes and getting a WiFi thermostat in any room with a light switch. Duct sensors control zone dampers and monitor duct temperature and pressure.

ALL-NEW DIRECT DRIVE MODEL HAS ARRIVED. SMARTER, BEASTIER, & MORE POWERFUL!

PATENT PENDING, DR SMART TECHNOLOGY

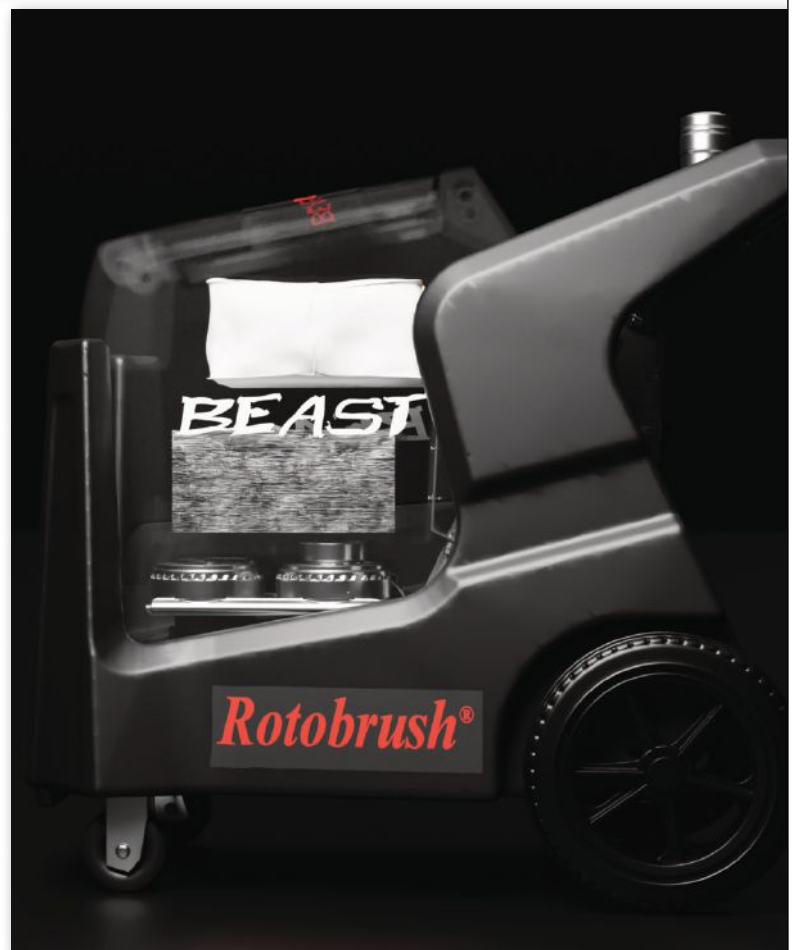
The BrushBeast DR features a newly designed direct drive system which has eliminated the need for pulleys and has an auto stop feature which helps reduce tension on drive cables. The DR is also equipped with speed rotation settings allowing for more control over the machine.

POWERFUL ENERGY SAVING VACUUM MOTORS

The unbelievable BrushBeast DR uses less energy but produces more power. When compared to the original BrushBeast, the DR produces 20% more vacuum power and uses 20% less energy.

REMOVABLE POD + SPEEDTRAY CARRIER

Rotobrush is the only duct cleaning equipment manufacturer that features a removable pod. The signature removable pod allows operation by a single technician. Paired with the SpeedTray Carrier, the portability and power of the BrushBeast DR is unmatched. Magnets on the front of the carrier allow you to easily attach your brushes while built-in holders house your vacuum accessories, drill, and fogger. Easily carry everything you need and access is within arm's reach.



1-800-535-3878 | sales@rotobrush.com | www.rotobrush.com

New Products

Nu-Calgon NuShield



Nu-Calgon has launched NuShield®, the company’s next generation of air ionization products. NuShield products are the most advanced air ionizers that utilize needlepoint bipolar ionization technology. The improved design of these air ionization systems includes features like daily self-cleaning, more robust construction and heavy-duty wiring (inside and out). All NuShield models are validated to meet UL 2998 zero ozone emissions certification and are CARB certified.

NuShield products work to treat the air in any residential or commercial space, providing improved indoor air quality. NuShield systems reduce certain bacteria and viruses, particles, smoke and odors in the air. They also reduce certain VOCs, pollutants and airborne gases. All models feature a patented self-cleaning design to ensure peak performance for the life of the system with no maintenance or replacement parts. All NuShield models also include patented multi-voltage input, allowing easy connecting from 24VAC up to 240VAC with no impact to ion output or performance.

This next generation of products includes the NuShield-R for residential systems up to 6 tons and the NuShield-CI and NuShield-CX for commercial systems up to 12 tons. The NuShield-CI is a slim compact design for easy internally mounted installations, while the NuShield-CX offers a solid robust build for installing externally.

More information: www.nucalgon.com.

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Powers PEX F1960

Powers has announced the addition of cold expansion fitting tailpiece connections (PEX F1960) for the LFLM495 and LFLM490 mixing valve series.

The addition of PEX F1960 union tailpieces allows Powers to continue to offer a wide range of tailpiece options for these point-of-use and point-of-source thermostatic mixing valves, which also include threaded, sweat, PEX, CPVC, Press, and Push-to-Connect options.

Connections are available in ½”

and ¾” sizes.
More information: www.Pow-ers.com.



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Hospeco Brands Group Shopserve

Take microfiber cleaning and detailing on the go with **Hospeco Brands Group’s Shopserve®** microfiber towels, now available in a convenient dispensing box. These thin but durable 12” x 12” towels are perfect for quickly removing dirt, dust, and bacteria from surfaces requiring little to no chemicals. And now, with the convenient dispensing box, microfiber cleaning towels can be kept in areas where cleaning up or wiping down surfaces is a more constant undertaking, assuring maximum efficiency and efficacy.

Shopserve® microfiber towels are economical enough to be use as a disposable towel or can be laundered for limited reuse.

Shopserve microfiber cloths are made of polyester and polyamide. The fibers are more than 100 times smaller than a human hair, creating a larger volume of fibers touching a surface compared to traditional cotton cloths. The increased surface area makes Shopserve microfiber significantly more absorbent, seemingly lifting and trapping dust and dirt into their fiber web. Further, they are non-linting, making them ideal for cleaning and polishing applications. They also excel at absorbing grease and oil.

These general-purpose cleaning and detailing towels are suitable for applications as diverse as building services and maintenance, industrial, manufacturing, automotive, healthcare, agriculture, and more.

Shopserve is offered in a variety of colors including red, yellow, green, and blue to help prevent cross contamination and to indicate different chemical use. These machine washable, colorfast, edge-



less towels are non-abrasive and won’t scratch surfaces.
More information: <https://hospeco.com/product/8410>.

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Watts Water Quality Monitors

Watts has released new monitors designed to ensure optimal performance of key water quality systems.

These new monitors will now come standard on the Big Bubba® BB-S101 whole home filtration system and the OneFlow® OFRES-K & OFCOM-EK Series anti-scale systems. The performance monitors send notifications when routine maintenance is needed such as media or filter changes.

The BB-S101 point-of-entry system gives plumbing contractors a solution for homeowners concerned about Lead, PFAS, Cysts, and Chlorine Taste and Odor in their drinking water. The BB-M101 Smart Volumetric Flow Monitor displays % Filter Life Consumed, % Filter Life Remaining, and Volume of Water Remaining until filter replacement is due.

OneFlow® is a salt-free, chemical-free anti-scale technology that is an economical and environmentally-friendly alternative to water softening or scale sequestering devices. The U-M311 Time Elapsed Monitor displays % Media Life Consumed, % Media Life Remaining, # of Days until Media Replacement is Due, and water volume conditioned since last media reset.

The systems will offer the same great performance with enhanced alerts & notifications. The BB-M101 Smart Volumetric Flow Monitor and the U-M311 Time Elapsed Monitor will also be sold separately for retrofitting existing systems.

More information: www.watts.com.



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Brass Knuckle Slingshot

Here’s one Slingshot that’s good for the eyes. New **Brass Knuckle Slingshot™** (BKFLEX-4050AFP) loads up on eye-protecting features and puts them in a package that

manages to be sporty and stylish – and affordable and functional. Slingshot brings together world-leading anti-fog and the highest UV protection, adds all-day-wear comfort features, and never breaks the bank.

Fog and UV rays are ever-present bullies to workers in extreme plant conditions and out in the elements. Much like David and Goliath, this Slingshot fights back against these bullies and levels the playing field.

These safety glasses – with lean, green frames – are part of Brass Knuckle’s new anti-fog collection, which features groundbreaking BK-Anti-Fog+ technology. Fused directly to the lens, rather than simply sprayed on like others, it delivers better and longer-lasting fog-free protection. BK-Anti-Fog+ also beats the toughest anti-fog standard in the world, EN 166/168. By a lot. It’s not even close. It also adds ANSI Z87.1/U6 ultraviolet protection, the highest standard in the world, to eliminate 99.99% of damaging UV rays.

More information: <https://www.brassknuckleprotection.com/>.



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Danfoss AB-QM

The **Danfoss AB-QM™** pressure independent balancing and control valve (PICV) is an all-in-one balancing valve and differential pressure controller, providing 100 percent valve authority, accurate flow limitation and precise system control of hydronic systems. Available in a full range of sizes from ½-inch to 10-inches with a compact design able to handle any size application, the AB-QM™ is ideal for small spaces such as fan coil units and VAV boxes, as well as large buildings like offices, universities, hospitals, and buildings where accurate temperature control is critical, such as laboratories and research facilities.

Tested accuracy for energy savings, improved comfort

With third-party verified balancing and control accuracies of ±5 percent of setpoint, the AB-QM™ is the most accurate valve on the market and can increase energy savings by 20 to 50 percent, improve overall system efficiency, and enhance indoor comfort.

Compared to traditional balancing valves, the Danfoss AB-QM™ PICV eliminates the need

for authority calculations and will save time on installation and commissioning.

The AB-QM™ pressure independent control valve helps to put an entire hydronic system into perfect balance by providing flows that match loads, even at partial loads, while minimizing maintenance and the horsepower required by the pump. This enables chillers to operate at designed capacities and improves energy efficiency and indoor comfort.

More information: www.danfoss.com.



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Uponor AquaPort



The first of its kind in North America, **Uponor** previewed an exciting new innovation at the 2022 ASPE Convention & Expo – the AquaPort™. Ideal in multifamily or hospitality low-rise, mid-rise, or high-rise applications, the AquaPort is a self-contained unit that converts a building’s hydronic heating supply to on-demand domestic hot water.

This solution eliminates centralized domestic hot water (DHW) and recirculation piping in a structure to provide numerous benefits, including energy and water savings, improved water quality, installation efficiencies, and reduced maintenance.

Compared to traditional pipe-routing methods, incorporating AquaPorts can reduce hot-water energy use by up to 35%, eliminate up to 40% of unnecessary piping, and remove more than 50% of the total DHW volume in a building for improved system performance, efficiencies, and hygiene.

Continued on Page 47

Product Spotlight

Next Time You're on a Service Call, Consider Going with Wireless Technology

The next time you're on a service call, the wireless technology built-into your Fieldpiece tools can make your time as efficient as possible. To make the most of that technology, here are a few steps to consider following:

1. Understand the symptoms

Using wireless tools makes the troubleshooting process easier, faster and better but before we begin, it's important to clearly understand the problem so we can determine what analysis needs to be performed. To do that, use your most important tool: Your ears. Often, when a customer is asked what's wrong with their system, we hear: "It doesn't work." We know that answer doesn't get us any closer to finding the actual problem, so it's time to play detective.

The customer doesn't need to be an expert in HVACR to help. But it helps to ask the right questions that may lead to finding the problem. Consider questions like: Does the system turn on? Do you hear any strange noises when it's running? Does the system blow cold air? Does the system blow any air at all?

Let the customer speak and listen to what they say. The more useful information we gather from the customer up front, the better able and faster you'll be to figure out the issue.

2. Find the problem

Once you've asked the right questions and begin to understand the problem, it's time to get to work figuring out the issue. Based on what you got from the customer, you should now have a better idea of what could be causing the problem.

If the system turns on, it's a good idea to begin with simple, quick visual inspections of the system. These include making sure the return air filter is clean, checking the outdoor unit for excessive debris that may be restricting airflow and using your hand to see if cold air is blowing from the supply vents. These quick and easy to perform checks help eliminate some possible problems right from the start.

If the system doesn't turn on, the issue more than likely is electrical. Use the Fieldpiece Wireless Clamp Meters, SC480 and SC680 to take voltage measurements at the thermostat and the outdoor unit. Also, be sure to check the fuses. This should be a good indication if there is an electrical issue

with the system.

Here are some of the main tests typically run to fully understand system performance. First, you'll want to do an airflow check, then check the refrigerant charge.

Checking Airflow via Temperature

It's often a good idea to start with airflow. After all, airflow is everything. First, use the Job Link® System Flex Psychrometer Probes®, JL3RH, to measure the Delta T. Attach one of the two JL3RH probes on the return side of the evaporator and the other on the supply side. This helps to understand the heat transfer that's happening across the evaporator. When measuring this, look for a Delta T around 20 Fo. While this is a good rule of thumb, it's a good idea to verify the manufacturer's specs for their ideal Delta T.

If there is a low Delta T, it doesn't necessarily mean there's definitively an airflow problem. A low value could also come from a refrigerant charge issue so it's important to check both airflow and refrigerant charge.

Checking the TESP

To further understand the airflow, measure the Total External Static Pressure (TESP) across the air handler.

To measure this, use the Dual Port Manometer Kit, JL3KM2. When placing these probes around the air handler, check with the manufacturer's recommendations. However, one probe should be positioned to measure static pressure before the air handler and one to measure static pressure after the air handler. Point the tips of the static pressure probe into the airflow. The JL3KM2 static pressure probes are designed with a red arrow on the magnetic base of the probe to ensure it's pointed in the correct direction. Before inserting the probes into the unit, make sure to zero out the manometers – this helps get the most accurate measurement.

Once the data is acquired, the Job Link® App takes both static pressure measurements and automatically calculates the TESP. Compare this to the manufacturer's max static pressure specifications. If the TESP is higher, there's probably resistance to the airflow like a dirty return air filter, leaks in

the ductwork, improper fan settings or poorly designed ducts. Examine all of these to determine what's making the system perform poorly.

Checking the Superheat and Subcooling

After checking the airflow, it's a good idea to move onto the refrigerant charge. Do this by measuring the system's superheat and subcooling values. The SMAN Digital Manifold and the Job Link® Pressure Probes and Pipe Clamps are specifically designed to capture these readings and compute the correct values. When the superheat and subcooling are measured you have better insight whether the system has the correct amount of refrigerant.

Since these levels can also be affected by improper airflow, measure both the airflow performance and



FIELDPIECE DUAL PORT MANOMETER KIT JL3KM2

refrigerant charge at the same time. This helps see the whole picture and create a more accurate diagnosis of the system.

3. Fix the problem

Improving airflow.


If it's determined that airflow is the culprit, make the necessary adjustments to dial in the airflow.

Start with cleaning or replacing all air filters, cleaning fans, fixing duct leakages, and adjusting fan speed as needed. Check with the system manufacturer to determine ideal fan settings.

Recharging the system.

If it's determined the refrigerant charge is low, it's important to find out why. Use a reliable refrigerant leak detector to inspect the system for leaks. If found, responsibly recover the refrigerant as needed and perform the repair. Once complete, perform a proper system evacuation to remove all moisture and non-condensables from the system before recharging with the correct amount of refrigerant.





Continued on Page 40



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Growing Green Technicians Part 157: U-Factors – Heat Gain and Loss

By Jim Johnson
Contributing Editor

While it's understood that an HVAC technician's task is not to design a system, but rather to evaluate, troubleshoot, and when necessary, make repairs and adjustments in order to ensure that equipment is operating properly, a fundamental understanding of heat gain through different types of materials can be helpful in dealing with a customer's complaint that their heating or cooling equipment "isn't working right".

For example, consider the concept of U-Factors. The formal definition of which is as follows:

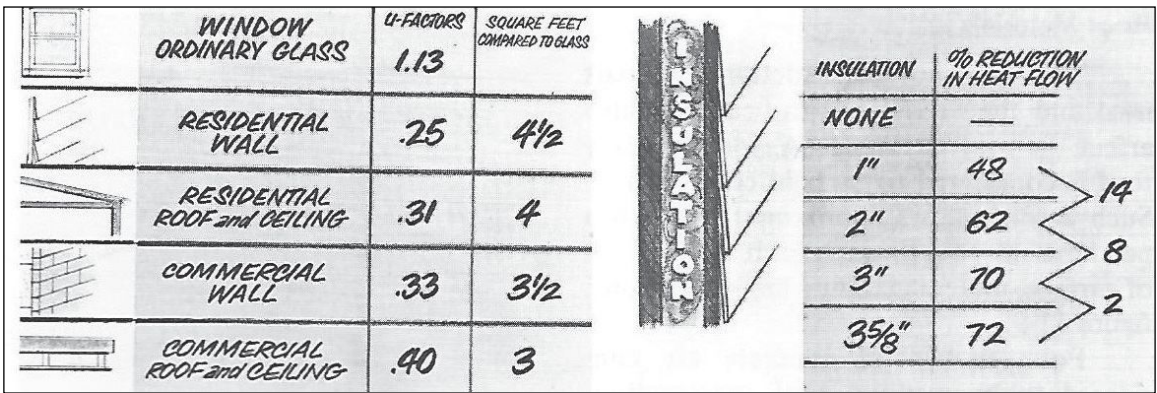
"A measure of thermal transmittance via conduction, convection, and radiation."

From a design perspective, these three thermodynamic processes relate to:

through materials by contact. Convection = the transfer of heat via the movement of liquids and gases. Radiation = the transfer of heat through a space without relying on a medium such as solids or liquids.

These processes are related to estimating the cooling and heating load of a structure, sizing the equipment, and determining the amount of air required to achieve the desired indoor comfort level in the conditioned space. From a service perspective, though, considering U-Factors simply adds to the service technicians common sense approach to explaining potential problems to customers. Figure one gives you an example.

It's universally understood by everyone that when it comes to heat gain in a building, window glass that allows for direct



sunlight to enter the indoor space is number one on the hit parade of allowing heat transfer. Ditto for allowing heat to transfer from the building to the outside environment. In our illustration, this is shown from that simple universal understanding, along with some numbers to back it up.

Our illustration shows that one square foot of single-pane window glass has a U-Factor of 1.13 (the amount of heat allowed to flow

through its material from warmer to cooler). It also shows that since the U-Factor of a residential wall is .25, that means that the same amount of heat transfer through that material would require a space more than four times that of the window glass.

The point here is that while the technician doesn't need to get the customer to understand the definition of the U-Factor itself, or even the different factors that apply

to different types of construction materials, being able to explain simply that one square foot of un-shaded, single-pane glass allows as much heat into the building on a sunny day (and also allows heat to escape) as 4 1/2 feet of wall space goes a long way toward the customer's understanding that if their system isn't performing like it should, it may not be the fault of the system itself.

Troubleshooting

A No-Heat Gas Furnace Emergency Call

This month's troubleshooting situation is an emergency call. The equipment is a condensing gas furnace and the customer's description of the problem is that when they turn the thermostat up to call for heat, nothing happens.

When you arrive, you are able to confirm that the thermostat is properly set, and you also note that the LED display on the furnace is flashing on and off slowly with a combination of short and long flashes, which you determine identifies a Gas Heating Lockout situation.

On the schematic diagram shown in Figure One, the components you need to check relative to this failure are identified as GV (Gas Valve) and GVR1 (Gas Valve Relay).

.... At the GVR-1 terminals, 24 VAC.
Your troubleshooting question: *What have your voltage tests determined?*

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@techtrainasoc.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."

.... At the GV terminals, 0-Volts.

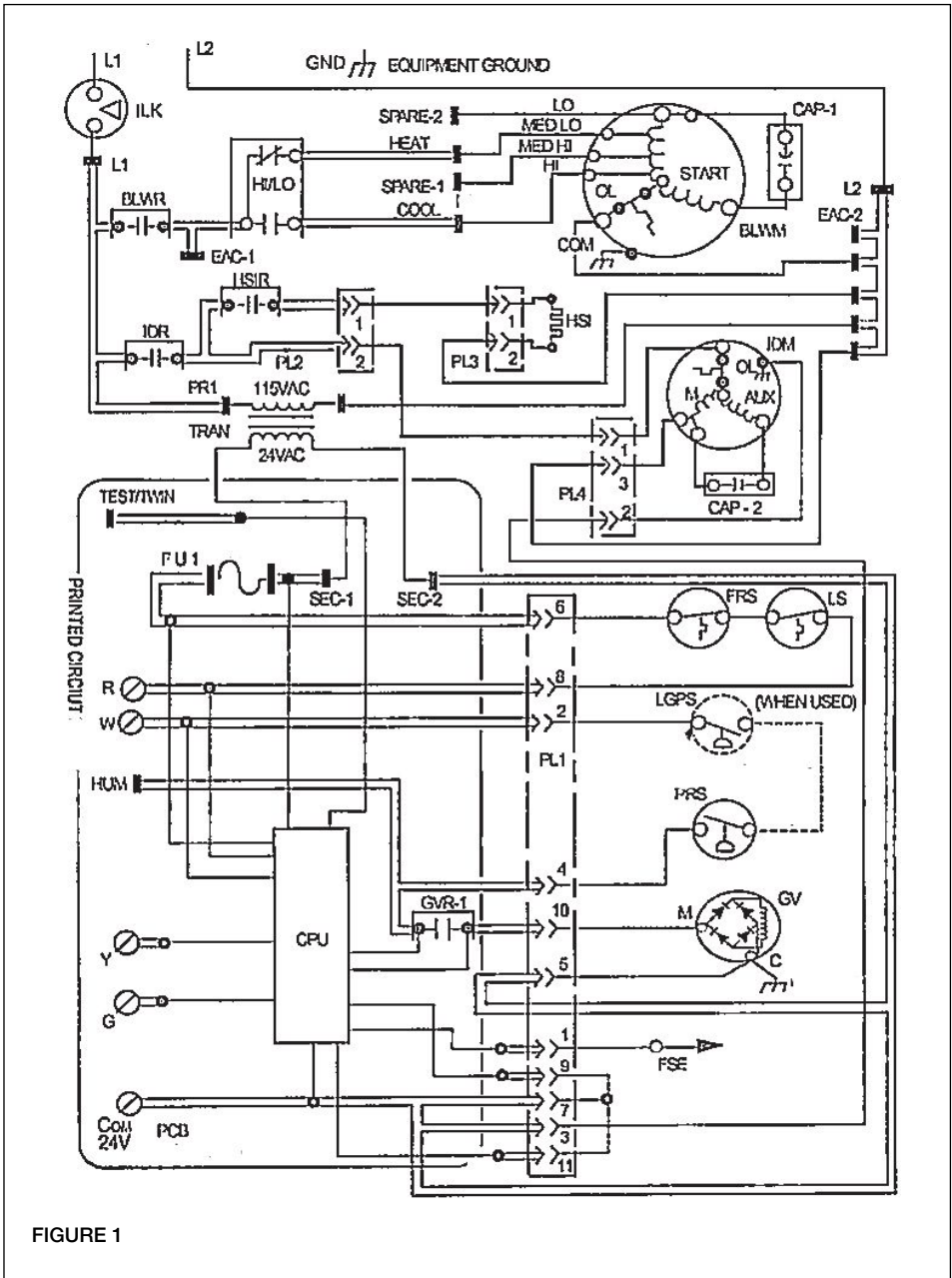
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Answer to Last Month's Problem

The compressor is equipped with an internal overload that re-set after cool-down. All of our meter tests proved that all the start and run components had not failed, and the compressor motor windings are also OK. The compressor has failed mechanically and needs to be replaced.

The winner of last month's troubleshooting is:

Robert Kyle



GreenChill Award Winners Announced by EPA

Companies recognized for exceptional achievements in reducing HFC emissions.

The U.S. Environmental Protection Agency (EPA) recently presented its annual GreenChill awards at FMI – The Food Industry Association's Energy and Store Development Conference in Orlando, Florida. This year, GreenChill honored 13 super-market industry organizations and one advanced refrigeration system manufacturer for exceptional achievements in effectively managing refrigerants and reducing emissions of ozone-depleting substances and high GWP gases such as HFCs to reduce the impacts of commercial refrigeration systems on the environment.

Since its founding in 2007, GreenChill has grown from 10 partners representing about 4,500 stores to 33 food retail partners representing over one-third of all U.S. super-markets, or over 13,000 stores. On average, GreenChill food retailers maintain emissions rates that are approximately half the industry average. Over the past 15 years, Partners have avoided emissions of over 500 metric tons of ozone-depleting substances and roughly 100 million metric tons of carbon dioxide equivalent. This is roughly equivalent to the greenhouse gas emissions from consuming over 11 billion gallons of gasoline.

The following are the GreenChill Partners that were recognized for outstanding refrigerant management at both the corporate level and at the individual store certification level.

2022 GreenChill Corporate Partner Awardees:

Best Corporate Emissions Rate

- Ashland Food Co-Op (Ashland, Ore.)
- Meijer (Grand Rapids, Mich.)

Most Improved Emissions Rate

- PCC Community Markets (Seattle, Wash.)
- Weis Markets (Sunbury, Pa.)

Superior Goal Achievement

- Ashland Food Co-Op (Ashland, Ore.)
- BJ's (Westborough, Mass.)
- Coborn's Inc. (St. Cloud, Minn.)

- Food Lion (Salisbury, N.C.)
 - The GIANT Company (Carlisle, Pa.)
 - Giant Eagle (Pittsburg, Pa.)
 - Hy-Vee (Des Moines, Iowa)
 - Meijer (Grand Rapids, Mich.)
 - Target (Minneapolis, Minn.)
- Exceptional Goal Achievement
- Ashland Food Co-Op (Ashland, Ore.)
 - Coborn's Inc. (St. Cloud, Minn.)
 - Giant Eagle (Pittsburg, Pa.)
 - Meijer (Grand Rapids, Mich.)
- 2022 GreenChill Store Certification Program Awardees:

Store Leadership – Target's Vista, Calif. location was honored for the innovative design as the company's first net-zero energy store (Target has applied for net-zero certification from the International Future Living Institute). The pursuit of this certification is a first among GreenChill certified stores.

Store Certification Excellence

- ALDI (Batavia, Ill.) certified 505 stores at the Platinum-Level. This is the highest number of Platinum level stores certified in one year by any company in GreenChill's history.

Hillphoenix (Conyers, Ga.) installed the most systems in GreenChill Certified Stores in 2021. This is the 10th consecutive year Hillphoenix has won this award.

Store Re-Certification Excellence

- Sprouts Farmers Market – One store in Whittier, California, achieved GreenChill Store Certification for 10 consecutive years.



ALDI CERTIFIED 505 STORES AT THE PLATINUM-LEVEL, WHICH IS THE HIGHEST NUMBER OF PLATINUM LEVEL STORES CERTIFIED IN ONE YEAR BY ANY COMPANY IN GREENCHILL'S HISTORY.

Seventeen additional Sprouts Farmers Market stores in Arizona, California, Colorado, Georgia, Maryland, Nevada, New Mexico,

North Carolina, South Carolina, and Tennessee earned recognition

Continued on Page 39

ARE YOU #2023READY?

Here's What's Changing

The Department of Energy (DOE) is increasing the minimum efficiencies for central air conditioners and heat pumps. The testing procedures for determining those efficiencies are changing as well.

What you need to know

Are you ready for the new Department of Energy Changes?



Dealers and contractors who install non-compliant equipment will be required to replace the equipment and face fines of up to \$503 per unit, per day.



Train your technicians now on the new compliance standards.

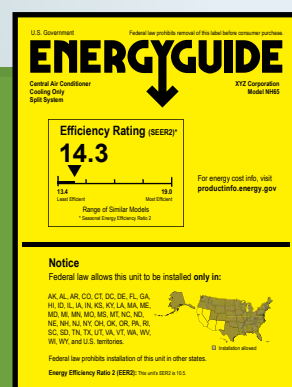


Scale down current inventory now to prepare for the new regulations and product launches.

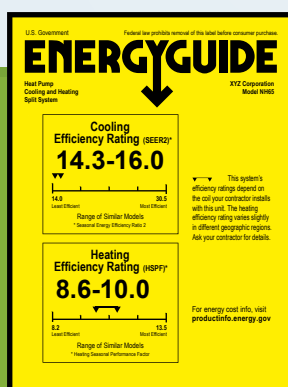
Baker
Distributing Company



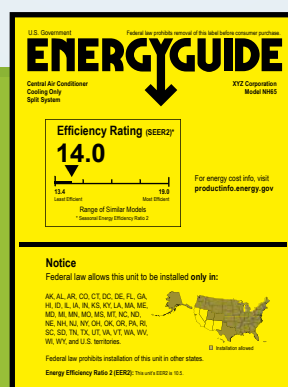
TEMPSTAR
Heating and Cooling Products



Split System Air Conditioner Sample Label



Split System Heat Pump Sample Label



Small Packaged Product Sample Label



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Carrier Ventures Invests in Next-Generation, Sustainable Technology Startups

Carrier Global Corporation, a global provider of healthy, safe, sustainable, and intelligent building and cold chain solutions, has completed three new investments through its Carrier Ventures group. Archilogic, Butlr and Transaera – startups in the healthy and green building space – are the newest additions to the Carrier Ventures investment portfolio of companies selected for their next-generation technology, high-growth potential, and sustainability focus.

“Carrier is pleased to add three more disruptive companies to the Carrier Ventures investment portfolio that share our commitment to decarbonizing buildings and creating healthier, safer environments for the people who occupy them,” Jennifer Anderson, senior vice president, strategy, business development and chief sustainabil-

ity officer. “Our partnerships with Archilogic, Butlr and Transaera will help to accelerate the commercialization of next-generation technology, contributing to a more sustainable world.”

Archilogic is a holistic spatial data platform for the internet. It provides product managers and software developers with infrastructure for building scaled, spatially aware apps that let end users interact with their spaces in the way they need. Archilogic’s software will be used in Carrier’s Abound cloud-based digital platform to give customers a clear and accurate view of their building interiors in one easy interface, allowing them to unlock and visualize building data to create healthier, more efficient spaces.

Butlr, a venture-backed startup spun out of the MIT Media Lab in



2019, was named one of the World Economic Forum’s Technology Pioneers of 2022. The company’s people-sensing platform uses body heat and machine learning to detect occupancy, headcount and activity, and generate accurate, real-time and historical spatial insights without collecting personally identifiable information. Butlr’s thermal sensing technology will be embedded in the Abound digital platform. The combination of these technologies will provide building owners and operators with real-time insights to make confident decisions to improve energy efficiency while ensuring

occupant wellness.

Transaera is developing a new class of affordable, energy-efficient, sustainable cooling systems. Buildings account for about 40% of global energy greenhouse gas emissions, and 40% of that is from HVAC. Current air conditioners consume more energy in humid conditions, and the majority of future cooling demand is expected to come from people living in hot and humid climates. Transaera’s desiccant technology uses a sponge-like material that grabs moisture from the atmosphere to enable its air conditioner to cool air more efficiently. The heat generated by the air conditioner is then used — instead of being wasted — to dry the material for the next cycle. Transaera intends to use this technology in partnership with Carrier to develop

ultra-efficient climate systems. The company was named one of eight finalists in the Global Cooling Prize, an international innovation competition to develop an affordable and sustainable residential air conditioner.

Launched in 2022 with a vision to accelerate the development of sustainable innovations and disruptive technologies, Carrier Ventures is an important accelerator of Carrier’s 2030 Environmental, Social, and Governance (ESG) Goal to help its customers reduce their carbon footprints by more than one gigaton. Carrier has also committed to investing more than \$2 billion by 2030 to develop healthy, safe, sustainable, and intelligent building and cold chain solutions that incorporate sustainable design principles and reduce lifecycle impacts.

Industry Education

Fresh Start Women’s Foundation Receives \$100k in Scholarships to Support Women in Trades

Scholarships available for training in the fields of HVAC, refrigeration, electrical and welding at The Refrigeration School, Inc.

According to Career School Now, women make up less than 10% of the country’s skilled trades workforce. As employees with skills and credentials in the trades continue to be in strong demand, Fresh Start Women’s Foundation joins forces with StrataTech Education Group to provide \$100,000 in tuition scholarships in a continued effort to provide access and resources that help women achieve self-sufficiency and use their strength to thrive.

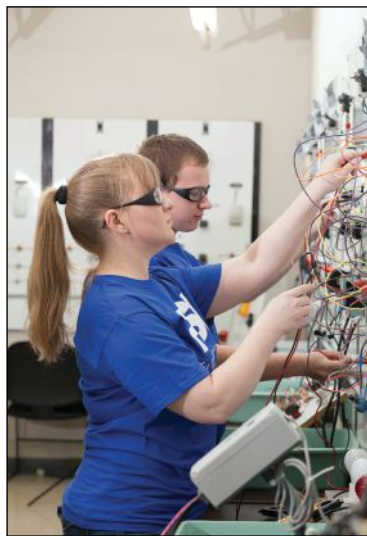
The scholarships provide Fresh Start clients with career training at The Refrigeration School, Inc. (RSI) in Phoenix in the areas of HVAC & refrigeration, electrical applications, and welding. Exploring a career in the skilled trades allows women who might be earning minimum wage the ability to increase their income upon securing employment after program completion in their chosen trade, all while propelling them toward more sustainable careers.

“Growing up, I saw my mother face similar obstacles to those of Fresh Start’s clients, so I understand first-hand how education can change a woman’s life and give her the life-long skills for

employment stability, growth opportunities, flexibility, and financial stability,” said StrataTech Education Group CEO Mary Kelly. “Both our organizations are committed to providing wrap-around services to help the people we serve succeed. As a result, Fresh Start scholarship recipients will have access to various support services, including industry-aligned training, resume, interview, and career support, along with employer connections during and after graduation.”

For over 30 years, Fresh Start Women’s Foundation has supported more than 50,000 at-risk women with critical, comprehensive services, resources, education, and training. The majority of Fresh Start’s clients are single mothers who are under or unemployed and face many barriers, such as poverty, domestic violence, homelessness, and limited access to education and job training.

“These generous StrataTech scholarships directly support Fresh Start’s commitment to expand opportunities for women in nontraditional well-paying occupations, such as technology and the skilled trades,” said Kim McWaters, CEO of Fresh Start. “We know that you can lift a woman up by giving her access to education and job skills that will allow her to earn self-sufficient wages



STUDENTS TRAINING AT THE REFRIGERATION SCHOOL, INC. IN PHOENIX.

and support her family. That shift changes her life, her children, and generations to come. We are so grateful for the support and partnership with StrataTech and RSI in this life-changing work.”

RSI graduate and Chas Roberts Air Conditioning technician Jenna Yost embodies the difference industry-aligned skills training can make in a woman’s life.

“I was a preschool teacher for 10 years and made minimum wage, which made making every month’s bills very stressful as I was living paycheck to paycheck,” Yost explains. “Now, I’m more financially stable than I’ve ever been, and it is a relief to be able to put

extra money in the bank. I also really like my job. It’s fun to surprise people when a woman shows up to fix their air conditioner.”

Sissie Shank, CEO at Chas Roberts and employment partner with RSI, started working in air conditioning with her dad when she was just 14 years old.

“Back then, the guys in the shop were not very open minded about a woman in the business,” Shank said. “But times have changed, and women technicians can be empathetic with our customers and sometimes better at explaining technical issues than men, especially to women customers. I’m excited about teaming up with Fresh Start and RSI in support of more women entering the air conditioning industry and coming to work at Chas Roberts.”

Recently, Fresh Start was one of five organizations nationwide to receive a \$500,000 grant from the U.S. Department of Labor to expand and expedite support to women pursuing sustainable careers in non-traditional fields, such as technology and the trades.

For more information on how to apply for a StrataTech Education scholarship at RSI through Fresh Start Women’s Foundation contact: Trinkia Jones, Client Support Specialist, at Tjones@fswf.org or 602.261.7144.

Fresh Start is celebrating 30 years of supporting women

in Arizona. It’s our mission to provide access and resources that help women achieve self-sufficiency and use their strength to thrive. Our ultimate vision is to create unlimited opportunities for women. Fresh Start serves over 3,000 women annually who are 18 years and older. 86% are mothers, 60% are single mothers and 64% are women of color. These women face a variety of barriers hindering their ability to be personally or financially self-sufficient, including domestic violence, generational poverty, and unemployment. Fresh Start offers focused programs, services, access to training and education, as well as employment and career services to help women reach their personal and professional goals through our Impact Program. For more information, visit www.freshstartwomen.org or connect with us on Instagram, Twitter or LinkedIn.

StrataTech Education Group focuses on the education, growth and development of specialized career education schools, particularly skilled-trade programs designed to address the nation’s growing infrastructure needs. Holding an A+ rating by the Better Business Bureau, StrataTech Education Group’s portfolio includes The Refrigeration School,

Continued on Page 39

Emerson Brands Partner with National Coalition of Certification Centers

Copeland, RIDGID brands partner to strengthen support for training and preparing technicians.

In an effort to continue to support the training and development of the next generation of skilled tradespeople, Emerson announced that its Copeland and RIDGID brands are partnering with the National Coalition of Certification Centers (NC3). NC3 is a career and technical training organization that supports skilled trades advancement, including the HVACR industry. Emerson's Greenlee brand has been a partner with NC3 since 2016. Now, with the additional support of the Copeland and RIDGID brands, Emerson hopes to strengthen its partnership with NC3.

"For years, we've been committed to supporting industries in overcoming the skilled trades gap. Our ongoing efforts are designed to put more training into the hands of new technicians and partner with trade schools to advance curriculum whenever we can. NC3 helps us advance these goals," said Tim Ferry, group president, tools

and home products for Emerson.

NC3 was established to help build a workforce prepared to meet the needs of industries by connecting employers and educational institutions. These synergistic partnerships foster effective training, elevation of skilled careers and employment opportunities. NC3 builds deep industry-educational partnerships. They develop, implement, and sustain industry-recognized portable certifications built on national skills standards.

"As we continue to explore ways to increase education of Copeland products for new technicians, this is an important initiative for Emerson, and we are looking forward to extending this to other Emerson brands as this partnership grows," said Brent Schroeder, group president, HVACR Technologies for Emerson.

As part of the NC3 partnership, Emerson's Copeland, RIDGID, and Greenlee brands recently participated in NC3's Train-the-Trainer summit, held at Gateway Technical College. The NC3 Train-the-Trainer events are opportunities for industry technical experts to provide hands-on training to community, technical college, and high school instructors.

"Copeland compressors and technology live at the heart of

HVAC and refrigeration systems that homeowners, businesses, and industries have depended on. The continued growth of refrigeration technology requires skilled and knowledgeable technicians to keep up with service and business needs to prepare for tomorrow's challenges today," said Dan Ramirez, NC3.

Emerson provides additional training support through its Educational Services team, with options such as virtual classrooms, onsite training, eCourses and a training center. Emerson also recently launched its HVACR Educator Resource platform, designed to provide industry educators with access to tools, training, and educational materials to enhance learning for the next generation of HVACR professionals. Within the HVACR Educator Resource site, there is a wide range of educational features including a Copeland scroll compressor training kit. This kit offers a detailed look inside a scroll compressor, through a disassembled model from Emerson's lab, offering a hands-on approach to learning the fundamentals of compression technology. The kit also includes custom safety equipment, supplemental learning materials and interactive digital content to provide a comprehensive educational experience.



EMERSON'S COPELAND AND RIDGID BRANDS HAVE PARTNERED WITH THE NATIONAL COALITION OF CERTIFICATION CENTERS.

Women in Trades

Continued from Page 38

Inc. (RSI) (Phoenix, AZ), Tulsa Welding School (TWS) in Tulsa, OK and Jacksonville, FL, and Tulsa Welding School & Technology Center (Houston, TX). For more information, visit stratatech.com.

The Refrigeration School, Inc. (RSI) was founded in Phoenix in 1965 and has been training students for sustainable careers for more than 55 years. Offering hands-on education with a strong emphasis

on the highly sought-after skills employers seek, RSI's programs include training in Refrigeration, Air Conditioning and Heating Technologies, Electro-Mechanical Technologies (HVAC-R), Mechanical Maintenance Engineering, and Welding. RSI is an ACCSC accredited school and licensed by the Arizona State Board for Private Post-Secondary Education. For more information, visit <http://www.rsi.edu> or follow along on Facebook, Instagram and Twitter.

Family-owned and operated for four generations, Chas Roberts continues to serve Arizona with a genuine and trustworthy approach

to the Valley's A/C, heating, and plumbing needs. For more than 75 years, and as one of the largest HVAC providers in Arizona, Chas Roberts serves both the Metro Phoenix and Tucson areas. Every Chas Roberts technician is certified and has successfully completed the rigorous Chas Roberts Customer Service Training Program on top of being licensed, bonded, and insured. This combination of expertise and family values inspires every aspect of the company's service, from employees to customers to the community.

For more information visit www.chasroberts.com.

GreenChill Winners

Continued from Page 37

for five consecutive years of certification.

- ALDI – Twenty-one stores across California, Maryland, New York, Pennsylvania, and Virginia achieved GreenChill Store Certification for five consecutive years.

- Weis Markets – Two stores in Maryland achieved Green-

Chill Store Certification for five consecutive years.

- Meijer – One store in Indiana achieved GreenChill Store Certification for five consecutive years.

- Target – One store in Minnesota achieved GreenChill Store Certification for five consecutive years.

GreenChill is a voluntary partnership program that works cooperatively with the food retail industry to reduce refrigerant emissions and decrease their impact on

the environment. Leaky systems can come at a high price, requiring retailers to pay for replacement refrigerant, system maintenance, and repairs. Reducing leaks is also beneficial to the environment, as some refrigerants deplete the stratospheric ozone layer and are potent greenhouse gases. In addition to reducing leaks, GreenChill participants are leaders in transitioning to environmentally friendlier refrigerants and adopting advanced refrigeration technologies.

Fieldpiece

OUR NEWEST
**HEAVYWEIGHT
CHAMPION**



Wireless Refrigerant Scale, SR47

- 13" platform to fit larger tanks and integrated bumpers for increased durability
- Strong enough to hold a maximum load of 252 lbs
- Lightweight. Total weight of scale and remote is ~7 lbs
- Connects to the Job Link System App with 1000' wireless range and Digital Manifolds SM480V & SM380V



Learn more at www.fieldpiece.com



WALTER "BUDDY" DOLL III

S&P USA Ventilation Systems, LLC, part of Soler & Palau Ventilation Group, has appointed **Walter "Buddy" Doll III** as President.

Doll has worked within the North American and Global HVAC industries for over 35 years. He has held several key roles within HVAC companies including but not limited to: Nortek Air Solutions (Group President 2017-2021, VP & GM Commercial, 2016-2017) and Johnson Controls Inc (1987-2016 VP & GM of Chillers NA; VP of Commercial Operations & Strategy; VP of Business Development).

Doll holds two degrees from Georgia Tech, a BS in Mechanical Engineering and a Master of Business Administration.

During his time at Nortek and Johnson Controls, Doll led transformational improvements to the commercial and factory operations. S&P USA is confident that he will share and transfer these experiences to his new role.

S&P USA, based in Jacksonville, Florida, is part of Soler & Palau Ventilation Group, the world's leading fan manufacturer for over 70 years. They provide innovative air solutions spanning residential, commercial, and industrial applications. Through excellence in design, manufacturing, and customer support, S&P USA enables

people and buildings to breathe better, cleaner air.

.....

Diversified CPC International, a producer and distributor of propellants, refrigerants, and specialty gas products, announced that **David Burks** has been appointed president and chief operating officer (COO). In this new position, Burks will provide strategic leadership to continue the company's success, direct future growth, and further sustainability initiatives.

As president, Burks will lead with the advisement of Bill Auriemma, who will continue as chief executive officer (CEO). Auriemma has additional responsibilities for the cosmetic portfolio of businesses held by Sumitomo Corporation of Americas, which is the holding company of Diversified CPC.

Burks joined the company in 2018 as executive vice president and was promoted to chief operating officer in 2021. While serving as president, Burks will remain the executive leader of operations.

"David is a solid leader who will bolster our growth within key markets that have increasing needs for high-purity gases," said Auriemma. "He is committed to our core values, which include environmental, social, and corporate governance. He is exceptionally



DAVID BURKS

qualified to further the evolution of our company."

"I am honored to take on this role and I am excited about the prospects that lie ahead for our company," said Burks. "I look forward to working with the Diversified CPC team to identify and leverage opportunities that contribute to helping us achieve our strategic growth plan and align with our core values."

Burks came to Diversified CPC following a 25-year tenure at Worthington Industries where he held key management roles in sales, commercial, and manufacturing operations. Has also served on several boards and industry trade groups throughout his career. Currently he is on the Household and Commercial Products Association Board of Directors and the Alliance for Consumer Education Board of Trustees.



NORMAN H. ASBJORNSON

.....

AAON Inc. announced that **Norman H. Asbjornson**, director, executive chairman, and founder of AAON Inc., has retired from his position of executive chairman and will continue to serve as a member of the company's Board of Directors.

In addition, Asbjornson will continue to assist the company in a consulting and advisory role until May 2024.

"It has been an extraordinary

privilege to be an employee of this remarkable company for nearly 34 years, and an even greater privilege to serve alongside all of the dedicated team members who have elevated AAON to its current position as an industry leader," said Asbjornson.

"I am truly humbled by all that AAON has achieved to date and remain as confident as ever that our best days are yet to come."

"This announcement marks a significant milestone for Norm and AAON, and is the culmination of long-term succession planning efforts," commented Gary Fields, AAON CEO and president.

"We are well-positioned to continue to execute on our strategic objectives and consider ourselves fortunate to be able to continue to pull from Norm's wealth of experience and company knowledge. On behalf of all AAON team members, please join me in congratulating Norm on his very well-deserved retirement."

"I look forward to my continued involvement with AAON as a member of the Board of Directors and through a consulting and advisory role. I have complete confidence that AAON will continue to innovate and thrive under the leadership team headed by Gary," Asbjornson added.

.....

Air Comfort Corporation announced **Krista Bulow** as the company's new director of business development. Air Comfort was originally founded in 1935 as an engineering company and equipment distributor, and is now a full-service commercial and industrial HVAC provider.

Bulow brings 40 years of experience in the mechanical contracting industry to Air Comfort. Her diverse background includes



KRISTA BULOW

all levels of management and supervisory roles within both large corporations and small family-run operations in commercial and industrial markets. For 34 years, she played an integral part in the growth of a prominent mechanical contractor, successfully running and building its service organization. Most recently, she developed and implemented a successful company infrastructure for a refrigeration business, which afforded the company the platform to double their business over the past four years as a result.

"There was such a small group of women in this industry during the time that I first started that I feel like I have been somewhat of a pioneer in my role. I am so happy to see more women entering the mechanical industry," Bulow said. "My successes are hands-on and I've never been one to shy away from a challenge. In the service industry, you're doing something different all the time and I believe you must have a strong work ethic, enjoy working as a team, have the ability to pivot quickly, and have a common-sense approach. Technology is changing, equipment is changing, and now with hybrid working environments, people are changing the way they do business."

Continued on Page 46

Product Spotlight

Continued from Page 35

Know you're right.

While measuring and testing the system with wireless tools, it's okay to leave these in place as adjustments are made. Then after service is complete, re-run the TESP and Delta T tests to see if the system is performing better. Be sure to also measure the subcooling and superheat to check that the refrigerant charge is correct. Since these are wireless tools, there is no wasted time re-attaching the meters and gauges. You can

leave them in place as you work. Also, as you move around the system throughout the service call, you can recheck these values to gain a real-time picture of the improving health of the system.

Call-out #1
Measuring Real-Time Power Consumption

The Fieldpiece Wireless Clamp Meters, SC480 and SC680 offer a unique tool while on service calls – showing customers how much energy their system is consuming. Most other meters on the market don't have this feature. First, at the outdoor unit attach test leads to measure incoming VAC on the

L1 and L2 terminals. Then use the amp clamp on the L1 or L2 wire. Set the dial to the W position and the meter displays real-time power consumption in kW.

Before performing the service call, measure the power consumption. And then, do the same at the end. Show the customer a before and after power consumption comparison to validate the work completed and to build trust.

Call-out #2
Rapid Rail® Sensor Technology

The Job Link® System Pipe Clamps JL3PC and the large JL3LC use revolutionary, patented technology to measure tempera-

tures in a pipe. It's called Rapid Rail® Sensor Technology and it offers more accurate, faster readings. Since the copper of a pipe is electrically conductive, the Rapid Rail® Sensor uses the pipe itself to complete the sensor circuit and measure the temperature. This provides a more accurate and a more stabilized reading in just a few seconds and it isn't affected by the ambient air conditions. This innovation saves time and is far more accurate than other pipe clamps.

Call-out #3
Testing Variable Frequency Drives (VFDs)

Many times when testing the electrical components of a newer system, you come across Variable Frequency Drives (VFDs). These are designed to be more energy efficient by ramping up and down based on the systems required load – instead of just running at either 100% or 0%. The SC680 and SC480 measure VFD voltage more accurately by filtering out the electrical noise that's present on the exiting voltage signal. Other meters on the market not designed for VFDs can't filter out the signal noise and won't give an accurate reading.

LET'S DO GREAT THINGS TOGETHER.



STRENGTH IN NUMBERS.



BECOME AN IHACI MEMBER TODAY.

For quick, easy, and direct on-line enrollment, simply **open your Smart Phone Camera** and **hover over the QR code** to access the membership application.

INSTITUTE OF HEATING AND AIR CONDITIONING INDUSTRIES, INC. PRESENTS 2022 TRAINING CLASS SCHEDULE

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

**SOUTHERN CALIFORNIA
EDISON, IRVINDALE**

NOVEMBER

System Diagnostics Module

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

Wed., Nov. 9 – Part 1

Thurs., Nov. 10 – Part 2

Wed., Nov. 16 – Part 3

Thurs., Nov. 17 – Part 4



**SOUTHERN CALIFORNIA
EDISON, TULARE**

NOVEMBER

NATE AC/HP Refrigeration & Air Distribution Training

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

Wed., Nov. 2 – Part 1

Thurs., Nov. 3 – Part 2

Wed., Nov. 9 – Part 3

Thurs., Nov. 10 – Part 4

Sat., Nov. 12 - NATE Exam, 7:30 a.m

**PACIFIC GAS AND ELECTRIC
COMPANY, STOCKTON**

NOVEMBER

NATE AC/HP Refrigeration & Air Distribution Training

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

Mon., Nov. 7 – Part 1

Tues., Nov. 8 – Part 2

Wed., Nov. 16 – Part 3

Thurs., Nov. 17 – Part 4

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

DECEMBER

System Diagnostics Module

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

Wed., Dec. 7 – Part 1

Thurs., Dec. 8 – Part 2

Wed., Dec. 14 – Part 3

Thurs., Dec. 15 – Part 4

SAN DIEGO GAS & ELECTRIC

NOVEMBER

NATE CORE & Gas Heating Training

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

Mon., Nov. 21 – Part 1

Tues., Nov. 22 – Part 2

Mon., Nov. 28 – Part 3

Tues., Nov. 29 – Part 4

DECEMBER

NATE AC/HP Refrigeration & Air Distribution Training

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

Mon., Dec. 5 – Part 1

Tues., Dec. 6 – Part 2

Mon., Dec. 12 – Part 3

Tues., Dec. 13 – Part 4

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

All Classes Are Being Offered as Webinars

**Classes begin at 6:00 PM Pacific Time and are subject to change
Register at www.ihaci.org (Training)**

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

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



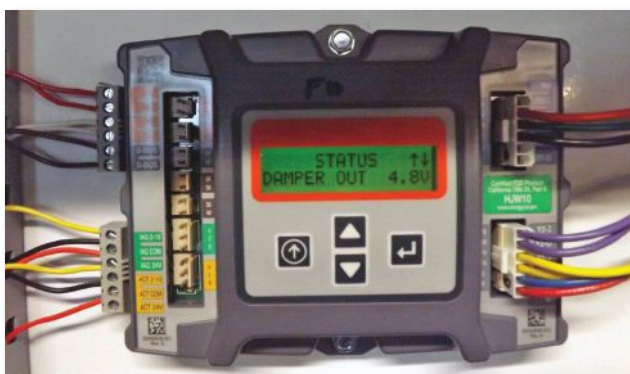
**Pacific Gas and
Electric Company**

Class 6:00pm • 2021 Training Class Schedule (Subject to Change)

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IHACI



HANDS-ON

Mechanical Acceptance Testing demonstrations.

Can you do these tests?

Let's see! Visit us at the end of aisle 100.

During the hands-on demonstration of Mechanical Acceptance Testing, the following tests will be demonstrated. Test your skills!

- ▶ How to determine the proper amount of outside air required for a Constant Air Volume system using ASHRAE 62.1.
- ▶ How to measure for proper outside air. This test verifies the introduction of a minimum volume of outdoor air, in accordance with §120.1(b)2, into the air handling unit and is within 10 percent of the required volume when the system is in occupied mode on Constant Air Volume system. We'll have a contest to see how close your readings are.
- ▶ How to determine that the controls are operating properly, including thermostats, outdoor ventilation and demand controlled ventilation.
- ▶ How to determine if the Economizer is working properly. Functionally testing an air economizer cycle to verify that an HVAC system uses outdoor air to satisfy space-cooling loads when possible.
- ▶ How to verify proper fault detection and reporting for automated fault detection and diagnostics systems for packaged DX units.



IHACI

These tests will represent the most popular tests which are NRCA-MCH-02-A – CAV, NRCA-MCH-03-A, NRCA-MCH-05-A, and NRCA-MCH-12-A.

With this hands-on demonstration, you will have a much better understanding of what the most popular Mechanical Acceptance Tests are all about as well as see what tools will be required and how they are to be used to take these measurements.

Viva HVAC!



IHACI'S 42nd Annual HVAC/R/SM – Performance Contracting Product and Equipment Trade Show

IHACI

TUESDAY November 15, 2022
Pasadena Convention Center • 11:00 a.m. - 7:00 p.m.

PRE-REGISTER
FOR A SPED BADGE
AT WWW.IHACI.ORG

LOCATION: PARSONS PARKING LOT
(located directly off the 134 and 210 freeways)
100 WEST WALNUT STREET, PASADENA, CA 91124
ENTER ON PASADENA AVE.
\$16 per vehicle

Free shuttle provided to and from the Convention Center 7 a.m. to 8 p.m.

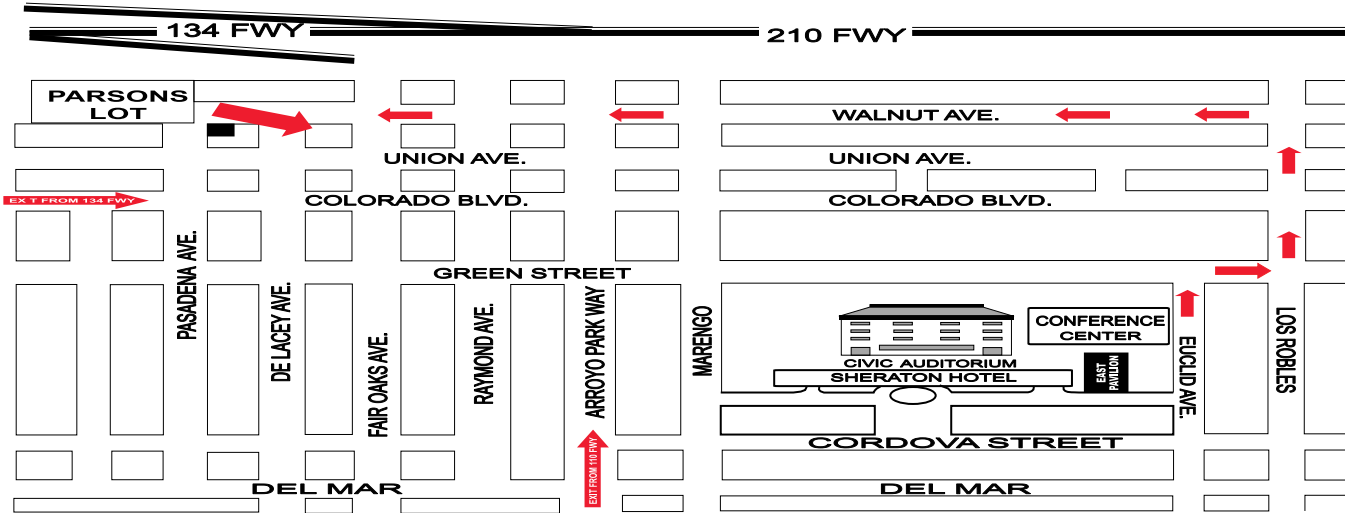
**ALL OTHER VEHICLES PLEASE USE PASADENA
CONVENTION CENTER PARKING**
300 EAST GREEN STREET, PASADENA CA 91101

PARKING-VEHICLES OVER 6'8" AT PARSONS PARKING LOT

100 West Walnut Street
Pasadena, CA 91124

ENTER ON PASADENA AVE.

PARKING



INFORMATION

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IHACI's 42nd HVAC/R/SM TRADE SHOW FLOOR PLAN

Viva

**IHACI'S 42nd Annual HVAC/R/SM –
Performance Contracting Product
and Equipment Trade Show**

TUESDAY November 15, 2022

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

HVAC!

SEMINAR SCHEDULE

WORKFORCE DEVELOPMENT AND BUILDING A CAREER PATH TO HVAC/R/SM PERFORMANCE CONTRACTING

Time: 11:30 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. Working professionals in the industry will discuss continuing education opportunities, wages, what they are looking for in future employees and 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.

Speakers: Pepper Hunziker, ("TECH" Clean California), Eugene Silberstein, (Board of Directors member IHACI, HVAC Excellence), Dean Gilford, (President, IHACI, and President, Kilowatt Heating, Air Conditioning & Electric), Sherman Oaks, CA; Bob Wiseman, (Board of Directors member, IHACI and President, Canoga Park Heating and Air Conditioning Company), Steve Adams, (Vice President, IHACI, Director of Sales, Ferguson HVAC)

ENERGY REGULATIONS GO INTO EFFECT JANUARY 1, 2023 DON'T MISS THIS IMPORTANT SEMINAR FROM LEADERSHIP AT THE CALIFORNIA ENERGY COMMISSION

Time: 1:00 p.m. – 2:30 p.m.

Location: Sheraton / Justine's Room

This presentation will provide an overview of the major changes to the 2022 Energy Code requirements for single family, multifamily and nonresidential buildings scheduled to go into effect on January 1, 2023. Newly constructed buildings, additions, and alteration projects will be covered. The 2022 Energy Code training focuses on recently adopted regulations for HVAC, including but not limited to: acceptance testing and compliance forms, minimum efficiencies, OSVC controls, duct leakage, economizers, dedicated outdoor air systems (DOAS), exhaust heat recovery, heat pump baseline, fan power, and high-capacity gas boilers. Educational resources including the Blueprint, Online Resource Center, etc. will also be provided.

Speakers: Christopher Olvera (Outreach & Education Unit at the California Energy Commission)

"GROW YOUR HVAC BUSINESS WITH HEAT PUMP WATER HEATERS"

Time: 3:00 p.m. – 4:00 p.m.

Location: Sheraton / Justine's Room

Did you know HVAC contractors are an appropriate classification to install, service, and maintain heat pump water heaters? As an HVAC contractor, now is the perfect time to grow your business by adding heat pump water heaters to your service offering. The water heating market is set to change radically over the next 10 years as heat pump water heaters get more and more adoption. And starting now means you can tap into the numerous funding streams that will become available starting in early 2023, including tax credits and rebates through the Inflation Reduction Act and California specific rebates through the upcoming Self Generation Incentive Program. Join TECH Clean California, ENERGY STAR, and manufacturers AO Smith, Bradford White, ECO2 Systems, Nyle, and Rheem to learn about how to incorporate heat pump water heaters and available funding sources into your HVAC business. Learn from the experts how these products work and how to sell them to your customers!

Speakers: Peter Florin (Energy Solutions), Alice Liddell (ICF on behalf of ENERGY STAR), Michael Corbett (Bradford White), John Miles (ECO2 Systems), Francois Labrasseur (AO Smith), Kevin Clark (Rheem), Ryan Hamilton (Nyle Water Heating Systems)

REFRIGERANT CHANGES

Time: 4:30 p.m. – 5:30 p.m.

Location: Sheraton / Justine's Room

The Chemours presentation will touch on the new refrigerants that are coming soon and how this change will impact HVAC-R technicians in the field. The characteristics of R-454B and comparison to R-410A will be discussed, as well as current regulations and refrigerant flammability ratings. Please join the Chemours specialists Don Gillis (Senior Technical Trainer) and John Milkint (West Coast Territory Manager) for this hour of information and Q/A.

Speakers: Manufacturer / Distributor Technical Experts - Don Gillis (Senior Technical Trainer) and John Milkint (West Coast Territory Manager)

Continued from Page 40

Mike Devito, Air Comfort president, created the director of business development position in response to the company's 2021 partnership with Orion Group, a business move that will focus on continued growth and quality solutions for clients.

"In every role Krista has held, she has demonstrated strong leadership qualities. We look forward to her tremendous commitment to make Air Comfort better," Devito said. "With Krista's background of 40 years in the mechanical industry, she will help drive our efforts to build a stronger team and drive Air Comfort's course to even greater success."



KEVIN FALTIN

Air Movement and Control Association (AMCA) International Inc. appointed **Kevin Faltin** as executive director.

"The HVAC industry is undergoing dramatic change at an unprecedented rate," 2021-2022 AMCA International President Jim Meats, PE, said. "Many forces are at work, including looming state and federal regulations, an expanding appetite for integrity in product performance, and the greatest demographic shift of our lifetime, with great numbers of workers, both blue and white collar, retiring each year. To stay relevant and grow, industry stakeholders have no choice but to adapt. To help lead the way forward, AMCA has

hired Kevin as its new executive director."

Faltin is a global business leader with more than two decades of experience in the construction and buildings industry. He comes to AMCA after more than 21 years with UL, which he served in the roles of vice president of operations, director of engineering operations, business-development director, business-development manager, sales manager, and account executive.

"Kevin has experience establishing partnerships in Europe, the Middle East, and Asia to deliver regional testing capabilities as well as experience with mergers and acquisitions to expand operations and improve service efficiency," Meats said. "He has demonstrated the ability to collaborate with industry stakeholders at all levels, including governmental bodies, regulatory agencies, other industry associations, code officials, and customers. He also directed high-performing international teams of managers, directors, and professionals to achieve business goals and deliver high-quality results and best-in-class client satisfaction. Lastly, he has managed testing facilities and understands the importance of product-testing integrity and the credibility it brings to AMCA's Certified Ratings Program."

A native of Chicago, Faltin holds a bachelor's degree in marketing from Bradley University and has completed the Yale School of Management's Executive Leadership Program and the Massachusetts Institute of Technology (MIT) Sloan School of Management's Artificial Intelligence: Implications for Business Strategy course.

"I am looking forward to joining such a well-regarded team and contributing to the continued success of AMCA," Faltin said. "As we look to the future, we will face challenges and opportunities. Our success will rely on our teamwork, trust in each other, and willingness to adapt."



PATRICK FLAHERTY

Walter Morris Company, a manufacturer's representative firm serving plumbing, heating, refrigeration, and water filtration trades throughout New England, announced the appointment of **Patrick Flaherty** as Eastern New England commercial sales manager.

"Pat will be our territory sales manager for the Boston Metro area," said Walter Morris Vice President, Patrick McCarthy. "He brings extensive experience as a manufacturer's representative as well as holding key sales positions with Viega industrial piping products and Burnham boilers. Pat is focused on using his commercial boiler and water heater sales experience, team building skills, and industry relationships to grow market share for our manufacturers and develop our commercial sales team."

Flaherty has spent his career in the plumbing and HVACR industry with experience in field service, product management, technical sales, and sales management. Pat is a Boston College graduate and lives in Quincy, MA with his wife Resie.

Malco Products, SBC, one of the nation's leading manufacturers of high-quality, American-made hand tools, announced that **Phil Sponsler** was recently appointed to its board of directors.

Sponsler brings a great deal of

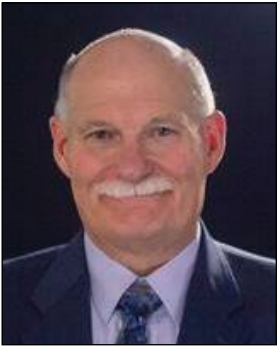
experience in creating operational excellence and driving continuous improvement in the manufacturing industry. Since 2000, Sponsler has been the president and general manager of Orbitform, which creates engineered and manufactured assembly solutions for the automotive, industrial, medical, hand tool and aerospace industries.

Sponsler has a passion for developing winning cultures and mentoring leaders and winning teams. Over his tenure with Orbitform, he created the Orbitform Sales Growth Engine, which has provided recurring revenue growth and stability for the company.

"We are very fortunate to have Phil join the Malco team, and we look forward to his contributions to helping Malco realize our vision as a destination company for many years to come," said Don Schmidt, board chair for Malco Products.

"Phil successfully embodies a servant leadership style, inspiring and motivating the teams he has led over the span of his career."

"It is an honor to be joining the Malco family as they continue to deliver on their long-standing commitment to American-made products and creating jobs here in the U.S.," Sponsler said. "The work they do aligns with my background and experience, so I'm looking forward to partnering with the organization moving forward."



PHIL SPONSLER

Ecoer, maker of highly efficient variable speed inverter heat pumps, recently appointed **Rick Warner** as president of its North American operations.

Warner was promoted from his previous position as VP/General Manager with the company.

"I'm very grateful for this opportunity and excited to bring Ecoer's superior products to the North American market," said Warner. "Our goal is to increase awareness and acceptance of our advanced capabilities with our distributor customers, installing contractors, and energy-conscious end users."

Warner brings over thirty years' experience to his position at Ecoer, most of which was in a sales and operations management capacity



RICK WARNER

ity with Lennox International. Joining Warner in bringing Ecoer products to market are the leadership team of operations excellence manager, AJ Kanyan, and inside sales support manager, Kendra Harvey. Ecoer North American operations are located in Fairfax, VA and the company enjoys coast to coast sales representation.



STEPHEN O'BRIEN

A. O. Smith Corporation announced the appointment of **Stephen O'Brien** as chief operating officer for Lochinvar. O'Brien will oversee engineering, manufacturing, quality, product services, marketing, and business development teams at Lochinvar, a division of A. O. Smith.

O'Brien comes to Lochinvar from Mitsubishi Electric Trane HVAC US (METUS) where, as senior vice president - sales, Marketing & Supply Chain, he impacted channel strategy and product mix resulting in revenue and net profit growth. He began his career as a small business owner and joined A. O. Smith Electrical Products Company in 1997 as a sales engineer, where he steadily progressed through sales and marketing roles until being named senior vice president & general manager - HVAC, Hermetic and Appliances in 2008. When the company was sold to Regal Beloit in 2011, O'Brien served as the acquisition integration leader and vice president for Regal Beloit until joining METUS in 2015.

O'Brien holds an MBA from the University of Dayton in Ohio and a bachelor's degree in mathematics from State University of New York at Potsdam, New York.

Mitsubishi Electric
Continued from Page 20

project was helping this community avoid the financial and environmental costs of bringing in expensive gas lines to the property," said DeMaster. In climates like the upper peninsula of Michigan, carbon emissions are a real problem as many developers specify fossil-fuel-burning systems to combat cold temperatures

without considering planet-friendly alternatives.

With UPPCO serving a rural service territory (just over 50,000 customers across 4,400 square miles) and 40 percent of their customer base identified as low income, helping developers understand the efficiency, cost and performance benefits of heat pump systems is a goal for the utility – along with reducing the number of power plants.

"I now have 60 tenants here in Ontonagon Village telling me

and anyone else in earshot how wonderful the heat pumps are," expressed McNeally. "This project gives us a powerful opportunity to showcase what heat pumps can do, and what UPPCO can do for tenants and customers."

For more information about Mitsubishi Electric, and to hear directly from the Ontonagon Village project team in a series of videos, visit MitsubishiComfort.com.

For Sale

Business for Sale

Small Residential/Light Commercial Service and Installation company serving San Gabriel Valley and North Orange County, California. Excellent customer base, 5 Star Yelp, Quickbooks Pro with online pay and billings. 2 Vehicles Great addition to existing business or for home base business. \$650K in service and installations. \$195,000 call or text 626-484-7199

.....

HVAC Company for Sale

22 year old HVAC company for sale in Santa Barbara CA. Factory dealer for York, Samsung, Aeroseal, Rotobrush and sheet metal shop. Owner needs to retire due to medical reason. \$1 million in sales per year. Great internet and customer reviews. Comes with all truck and install equipment. Service van. Call 805-705-0733.

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New Products

Continued from Page 34

The innovative and simplified design and installation provides efficiencies for installing contractors and facilities management to help keep projects on schedule, within budget, and running smoothly. It removes gas and electrical supply lines and venting in each dwelling

unit to save on both short-term and long-term expenses, and it eliminates DHW supply and return piping for fewer piping supports, fire penetrations, insulation, and accessories required in a building.

The compact, in-wall design is only 2650 mm tall by 368 mm wide and 137 mm deep to maximize overall square footage. Additionally, the AquaPort is ex-

tremely lightweight at 47 lbs. (21.3 kg) for the 100K BTU/hr. version and 57 lbs. (25.9 kg) for the 180K BTU/hr. version, which makes it easy for one person to maneuver and install.

“Uponor is striving to innovate tomorrow’s buildings with high-performing solutions like the AquaPort to save water, minimize energy use, reduce risk, and eliminate waste,” says Aaron Stotko, director, Segment Marketing, at Uponor. “We anticipate the AquaPort will revolutionize hydronic heating and domestic water design to elevate building construction to a new standard.”

For further details about this new product innovation, refer to the AquaPort Brochure. For more information about the concept of decentralized DHW systems, review this white paper or watch this recorded webinar on Exploring Efficiencies of Decentralized DHW Systems.

More information: www.uponor.com.

GOLD KEY
Contest Winner

The winner of last month's ICN Gold Key contest is:



Kevin Moreno
Best Value Heating & A/C

Moreno is the winner of a \$50 Amazon gift card, courtesy of ICN. Congrats!

NEW IHACI MEMBERS

- **Capital One**
El Segundo, CA 90245
- **CI Web Group**
Houston, TX 77080
- **EWC Controls Inc**
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