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



Editorial Focus

ICN spotlights the latest offerings in refrigerants and green technologies, heating products, and residential ductless.

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Industry Events

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Indoor People

ICN takes a look at all the movers and shakers in the HVAC/R/SM industries.

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Industry News

DOE Finalizes Efficiency Standards for Residential Refrigerators, Freezers

Energy Department also proposes new rule for energy efficient commercial fans and blowers.

The U.S. Department of Energy (DOE) has announced two energy-efficiency actions that will save American households and businesses \$5 billion per year on their utility bills, while significantly cutting energy waste and harmful carbon pollution. The final standards for residential refrigerators and freezers – which are Congressionally-mandated and reflect a joint recommendation from a wide range of stakeholders, including the Association of Home Appliance Manufacturers, Consumer Federation of America, and energy efficiency advocates – and proposed standards for commercial fans and blowers are expected to save Americans approximately \$92 billion on their utility bills. Together, these updated standards are also expected to reduce nearly

420 million metric tons of dangerous carbon dioxide emissions cumulatively over 30 years, which is equivalent to the combined annual emissions of nearly 53 million homes.

With its actions in 2023 that built on progress in 2021 and 2022, DOE now projects that the energy efficiency standards advanced by the Biden-Harris Administration this term will together provide nearly \$1 trillion in consumer savings over 30 years. DOE also estimates that these standards, once finalized, will cumulatively reduce greenhouse gas emissions by 2.5 billion metric tons or more – an amount roughly

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Inside

A Message from the New President of IHACI

Bob Wiseman, President of MightyServ

I am honored to be serving a third term as President of IHACI. These next two years will be uniquely challenging for our industry. We face new flammable refrigerants in our equipment, regulatory changes, and challenges, changing equipment lineups from manufacturers, and difficulties in keeping our teams staffed and trained. As we deal with these issues, of course, we have to take care of our customers, and how we do that is changing as well. As always IHACI will be doing all we can to help our industry move forward.

I am proud to have been active in this industry for over 40 years now and a member of IHACI for the

entire time. Being a member of industry organizations like IHACI is critical to our success as HVAC technicians, contractors, and other players in our multi-billion-dollar industry. We all need help, and we all need to work together to make the HVAC industry the best it can be.

I wish each of you a happy and successful 2024-2025!



Editorial Focus

Survey: More than Half of U.S. Homeowners Ranked Federal Incentives as Top Reason to Install Heat Pump

According to a survey of U.S. homeowners conducted by Mitsubishi Electric Trane HVAC US (METUS), 63% of American homeowners have heard of the Inflation Reduction Act (IRA) and 54% ranked government incentive (such as a tax credit or rebate) as one of their top three reasons why they would consider installing a heat pump.

These findings, among others, were uncovered by the METUS 2023 Heat Pumps & Homeowners

Index. The survey explored American homeowners' attitudes toward the IRA and sustainable home upgrades, specifically regarding heat pumps.

Most (83%) survey respondents were concerned about the impact of energy bills on their household budgets. Further, 46% responded the cost to cool their homes last summer rose "somewhat" or "much

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Training Classes

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for more information.



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Industry News



ARIZONA



Phoenix HARDI Conference Sets Attendance Record

Phoenix, Ariz. – HARDI welcomed more than 1,940 attendees to Phoenix, including 519 wholesaler attendees from 180 companies, 40 Solution Center providers, 34 unique member sponsors, and a sold-out Booth Program featuring 250 vendors to its 2023 Annual Conference, Ascend in Phoenix. The conference surpassed all before it with the highest number of attendees to date and is a testament to the HVACR industry's enthusiasm for networking and consuming educational content.

The event featured six keynote speakers whose presentations inspired and informed the nearly 2,000 attendees with topics focusing on innovation, workforce management, and current geopolitical factors impacting not only the industry but global affairs. HARDI welcomed Meagan Johnson, known



MORE THAN 1,900 PEOPLE ATTENDED HARDI'S ANNUAL CONFERENCE.

as a Generational Humorist, who kicked off the conference with her opening keynote presentation, Zap the Gap: Generational Differences Reexamined, which explains the differing generational values that impact marketplaces and the workforce. Geopolitical strategist, Peter Zeihan, wowed attendees with his expert understanding of demography, economics, politics, and technology to help them prepare for an uncertain future. The conference concluded with Olympian and NY Times bestselling author Vince Poscente's inspiring presentation about activating one's purpose and accelerating growth, which challenged the audience to do what the competition is not willing to do.

The conference featured 26

breakout sessions, many of which showcased valuable insights on business development and benchmarking data by HARDI's Market Intelligence team. The conference's four Regional Forecast sessions examined region-specific economic and regulatory factors that will impact the industry in the coming months.

HARDI used the event as a platform to make important announcements regarding changes to its Board of Directors. This year, it was announced that Rhonda Wight, Refrigeration Sales Corp, after ending her second term as HARDI Chair would welcome Loran Liu, Standard Supply and Distributing Company, as the newest HARDI Chair. Along

with Rhonda Wight, it was announced Brian Blaushild of Famous Enterprises served his last term on the board. Both outgoing board members provided invaluable insights and expertise for members throughout their time and while their presence will be missed, they'll remain active members of the HVACR community. HARDI's newest Board Members are Todd Shadden, Century HVAC Distributing, Inc. and Layne Miller, Geary Pacific Supply.

With a growing number of HARDI's LATAM members, it is even more important that there are more opportunities for them to network and connect with each other as well as the greater HARDI membership and staff. The Annual Conference is just one of those opportunities and it is a pleasure to have them on-site and in-person.

Finally, HARDI recognized 16 graduates from its Emerging Leaders program, a program with the objective to assist in the development of the next generation of HARDI executives with access to learning and networking platforms.

Next year's Annual Conference will be held in Atlanta, GA at the Marriott Marquis, Dec. 7-10.

TEXAS



Service Experts Receives Whole Home Visionary of the Year Award


Richardson, Texas – Service Experts recently accepted the 2023 HVAC Whole Home Visionary of the Year Award, presented by Resideo at its Annual CONNECT customer event. This award recognizes companies that use smart home solutions, cutting edge technology and product diversity in their offering to deliver the next level smart home to their customers. Service Experts was selected for their commitment to the space and the future of the industry.

"We live and breathe the connected home," said David Ber- man, Director – Supply Chain for Service Experts. "One trip to our office proves this commitment when you see our scale model of the connected home. We're enthusiastic about sharing best practices and helping make this the future of our industry, and are honored to be recognized for that passion."

Service Experts sees significant growth in solar, storage, and EV chargers, and is helping customers envision and transition to The Home Of The Future. The significant increase in energy costs, as well as heightened concerns regarding the stability of the electric grid, are driving growth in residential solar power options, particularly with the lucrative rebates currently in place. And, with EVs maintaining a solid portion of the new car market, the home-charging dilemma will require the introduction of more customer-friendly EV charging options.

With a brand promise of protecting what matters most, Resideo is a leading global provider of home comfort and security solutions and offers trusted brands including Honeywell Home and First Alert. During the annual CONNECT customer event, the Connecting the Future theme showcased the impact Resideo's solutions offer its network of security dealers, HVAC contractors and plumbers and recognized the impact they have on their communities.

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.



Daikin, XOï Form Tech Alliance

Waller, Texas – Daikin Comfort Technologies North America, Inc. (Daikin), a subsidiary of Daikin Industries, Ltd., a leading manufacturer of heating, cooling, and refrigerant products, and XOï, the leading provider of technician-first smart technology for commercial and residential field service companies, are transforming the possibilities of field service technology through a new strategic relationship.

Together, Daikin and XOï are working to revolutionize the way technicians interact with technology in the field. The collaboration connects Daikin HVAC technicians throughout North America with XOï's advanced AI- and data-driven solution, generating an unprecedented information and data ecosystem and delivering powerful insights that empower intelligent business decisions.

"XOï's groundbreaking solution allows Daikin contractors to deliver hi-tech service to their customers," said Doug Widenmann Daikin's Senior Vice President of Marketing. "We believe that earning technician trust is one of our many keys to earning share. By streamlining and simplifying the experience of technicians in the field, XOï allows them to document, communicate and verify the services they provide with remarkable accuracy and transparency. That connection with customers helps Daikin contractors build trust and lasting relationships that drive consistently elevated business."

Daikin and XOï provide HVAC technicians with a suite of premium tools for managing and leveraging data from current jobs as well as historical projects, including powerful data collection, virtual support and mentoring, and data-based insights. With XOï, technicians have access to Daikin-specific workflows and a proprietary knowledge base, equipping them to perform full-service diagnostics at any jobsite by applying data science across live video, workflow automation and artificial intelligence – all of which not only support the technician, but help deliver an incomparable customer experience.

"Daikin's global presence and XOï's pioneering technology are connecting to reimagine what's possible with field service tech-

nology," said Aaron Salow, founder and CEO of XOï. "With our solution, Daikin contractors can drive truly world-class performance and productivity while supporting long-term, trust-based customer relationships that are crucial to meaningful and profitable outcomes."

Features of the platform include:

- Daikin-specific smart workflows with conditional logic that guide technicians through their work.
- Daikin-specific AI-driven

knowledge base.

- Smart push notifications which drive and deliver a streamlined technician experience.

- Easily accessible asset-centric service histories.

- Live augmented reality remote support direct to Daikin technical support.

- Strategic trade insights that drive decisions around marketing, training, sales, service and support.

Daikin Industries, Ltd. (DIL) is a Fortune 1,000 company with more

than 96,337 employees worldwide and a leading worldwide indoor comfort solutions provider. Daikin Comfort Technologies North America, Inc. (DNA) is a subsidiary of DIL, providing Daikin, Goodman, Amana® and Quietflex brand products. DNA and its affiliates manufacture heating and cooling systems for residential, commercial, and industrial use and are sold via independent HVAC contractors. DNA engineering and manufacturing is located at Daikin Texas Tech-

nology Park near Houston, Tex. For more information, visit www.northamerica-daikin.com.

XOï, the leading provider of technician-first smart technology for commercial and residential field service companies, is powering a world in which people and equipment are connected, decisions are transparent, and quality outcomes are predictable. Developed to meet the unique challenges of an

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industry traditionally underserved by technology, XOi equips field service professionals with groundbreaking technician-enablement tools, including remote support, visual documentation, immediate on-the-job insights and training resources, asset and team management functions, a comprehensive knowledge base, and operational insight dashboards leveraging data from current and historical projects. With a demonstrated commitment to the hard-working men and women in the field service industries, XOi delivers innovative artificial intelligence-based solutions that empower field service teams to drive productivity, elevate customer experience and help close the skilled labor gap. For more information, visit xoi.io.

NATIONAL



Carrier Completes Viessmann Acquisition

Palm Beach Gardens, Fla. – Carrier Global Corp. has completed its acquisition of Viessmann Climate Solutions from the Viessmann Group.

The transaction marks another step forward in Carrier's portfolio transformation, further strengthening the company's global leadership position in intelligent climate and energy solutions, the company said in a press release.

The combination adds a premier brand with a differentiated, direct-to-installer model and a key provider of efficient and renewable climate solutions with a 100-plus-year record of innovation to Carrier's portfolio, Carrier said. Viessmann Climate Solutions has 12,000 team members, further strengthening Carrier's position as an HVAC provider, and positioning Carrier in the fast-growing residential and light commercial (RLC) market in Europe, the company said.

Thomas Heim, who previously led Viessmann Climate Solutions, will lead Carrier RLC HVAC in Europe, the Middle East, and Africa, which includes Viessmann Climate Solutions and Carrier's RLC business in the region, including Riello.

Gas Industry Sues Energy Department Over New Furnace Efficiency Rule

New rule will require gas furnaces to be 95% efficient.

Washington, D.C. – The American Gas Association (AGA), joined other trade associations and a manufacturer in filing a legal challenge to a federal rule that will phase out non-condensing gas furnaces beginning in five years.

The final rule from the U.S. Department of Energy (DOE), issued last December, requires newly manufactured indoor residential gas furnaces to be at least 95% efficient starting in December 2028, meaning furnaces made after then will have to be condensing models.

In a press release, AGA said it has long supported improved building and appliance energy codes and standards that are technologically feasible, economically justified, and follow statutory requirements, but that the DOE's furnace rule

does not meet those standards.

The rule will effectively ban the sale of non-condensing gas furnaces and will affect 55% of U.S. households, according to AGA. DOE's own data shows that 30% of senior-only households, 26% of low-income households, and 27% of the owners of small businesses will face higher costs as a result of the new regulation, AGA said. For households with mobile home gas furnaces, 39% of consumers would be negatively affected by the proposed standard, according to DOE's analysis.

"AGA has attempted to work with the Department of Energy to address the rule's profound impacts on consumers and homeowners with a solutions-oriented approach to energy conservation that protects consumers and ensures continued availability of low-cost, low-emission natural gas furnaces. Unfortunately, our 114 pages of comments have been summarily ignored," said AGA President and CEO Karen Har-

bert. "This ruling from DOE will push American families with natural gas heat into a corner – when their furnace goes out, they'll be forced to choose between retrofitting for electric with the increased month-to-month utility bills that entails, or engaging in a costly and time-consuming renovation to retrofit their home for a completely different type of natural gas furnace. Either way, American families and businesses will be saddled with increased costs with little environmental gain."

The rule would make conventional, non-condensing natural gas furnaces unavailable to consumers. These furnaces rely on atmospheric venting that typically uses chimneys to vent to the outside. Condensing furnaces rely on different venting systems and are often difficult or impossible to substitute in place of non-condensing models due to physical limitations, especially in older homes and low-income neighborhoods where homes cannot

accommodate the venting and water hookup requirements of a condensing furnace.

Consumers in homes that cannot accommodate a condensing furnace would be forced to switch to electric heating, which can have higher emissions and increase monthly costs, when it comes time for a retrofit, AGA's press release said.

According to the most recent survey conducted by AGA in partnership with the Consortium for Energy Efficiency, natural gas utilities collectively spent almost \$1.6 billion on energy efficiency programs in 2020, a 391% increase in spending compared to 2007. This spending resulted in total savings of at least 325 million therms of energy in 2020 alone, AGA said. That's 1.7 million metric tons of greenhouse gas emissions, the equivalent of driving 4.6 billion miles.

"The combination with Viessmann Climate Solutions creates the most comprehensive and differentiated suite of sustainable climate technologies and services in the industry today," said Carrier chairman and CEO David Gitlin.

Effective immediately, Max Viessmann, CEO of the Viessmann Group, joins Carrier's board of directors.

"I look forward to working closely with Dave and his leadership team as well as my fellow board directors to build a future-proof, truly global climate champion," said Viessmann. "I could not be more excited about this combination, which lays the perfect basis to capture growth opportunities and maximize impact for generations to come."

Ferguson, CEO Warrior Form Partnership

Eatontown, N.J. – CEO Warrior, a nationally recognized business development, training and implementation organization for the service business industry, announced today that it has entered into a collaboration with Ferguson, a project success company providing expertise, solutions and products from infrastructure, plumbing and

appliances to HVAC, fire, fabrication and more, to provide its members with preferred access to the home service fulfillment giant.

"This collaboration with Ferguson shows CEO Warrior's commitment to add value to the services we provide our members," CEO Warrior CEO Scott Bohannon said. "It is our goal to offer our clients everything they need to be successful in their markets. Not only does CEO Warrior offer a full complement of training and mentoring solutions that help our members lead, grow and scale their services, we can now also offer them access to some of the finest products available in Ferguson's supply chain."

Founded in 1953, Ferguson is a leading value-added distributor of residential and commercial plumbing supplies and pipe, valves and fittings in the U.S. The company has 10 distribution centers offering clients rapid inventory access with the convenience of Pro Pick-Up services in as little as one hour, same-day or next-day delivery options.

"I am incredibly excited about the relationship between CEO Warrior LLC and Ferguson," said CEO Warrior Director of Business Development Caroline Moriarty. "This collaboration enables us to deliver greater value to our clients and reinforces our commitment to continued growth and high standards of quality products and

services."

CEO Warrior is the highest level business training and implementation organization in the trades industry. It is led by experts who have achieved success building and leading their own trades businesses and its members include the leaders of home service companies that provide plumbing, HVAC and other residential and commercial service companies.

For more information about CEO Warrior and how to become a member, please visit <https://ceowarrior.com/>.

CEO Warrior is a business development, training, and mentoring firm, providing tested and proven methods to eliminate the roadblocks that prevent small to mid-sized businesses from achieving success. CEO Warrior teaches service business owners, and their teams, how to lead, grow and scale their businesses by providing a variety of solutions to fit their individual situations. CEO Warrior uses a unique approach to training that encompasses mental focus, strategic thinking, resiliency, respect, and mindset while targeting the specific areas each business needs to address in order to reach their business goals. For more information about CEO Warrior, and to become a member, visit CEOWARRIOR.com.

Ferguson plc (NYSE: FERG; LSE: FERG) is a leading value-added distributor in North

America providing expertise, solutions and products from infrastructure, plumbing and appliances to HVAC, fire, fabrication and more. We exist to make our customers' complex projects simple, successful and sustainable. Ferguson is headquartered in the U.K., with its operations and associates solely focused on North America and managed from Newport News, Virginia. For more information, please visit corporate.ferguson.com or follow us on LinkedIn [linkedin.com/company/ferguson-enterprises](https://www.linkedin.com/company/ferguson-enterprises).

SupplyHouse.com Donates \$57K to PHCC Foundation

Falls Church, Va. – SupplyHouse.com, a leading e-commerce supplier for the heating, plumbing, HVAC, and electrical trades, announced that they are making a \$57,000 contribution to the Plumbing-Heating-Cooling Contractors – National Association (PHCC) and the PHCC Educational Foundation in support of training and workforce development projects.

As part of their Trade Tuesday campaign, SupplyHouse.com pledged to donate \$2 for every engagement on special social



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For additional product information and to learn more about available rebates **visit socalgas.com/Rebates**

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Continued from Page 6

media posts made in November. The trade community showed up to support the cause, with their social media sharing efforts earning a \$57,000 contribution.

“Our contributions to support the trades is an investment in the future of our industry,” said SupplyHouse.com Head of Integrated Marketing, Kyra Mitchell Lewis. “It’s clear that our online community agrees and is eager to help make our impact even greater. We appreciate that and the work PHCC is doing to recruit and train the next generation of industry leaders.”

The SupplyHouse.com gift will support PHCC Educational Foundation scholarships to apprentices and college students pursuing studies directly related to the plumbing-heating-cooling industry. It will also educate the public on opportunities in the trades at the PHCC – National Association’s workforce development website phccareers.org. It will remove barriers for new job entrants by supporting the Foundation’s online Plumbing and HVAC Workforce Readiness Course.

Additionally, an allocation to the Foundation’s Invest in Your Future annual giving campaign will support a wide variety of workforce development initiatives, including Foundation foremen and project manager workshops and apprentice competitions.

“SupplyHouse.com has been an incredible partner,” said PHCC Educational Foundation Chairman Kevin Tindall, of Tindall and Ranson Plumbing in Windsor, N.J. “They have a genuine desire to help people get their start and be successful in a trades career, which aligns with every program the Foundation delivers. This gift provides the resources needed to continue growing our training programs and making them accessible to a broader audience.”

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Food Banks Get Holiday Help from Munch’s Supply

Hillside, Ill. – Marcone, a distributor of HVAC, appliance repair, plumbing, commercial kitchen, and pool and spa parts, shared the results of an annual food drive to benefit food banks in Illinois, Indiana, and Michigan.

Marcone HVAC company Munch’s Supply raised \$9,716 and gathered 2,238 products for food banks in the communities it serves, according to a Marcone press release.

“The communities that we serve represent more than just a customer to Munch’s Supply,” said Steve Raimondi, market president for Illinois and Indiana. “These are our neighbors, co-workers and customers. It’s a privilege to play a small part in giving back.”

Employees and customers brought in donations of canned goods, non-perishable items, and household paper goods to each Munch’s Supply branch throughout the month of last November, the company said. Customers also supported the fundraiser through donations added onto their sales, and employees purchased raffle tickets for chances to win company-branded clothing, time off, or a Target gift card.

“The holidays can be a particularly challenging time,” said Adam Slusher, market president for Michigan. “As a leader in our communities, we want to give local families a helping hand so they can enjoy their celebrations.”

The annual food drive fundraising effort is an integral part of Munch’s Supply operations. All donations are brought to food banks near each Munch’s branch.

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Franklin Electric Buys Groundwater Distribution Company

Fort Wayne, Ind. – Franklin Electric Co., Inc. (NASDAQ: FELE) announced that its wholly owned subsidiary Headwater Companies, LLC acquired substantially all of the assets of LCA Pump, LLC, a Missouri limited liability company, which operates Water Works Pump. Water Works is a professional groundwater distributor located in Springfield, MO, and will operate as a branch of Headwater Wholesale, LLC, a subsidiary of Headwater Companies.

DeLancey Davis, President of Headwater Companies, commented: “We are excited to welcome Water Works to the Headwater Wholesale family. With over three decades of dedicated service to the pump industry and water resource markets, Water Works has earned a stellar reputation for delivering high-quality service. The addition of Water Works aligns with Headwater’s dedication to extending its reach, ensuring exceptional service, and reinforcing support for contractors and drillers in the Midwest. This strategic move marks Headwater’s inaugural venture into the Missouri market, aligning with our overarching goal of becoming the leading distributor of water systems solutions in the United States.”

Headwater Companies, LLC is a collection of leading distributors focused on groundwater, wastewater, water treatment and other products and services in water equipment markets. It delivers quality products and leading brands to the industry, providing contractors with the availability and service they demand to meet their application challenges.

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Heritage Distribution Buys Webb Supply

Atlanta, Ga. – Heritage Distribution Holdings, the U.S. platform for global HVAC wholesaler Beijer Ref, has signed an agreement to acquire the assets of Webb Supply (“Webb”), a wholesale HVAC distributor headquartered in Cleveland, OH and serving contractors in Northeastern Ohio and Western Pennsylvania – territories with seamless positioning in our current portfolio.

Founded in 1965, Webb is a family-owned company that is comprised of skilled professionals committed to providing solutions for different HVAC market segments, focused on residential add-on replacements and commercial projects. Webb has strong alignment with Heritage Distribution’s key suppliers.

Webb will continue to operate under its own brand, in both distribution and marketing. The company will become part of Heritage’s Northern Region, which includes Benoist Brothers Supply, NuComfort Supply and AMSCO Supply. The existing management will roll-over investment into Heritage Distribution and continue to run the business.

Alex Averitt, CEO Heritage Distribution, comments: “We are excited about the addition of Webb Supply to the Heritage Distribution family. Our growth, fueled by strategic acquisitions, allows us to continue adding new customers and enabling more people to live healthier and more comfortable lives.”

Heritage Distribution Holdings is the fastest-growing HVAC/R distributor in the US. With a focus on being the market leader in each local geography, HDH is expanding its footprint by partnering with businesses that share a tenacious commitment to customers, employees, and suppliers. From after-hours emergency service, to stocking our customer’s warehouses, the HDH family is fully invested in being the critical link in the supply chain that enables people to live healthier and more comfortable lives.

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METUS Honors Diamond Service Group Members

Suwanee, Ga. – Mitsubishi Electric Trane HVAC US (METUS), a manufacturer of ductless and ducted mini-split and variable refrigerant flow (VRF) heat-pump and air-conditioning systems, recently celebrated the contributions of its Diamond Service Group (DSG) members during the 2023 Diamond Service Group Conference in Atlanta.

Last year marked the DSG network’s 20th anniversary.

The DSG network encompasses 398 independent distributors that deliver technical service support in North America, Latin America, and the Caribbean. DSG members serve as local customer contacts for troubleshooting and offer support and training for all Mitsubishi Electric systems sold and installed through the network, a METUS press release said.

During the conference, METUS leadership thanked DSG network members for their participation. These distributors were also given technical instruction on current and future products in an effort to help them deliver quality support for HVAC contractors within their markets, METUS said. Approximately 225 participants attended the conference.

“While we continue to try new things to improve our annual DSG conference, our commitment to the ongoing development of our members remains unwavering,” said Brent Constant, senior director of technical solutions at METUS. “This year, we provided the opportunity for these valuable program members to choose from 10 unique training sessions containing topics most relevant to them individually and to their specific local markets.”

METUS leadership, including CEO Mark Kuntz, Constant, Brian Derry, the manager of service programs, and business unit technical service managers, presented the Business Unit DSG Distributor of the Year Award to companies in each DSG business unit.

METUS recognized the following individuals and companies for their achievements:

- John Zdon and Andrew Berry, Ferguson HVAC, King of Prussia, Pennsylvania, Mid-Atlantic Business Unit.
- Ralph Wolf and Al Taylor, Ferguson HVAC, Newport News, Virginia, Southern Business Unit.
- Dan Murray, Trane U.S. Inc., Willowbrook, Illinois, Central Business Unit.

- Justin Sanders, Kyle Sooter, Scott Shipley, Grant Hendrick, and Marlin Koslowsky, Trane U.S. Inc., Lenexa, Kansas, Southwest Business Unit.

- Mauro Rodriguez, Trane, S.A. DE C.V., Naucalpan De Juarez, Mexico.

- Ethan Smith, The Gustave A. Larson Company, Salt Lake City, Utah, Western Business Unit.

- Mike Lumia, Andre Correia, Peter Pavlov, Craig Johnson, Tat Yuen, Justin Heinzman, Robert Killion, Dave Carrette, Timothy Williams, and Bryan Warren, Homans Associates, Wilmington, Massachusetts, Northeast Business Unit.

Homans Associates and its team also received the DSG Distributor of the Year award.

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Johnson Controls Exceeds Heat Pump Challenge

Milwaukee, Wisc. – Johnson Controls (NYSE: JCI), the global leader for smart, healthy and sustainable buildings, announced the completion of the U.S. Department of Energy (DOE) Cold Climate Heat Pump Technology Challenge laboratory testing phase. Johnson Controls exceeded the performance benchmarks at extremely cold temperatures and achieved heating seasonal performance efficiencies well above today’s baseline products.

“The development of these next-generation systems plays a crucial role in efficiently electrifying our homes and reducing the carbon footprint of space heating,” said David Budzinski, president, Residential and Light Commercial, Johnson Controls. “Within this testing phase, we were able to successfully overcome many of the technological barriers that have historically slowed the decarbonization of residential heating in cold climates, and we look forward to the next phase of the challenge.”

The Cold Climate Heat Pump Technology Challenge was launched by the DOE to advance the performance of residential heat pumps so they offer reliable operation during winter in the northern United States. Achieving reliable heat pump performance during the coldest times of the year encourages heat pump adoption in more regions and is essential for maintaining a clean, resilient electricity grid. This makes it a critical step toward the decarbonization of residential heating and cooling across the country.

Continued on Page 10

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In laboratory testing the prototype operated at the coldest temperature the test cell could register. Field testing will take place at three sites this winter. The prototype heat pumps will remain active over the extent of the heating season to validate real-life performance.

The Cold Climate Heat Pump Technology Challenge is a part of Johnson Controls' larger commitment to propel the heat pump industry and drive sustainability. In partnership with the DOE Office of Manufacturing and Energy Supply Chains, Johnson Controls recently announced an initiative to accelerate the production of domestic heat pump manufacturing – including cold climate air source heat pumps – by expanding three of its U.S.-based factories. Combined, these facilities will be able to produce approximately 200,000 electric heat pumps per year. This substantial volume will help drive energy affordability and energy security, while helping combat climate change and creating new jobs.

To learn more about Johnson Controls heat pump technology, visit: johnsoncontrols.com/whatsaheatpump.

Laars Heating Acquires Electro Industries, Inc.

Rochester, N.H. – Laars Heating Systems, a designer and manufacturer of boilers, water heaters, and pool heaters used in residential, commercial, and industrial applications, has acquired Electro Industries Inc., based in Monticello, Minnesota.

Electro Industries is a manufacturer of electric boilers, air-to-water heat-pump technology, electric duct heaters, and controls. Laars is a subsidiary of Bradford White Corp.

“Electro Industries has developed a reputation for producing high-quality residential and commercial electric space-heating solutions since its founding in 1974,” said Bruce Carnevale, president and CEO of Bradford White, in a press release. “We are excited to welcome the employees of Electro Industries into the Bradford White family and incorporate their trusted products into the Bradford White portfolio.”

The acquisition will expand Laars' residential, commercial, and industrial space-heating portfolio, furthering its commitment to meet the growing needs of customers as state and local electrification poli-

cies and regulations continue to evolve, the Laars press release said.

“We are extremely excited that Electro Industries will become part of Bradford White Corporation, where their resources and market reach will allow the legacy of our family business to continue to grow for years to come,” said Krista Smith-Larson, president of Electro Industries.

“Laars Heating Systems and Electro Industries share similar commitments to American manufacturing, quality, and customer care,” said John Seefeldt, CEO of Electro Industries. “Joining with Laars Heating Systems will enhance our capabilities, allowing us to better serve our current customers while extending our offerings to a broader audience.”

This acquisition of Electro Industries includes all company assets, including the Electro Industries facility in Monticello, increasing Laars' U.S. manufacturing presence. Electro Industries will be organized as a division of Laars.

SMACNA Supports Executive Order on Labor Agreements

Chantilly, Va. – The Sheet Metal and Air Conditioning Contractors' National Association (SMACNA), supported by more than 3,500 construction firms engaged in industrial, commercial, residential, architectural and specialty sheet metal and air conditioning construction throughout the United States, announced its support for the final rule issued to implement President Biden's Executive Order 14063 requiring Project Labor Agreements (PLAs) for federal construction projects over \$35 million.

SMACNA has long championed PLAs as a valuable tool and key element to ensure fair wages, skilled labor, and contracting transparency throughout a project to create the conditions needed for highly complex and exceptionally large projects. It also ensures when seeking highly skilled contractors and union labor on large projects, that the work meets the highest possible quality standards, which is common in private sector projects, especially in the tech sector where no margin for error is acceptable. Sophisticated owners in both the public and private sectors know they need the best contractors utilizing a PLA to complete the facility on time and within budget at the highest quality. It is owners in the private sector who demand use of PLA the most and that benefits quality driven contractors best able

to meet owner demands.

“This updated rule will help ensure that large-scale federal projects are completed professionally and timely, while also supporting high skilled and paying jobs,” said Aaron Hilger, Chief Executive Officer at SMACNA. “Importantly, PLAs level the playing field by allowing all union and non-union contractors to bid and win federal contracts without discrimination concerning union status when selecting workers and contractors.”

PLAs were first used on the big public works projects of the 1930s. Since then, scores of large projects, public and private, have been built across the nation using PLAs. The efficient management of these projects has saved taxpayers and private businesses billions of dollars. Construction users increasingly favor PLAs because they reduce some of the uncertainty inherent in large-scale construction projects. They are also used to create highly developed structures for training and recruiting young workers into the building trades – a critical need considering looming skilled manpower shortages. To claim that federal PLAs are anti-competitive or union-only is simply false. More than 30 years ago, the Supreme Court confirmed in its unanimous Boston Harbor Decision that public use of PLAs is both lawful and longstanding.

PLAs are valuable tools for the construction industry because they can be used to create the conditions needed for a superior construction project, owners know this and demand it. Simply put, owners in both the private and public sector use PLAs because they work for the bottom line and quality demands.

For more information, visit www.SMACNA.org.

Winsupply Helps Entrepreneurs Launch Business

Dayton, Ohio – Winsupply Inc., one of the largest distributors in the nation, is keeping with its philosophy of helping courageous, capable, hardworking entrepreneurs succeed.

After purchasing the former location of the Golden Nugget Pancake House at 2932 S. Dixie Drive, Dayton, Ohio, 45409, Winsupply has identified the perfect local entrepreneurs to continue serving the Miami Valley with award-winning food and service.

Blue Berry Cafe, currently a Bellbrook staple, plans to open its doors at this new Kettering loca-

tion in the coming months.

“We understand the importance of this location to our community,” said Bill Tolliver, Real Estate Services and In-House Counsel, Winsupply Inc. “In seeking restaurateurs who share our values and commitment, we found the perfect match with Blue Berry Cafe. Their reputation for excellent food and service precedes them, and we couldn't be more thrilled about what this means for our neighborhood.”

As Blue Berry Cafe opens in this iconic location, guests can still expect their famous “big as your plate” pancakes, made-to-order omelets, and signature muffins. In addition, the Cafe plans to open a newly remodeled Bellbrook location in the coming months, a gesture of gratitude and commitment to the community that has supported them, especially through the challenges of the pandemic.

“My family has co-owned and operated Dayton restaurants since 1975,” said Kelley Andary and Ray Jean, owners of Blue Berry Cafe. “We're deeply grateful for Winsupply's belief in our work ethic and vision. Our passion is bringing people together over great meals, creating a space where the community feels at home. We're excited to maintain our presence in Bellbrook while embarking on this new journey in Kettering.”

“We are very excited about this opportunity and plan to open as soon as our friends in Kettering and Montgomery County sign off on the appropriate permits and licensing,” Tolliver said.

As one of America's leading materials suppliers for residential and commercial construction, Winsupply Inc. owns a majority equity stake in more than 660 local companies across the United States. Collectively, Winsupply is known as “The Winsupply Family of Companies” and includes Win-branded locations, Noland Company, Carr Supply, APCO, and other acquired regional suppliers.

American Welding Society, Miller Name Scholarship Recipients

Doral, Fla. – The American Welding Society (AWS) Foundation, in partnership with Miller Electric Mfg. LLC and Bechtel Group Foundation, is pleased to announce the recipients of the Light a Spark Grant:

- Bell City High School – Bell City, Mo.
- Griggs County Central School

– Cooperstown, N.D.

- Millennium High School – Goodyear, Ariz.
- Mountain View High School – Lawrenceville, Ga.
- Northern Cass School – Hunter, N.D.
- Warren Hills Regional High School – Washington, N.J.
- Wildwood Middle-High School – Sumterville, Fla.

The Light a Spark Grant brings welding back to high school with a turnkey Miller® equipment package valued at more than \$14,000. Each package includes a multi-process welding machine, plasma cutter, supplies, personal protective equipment, and a MobileArc™ Augmented Reality Welding System.

“The AWS Foundation is extremely pleased to offer this grant to high schools that do not currently offer a welding program. Thanks to Miller Electric and Bechtel Group Foundation, hundreds of students will have the opportunity to experience welding for the first time and consider the possibility of welding as a career,” said AWS Foundation Executive Director Monica Pfarr.

“Miller is committed to advancing the craft of welding through providing a foundation to inspire and excel the knowledge and opportunities in the welding career path” says Jessica Marhefke, Vice President and General Manager, Miller. “We are proud to partner with AWS and Bechtel Group Foundation to provide these schools with the equipment and supplies needed to introduce their students to welding.”

“These kits make it easy for educators to offer realistic learning experiences and position students for success in community college and university programs,” said Lee-Anne Lang, president of Bechtel Group Foundation.

This year the AWS Foundation will award more than \$3 million in scholarships, grants, and research fellowships to support welding education and workforce development across the United States.

The AWS Foundation was established by the American Welding Society on September 13, 1989, to support programs that ensure the growth and development of the welding industry through strengthening research and educational opportunities in welding and related industries. Led by a volunteer Board of Trustees, the Foundation is organized as a not-for-profit 501(c)(3) charitable organization. Administration, including program development, fundraising, public relations, marketing, and



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financial management is provided by a small development staff of the American Welding Society. Its operations are conducted from the Society's offices in Miami, Florida. For more information, visit aws.org/foundation.

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DOE Awards Trane Energy Savings Contract

Davidson, N.C. – Trane – by Trane Technologies, a global climate innovator, has been awarded the Department of Energy's (DOE's) Generation 4 (Gen4) Indefinite Delivery Indefinite

Quantity (IDIQ) energy savings performance contract (ESPC). This government-wide vehicle allows Federal agencies to leverage private capital and utility cost savings to reduce energy consumption, decarbonize, and enhance the resilience of Federal facilities. Trane has held a DOE IDIQ contract for 25 years.

Trane is one of 20 DOE IDIQ contractors who can compete for individual ESPC programs to accelerate the deployment of third-party capital in support of efforts to achieve the ambitious goals of Executive Order 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability.

The Gen4 contract carries a \$5B contract ceiling over 10 years. On the previous contracts, Trane has

executed several ESPC projects at Federal Facilities, resulting in a:

- total energy savings of nearly \$350 million;
- total fuel savings of 15,062,285 MBTU, or the annual energy use of 394 homes;
- total water savings of 1,472,309 kGals of water, the equivalent of 3,004 Olympic swimming pools; and an
- average consumer baseline energy consumption reduction of 32.2%.

"Trane is ready to deepen our longstanding relationships and expand to additional Federal agencies to help them accelerate their transition to clean energy and assure their missions," said Jody Wilkens, Vice President, Federal, Trane. "This most recent IDIQ clears the way for projects through

the end of the decade and further supports Trane Technologies' 2030 Sustainability Commitments."

Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments for commercial and residential applications. For more information, please visit www.trane.com or www.trane-technologies.com.

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BDR Launches Business Academy

Seattle, Wash. – Business Development Resources (BDR), the training and business coaching authority for home services industry professionals, introduces its Emerging Business Academy, a streamlined version of

its flagship coaching program tailored to the unique needs of growing small businesses.

BDR's Emerging Business Academy, designed for businesses with four people or fewer, guides motivated owners to put specific foundational systems and processes into place to reach revenues of \$1 million and beyond.

"With our Emerging Business Academy, the goal is to introduce small business owners to the process of structuring their business to grow and be successful long-term," said Kim Archer, President of BDR. "For over 20 years, our Profit Coach program has provided insights to help owners shift from a tactical role to a strategic one. We're taking that same proven system and customizing it specifically for smaller businesses looking to take their first steps in driving profit and growth."

Emerging Business Academy's year-long series of 48 weekly sessions starts on Jan. 17. Each 60-minute session features 30-40 minutes of instruction followed by 20-30 minutes of discussion and follow-up. As the sessions progress, participants discover BDR's core best practices and work with their coach to construct a business plan supporting increased profitability and growth to scale.

Participants in Emerging Business Academy build a foundation for their company to succeed and grow through insights of million-dollar business owners, focusing on actionable steps in areas such as:

- Proper pricing and job-costing
- Sales and estimation practices
- Building effective marketing programs
- The power of accessories and maintenance agreements
- Timely billing and collections
- Successfully managing and leveraging your team
- Delegation and performance accountability

Along with the weekly live sessions, the Emerging Business Academy also includes access to BDR's industry-leading training program, with the ability to choose four different 3-Hour Power-Up courses throughout the year.

Find out more about BDR's Emerging Business Academy or register at <https://www.bdrc.com/emerging-business-academy/>.



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DOE Finalizes Efficiency Standards for Residential Refrigerators, Freezers

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equivalent to the emissions of 18 million gas-powered cars, 22 coal-fired power plants, or 10.5 million homes over 30 years.

“Today’s announcement is a testament to the Biden-Harris Administration’s commitment to lowering utility costs for working families, which is helping to simultaneously strengthen energy independence and combat the climate crisis,” said U.S. Secretary of Energy Jennifer M. Granholm. “DOE will continue to move quickly in 2024 – together with our industry partners and stakeholders – to update and strengthen outdated energy efficiency standards, which is critical to innovation, more consumer options, and healthier communities.”

As of today, DOE has issued 30 proposed or final energy efficiency standards in 2023, meeting the Administration’s goal for the year while also carrying out Congress-

sional direction for energy savings that maintain reliability and performance across household appliances and commercial and industrial equipment. These actions reinforce the trajectory of consumer savings that form a key pillar of President Biden’s Investing in America agenda and underscore the Administration’s commitment to tackling the climate crisis while lowering costs for American families and businesses. The President’s unprecedented actions to strengthen efficiency standards will save the average family at least \$100 a year through lower energy bills.

A broad coalition of appliance manufacturers and advocates for consumer protection, water and energy efficiency, and climate action announced their support for updating several home appliance standards, following on DOE proposals. This year, the Administration will continue making rapid progress on finalizing cost-

saving standards informed by stakeholder input.

Residential Refrigerators and Freezers

The efficiency standards being adopted for residential refrigerators, refrigerator-freezers, and freezers, which have not been updated in over a decade, align with recommendations from a diverse set of stakeholders, including manufacturers, the manufacturing trade association, energy, environmental, and consumer advocacy groups, states, and utilities. Compliance will be required either January 31, 2029, or January 31, 2030, depending on the configuration of the refrigerator or freezer. The energy savings over 30 years of shipments is 5.6 quadrillion British thermal units, which represents a savings of 11% relative to the energy use of products currently on the market. DOE estimates that the standards would save consumers \$36.4 billion over 30 years of shipments and result in cumulative emission reductions of nearly 101 mil-

lion metric tons of carbon dioxide – an amount roughly equivalent to the combined annual emissions of 12.7 million homes.

Commercial Fans and Blowers

DOE also released a proposed rulemaking for commercial fans and blowers that would reduce energy costs for American businesses by \$3.3 billion annually. This proposal – the first federal standard for this product – follows the lead of efficiency standards already established by the state of California for general fans, extending savings to consumers nationwide and providing clarity for manufacturers. If adopted within DOE’s proposed timeframe, the new rule will come into effect in 2029. DOE estimates the new rule will reduce utility costs for American businesses by nearly \$56 billion over 30 years of shipments, while reducing carbon dioxide emissions by nearly 318 million metric tons – an amount roughly equivalent to the com-

bined annual emissions of 40 million homes.

Delivering Savings to American Families and Businesses

In addition to lowering costs through improved energy standards, DOE earlier this year launched the Energy Savings Hub – an easy-to-use online resource consumers can use to access the cost-saving benefits of President Biden’s Investing in America agenda. The website outlines clean energy tax credits and forthcoming rebates, helping people take control of their energy costs and have cleaner and more efficient options as a consumer – whether they’re looking to purchase an electric vehicle, update an appliance, or make their home safer and more comfortable. To learn how you can drastically cut your energy bills and keep money in your pocket, visit www.Energy.gov/Save.

Heat Pump Survey

Continued from Page 1

more” than the summer before, and 54% said it cost “somewhat more” or “much more” to heat their home this winter, compared to last winter. Similarly, 49% ranked “reduce energy bills” as one of their top three reasons to consider installing a heat pump.

According to the survey, 24% of respondents stated their home is already equipped with a heat pump and 69% would consider installing a heat pump in their home. While 28% of homeowners

say a concern preventing them from considering a heat pump in their home is the installation cost, 54% of all survey respondents ranked government incentive (such as a tax credit or rebate) as one of their top three reasons why they would consider installing a heat pump. “Reduce Energy Bills” and “Improve Air Quality in My Home” also were ranked among the top three reasons by 49% and 36% of survey respondents, respectively.

The IRA’s Energy Efficient Home Improvement Credit (section 25C) offers a nonrefundable tax credit of 30% of the qualified

expenses to install a qualified heat pump that is placed in service on or after January 1, 2023 and before January 1, 2033, up to \$2,000 per year.

“The financial incentives offered through the IRA are anticipated to accelerate the adoption of energy-saving, all-climate heat pumps,” said Mark Kuntz, chief executive officer, Mitsubishi Electric Trane HVAC US. “Our mission is to educate homeowners about the many benefits of all-climate heat pumps versus conventional heating and cooling systems.”

The survey also found more homeowners would be interested in tax credits for installing a heat pump or high-efficiency electric heating, ventilation air conditioning, and/or water heating, than interested in installing solar panels or purchasing a new or used electric vehicle. This benefit is even more appealing for Millennials (born between 1980 and 1993)

as 65% cited, among other listed options under the IRA, that tax credits for installing high-efficiency electric heating, ventilation, air conditioning and/or water heating would be of interest to them.

For more information about Mitsubishi Electric products, visit www.mitsubishicomfort.com.

The Heat Pumps and Homeowners Index, sponsored by Mitsubishi Electric Trane HVAC US (METUS), polled in June 2023 more than 1,000 American homeowners. Data cited in this index is for informational purposes only. Respondents included all age groups (18 and older), regions and genders. The margin of error for this Index is +/- 3.114%.

Formed in May 2018, Mitsubishi Electric Trane HVAC US LLC (METUS) is the exclusive provider of Zoned Comfort Solutions® and

leading supplier of Ductless and Ducted Mini-split and Variable Refrigerant Flow (VRF) heat pump and air-conditioning systems in the United States and Latin America.

A joint venture between Trane Technologies plc and Mitsubishi Electric US, Inc., the company provides innovative products, systems and solutions capable of heating and cooling a broad range of applications, from a home to a large commercial building with superior efficiency, comfort and control.

The family of brands supported by METUS includes: Mitsubishi Electric, Trane®/Mitsubishi Electric and American Standard®/Mitsubishi Electric. More information is available at www.metahvac.com.



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Editorial Focus

Midea Survey Unveils Stark Awareness Gap in Heat Pump Technology Among Homeowners, Contractors

Midea, one of the world’s largest producer of major appliances and a leading innovator in the HVAC industry, unveils an eye-opening survey that found more than half of homeowners are not fully aware of heat pumps and their function, and therefore have not considered the purchase. The survey conducted by Atomik Research shows a considerable awareness gap of the potential

of heat pump technology amongst homeowners and contractors, as well as a willingness to embrace heat pumps with proper understanding of the technology. Heat pump adoption has been rapidly rising in 2023 and with ongoing federal and regional legislation and incentives, adoption is expected to continue to increase in 2024.

Further highlights from this survey show that:

- 80% of homeowners claim to know what a heat pump is despite over half (54%) being unsure or unknowledgeable about its full capabilities, particularly its ability to provide both heating and cooling.

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Energy Department's Heat Pump Challenge Continues, Four Added to List

With DOE support, four additional industry manufacturers enter next phase of Residential Cold Climate Heat Pump Challenge.

The U.S. Department of Energy (DOE) recently announced that four additional heat pump manufacturers successfully produced heat pump prototypes as part of the Residential Cold Climate Heat Pump (CCHP) Technology Challenge, a DOE initiative to accelerate the deployment of heat pump technologies by supporting innovation and manufacturing.

Launched in 2021, this initiative brings together public and private sector stakeholders to address technical challenges and market barriers to adopting next-generation cold-climate heat pumps – a key clean energy technology that can potentially save households \$500 a year or more on their utility bills while also slashing harmful carbon emissions.

The Challenge specifies that prototypes deliver 100% heating capacity without the use of auxiliary heat and with significantly higher efficiencies at 5 degrees Fahrenheit. Through the Challenge, DOE is working together with industry to accelerate widespread commercialization of efficient cold-climate electric heat pumps, which can provide clean heating and cooling for millions of American families and help meet President Biden's goal of 100% carbon pollution-free electricity by 2035 and a net-zero carbon economy by 2050.

"Deploying next-generation technologies like heat pumps is critical to the Biden-Harris Administration's efforts to ensure that Americans have access to more affordable clean heating and cooling options – no matter where they live," said U.S. Secretary of Energy Jennifer M. Granholm. "By supporting industry advancements, DOE's Cold-Climate Heat Pump Challenge is helping get cost-effective clean energy technology into homes across America – keeping families warm during the coldest months and saving them money."

Heating and cooling buildings, homes, offices, schools,

hospitals, military bases, and other critical facilities contribute to more than 35% of all U.S. energy consumption, driving carbon emissions that fuel climate change, jeopardize public health, and pollute local ecosystems.

Heat pumps efficiently provides comfortable temperatures for heating and cooling homes and businesses in all climates, especially when homes are well insulated, and can also provide more efficient water heating. Unlike heaters that run on natural gas or heating oil, heat pump technology uses only electricity to extract heat from the air to heat and cool buildings and, when compared to gas boilers,

heat pumps reduce on-site greenhouse gas emissions by up to 50%.

Bosch, Daikin, Midea, and Johnson Controls will join previously announced partners Lennox International, Carrier, Trane Technologies, and Rheem in the next phase of the Challenge, which is expected to involve the installation and monitoring of more than 23 prototypes in various cold-climate locations throughout the U.S. and Canada over the next year.

With eight manufacturing partners successfully passing the laboratory testing stage in the Challenge, DOE is now turning to the nearly 30 state, utility, and other partners that were part of the original Challenge commitments to encourage the adoption of CCHPs. DOE will

continue to work with partners to develop programs, incentives, education and outreach campaigns that help consumers better understand the benefits of these new designs.

Electric heat pumps enable more American families and businesses to benefit from lower energy costs through American-made clean energy technologies, while supporting good jobs, reinvigorating American manufacturing, improving public health, and tackling climate change. Additional savings are currently available through President Biden's Inflation Reduction Act's Energy Efficient Tax Credit 25C tax credits, which helps consumers afford heat pumps. To learn

more about savings and how heat pumps work, visit Pump Up Your Savings with Heat Pumps or DOE's Energy Savings Hub – an easy-to-use online resource consumers can use to access the cost-saving benefits of President Biden's Investing in America agenda.

The Residential CCHP Technology Challenge is part of the Initiative for Better Energy, Emissions, and Equity (E3 Initiative) run by DOE's Building Technologies Office in the Office of Energy Efficiency and Renewable Energy. DOE is partnering with the U.S. Environmental Protection Agency and Natural Resources Canada on this effort.



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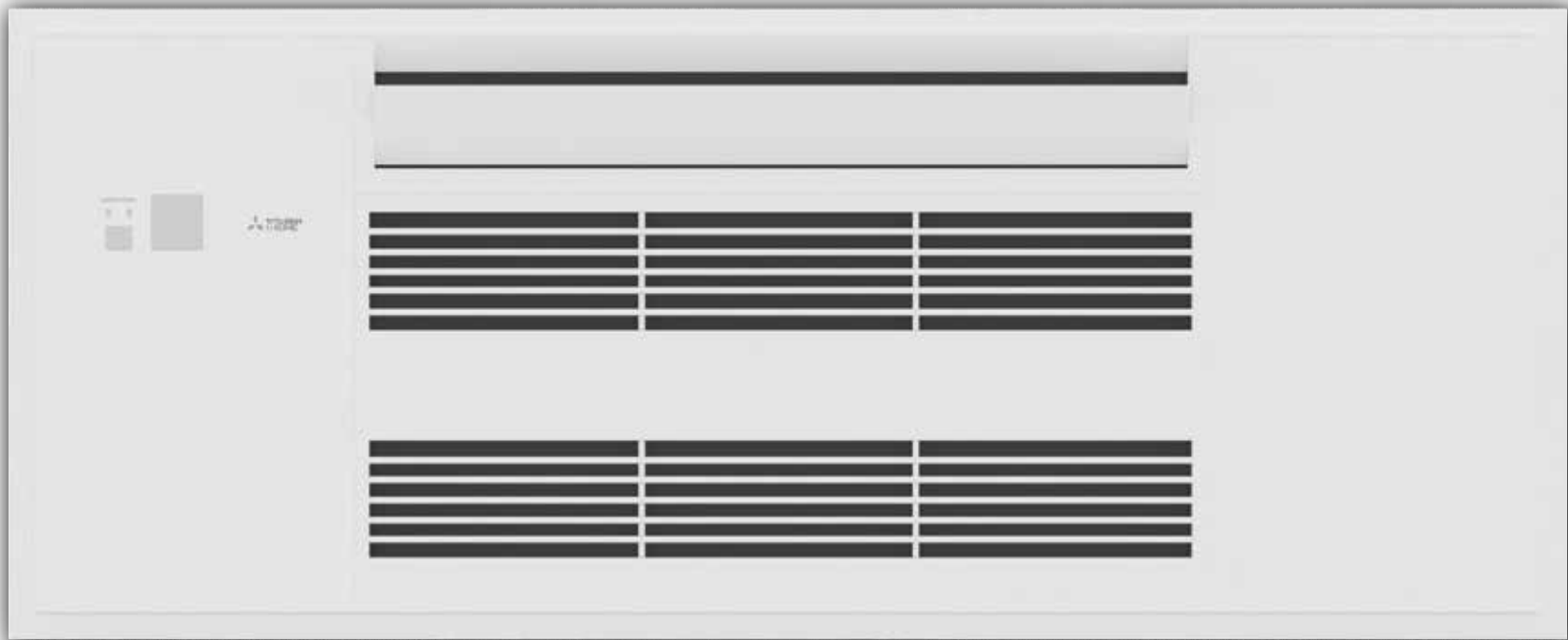
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Introducing the New EZ FIT® 6K BTU Ceiling Cassette

The smaller MLZ-KY EZ FIT® One-way Ceiling Cassette recesses between I-joists, providing a clean flush-mount appearance. The slim body design fits into shallow ceiling cavities making the EZ FIT a perfect selection for new construction projects, hotels, office spaces or any room upgrade. Compatible with multi-zone heat pumps and featuring high/low ceiling airflow settings, automatic vane control and is easily serviceable from below. The new smaller EZ FIT is specifically designed to provide personalized room comfort for multiple applications.



MLZ-KY06NA Dimensions
W: 33-3/16 x D: 11-7/8 x H: 7-11/16

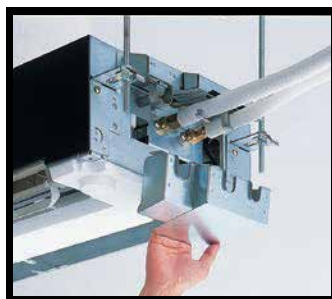
Compact Design

With its slim and compact design, new MLZ-KY model can be installed between a conventional joist and I-Joist.



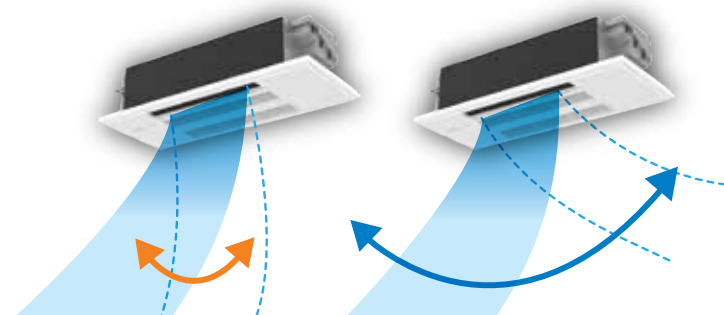
Serviceable from the Bottom

You have total access to the inside of the unit without requiring a service access panel.



Auto Vane Controller

Outlet vanes can be moved left and right, as well as up and down using the remote controller, improving airflow control.

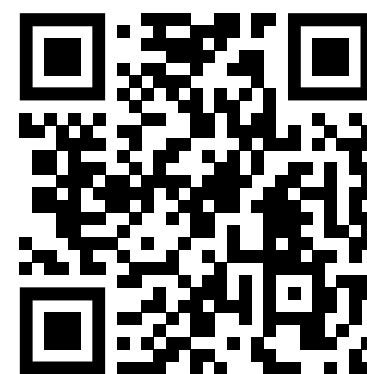




Key Features of the MLZ-KY06NA

- Designed to fit between I-joist spacing
- Stylish, square design panel
- Built-in condensate lift mechanism (19.6")
- Serviceable from the bottom (electrical and flare connections)
- Adjustable fan speeds and vane directions
- Washable antibacterial and deodorizing filter
- Multiple control options available:
 - Hand-held Remote Controller (provided with unit)
 - kumo cloud® smart device app for remote access
 - Third-party interface options
 - Wired or wireless controllers
 - Pocket inside the access panel for kumo cloud® Wireless Interface

Scan this QR code to watch a short video on the MLZ series products



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Carrier Puron



Carrier is continuing to lead in sustainability efforts by phasing in the lower global warming potential (GWP) refrigerant R-454B, commercially known as Puron Advance™, to its residential systems complete with new mitigation and reclamation components. Additionally, Carrier's industry-leading training programs recently opened for enrollment as distributors and dealers ramp up for the change-over in products, navigating tough kitchen table conversations, and phasing-out inventory.

Carrier is part of Carrier Global Corporation (NYSE: CARR), global leader in intelligent climate and energy solutions.

"Our customers, employees and planet were top of mind when we started collaborating on what changes needed to be made to not just address the refrigerant phase-down in 2025, but to provide the best solution for residential ducted, ductless and light commercial applications for years to come," said Nick Arch, Managing Director of Residential HVAC, Carrier. "We're confident that Puron Advance is the lower-GWP, non-ozone depleting potential, solution that will help homeowners achieve their sustainability goals now and in the future."

With a GWP of 466 – a 75% reduction from R-410A – and non-ozone depleting potential, Puron Advance refrigerant was selected as the best solution to minimize environmental impact and provide longevity based on the United Nations Montreal Protocol Kigali Agreement phasedown plan. Carrier worked closely with regulators and research groups to develop standards, codes and regulations that will help ensure the safe use of R-454B.

Carrier is redeveloping its portfolio of HVAC systems, enhancing from the inside out so units are lighter, technology-enabled, and equipped with new-refrigerant specific components to support with refrigerant transportation, handling, installation, and leak mitigation and reclamation – ahead of regulatory changes. Changes above and beyond regulatory requirements include lighter coils such as

Vertex™ Technology, enhancements to communicating capabilities through IntelliSense™ Technology, incorporating Near Field Communication for faster installation and servicing, and refrigerant-specific additions such as new leak sensors, differentiated labeling, and early training.

More information:

www.carrier.com.



Daikin Applied Chillers



Daikin Applied has announced two new products that add to its lineup of Trailblazer® air-cooled scroll and Pathfinder® air-cooled screw chillers, and build on the company's commitment to helping customers decarbonize their facilities. Daikin's new Trailblazer (model AGZ-F) is one of the first chillers available in North America with low-global warming potential (GWP) and highly efficient R-32 refrigerant. The company has also added a closed-loop version of the Pathfinder with Free Cooling (model AWW) to its portfolio. Ideal for data centers and other energy-intense applications, this chiller delivers the efficiency benefits of an integrated water-side economizer, commonly known as "free cooling," while eliminating the need to use glycol in the building water loop as an antifreeze.

While there are other low-GWP refrigerants on the market, the low-GWP plus high capacity and efficiency of R-32 is a leading combination for decarbonization. With R-32, Trailblazer AGZ-F delivers 10% greater capacity and efficiency versus previous models, with the potential to provide cost savings and reduce carbon emissions. Also, with a 33% reduced footprint and 10% reduced weight, AGZ-F presents a more compact solution for engineers, contractors, and building owners and operators cognizant of limited space.

With a 30- to 240-ton range, AGZ-F features composite condenser fan blades as well for a simpler mechanical design with less potential for parts failures and related maintenance spend.

The use of R-32 proactively addresses federal legislation to phase out higher-GWP refrigerants such

as R-410A. Along with the new Trailblazer chiller, Daikin is working to integrate R-32 into more of its applied offerings. That's because the refrigerant has a reduced GWP compared to R-410A, which lessens the warming impact per pound of refrigerant. R-32 also requires a lower refrigerant charge per ton of cooling compared to popular alternatives, reducing the amount of refrigerant needed. And R-32 has a positive impact on unit efficiency, which trims the kilowatt-hour consumption and grid-level emissions associated with electricity grids that rely heavily on fossil fuels to generate electricity.

As data centers continue to scale exponentially, there has been increasing customer interest in HVAC systems that don't require an antifreeze in the facility water loop. The Pathfinder AWW with Closed-Looped Free Cooling eliminates the need to add glycol to the building's water loop to prevent freezing in colder climates. By pairing an intermediate heat exchanger with the chiller, glycol can be used outdoors in the chiller, but remains isolated from the building water loop, which reduces any potential impact to performance and maintenance inside the facility.

While data centers will undoubtedly benefit, it can also be useful for other applications that need cooling regardless of season including hospitals, and indoor agricultural and manufacturing facilities. The variation allows the chiller to be used in a wider variety of climates, while still driving the efficiencies associated with free cooling.

Closed-loop free cooling uses outdoor air to naturally cool the fluid loop, reducing compressor work and increasing chiller efficiency. It also operates without needing water from a cooling tower. This drastically cuts water consumption, as well as costs for water, sewer and chemical treatment.

More information: www.daikinapplied.com.



Johnson Controls-Hitachi airCore

Johnson Controls-Hitachi has introduced airCore, the first line of precision air conditioner (PAC) heat pump systems in the U.S. to use R-32 refrigerant. R-32 is a refrigerant with low global warming potential that produces fewer greenhouse gas emissions than

R-410A. Low-GWP refrigerants such as R-32 reduce the impact of heating and cooling equipment on the environment and can meet upcoming refrigerant regulations.

Many states, such as California, have already established regulations that will phase out the use of high-GWP refrigerants in HVAC equipment, and the Environmental Protection Agency (EPA) has recently proposed regulations that allow only refrigerants with a GWP of 700 or lower to be used in new comfort cooling equipment starting January 1, 2025. By using low-GWP R-32, airCore units can comply with regulations before they go into effect.

In addition to using low-GWP refrigerant, the airCore line of universal outdoor units deliver energy efficient performance and make it possible for residential and light commercial applications, including small markets, restaurants, salons and medical offices, to decarbonize their heating and cooling when the electric units are powered by renewable electricity. The units may also qualify for state rebates and incentives.

The airCore line features industry-leading piping lengths of up to 245 feet, which allows for greater installation flexibility and is especially advantageous for building configurations in coastal regions. With a maximum external static pressure (ESP) of 0.8, airCore units can be used in parallel with existing ducted equipment. In buildings that use multiple airCore units, the units can be networked and controlled without a larger building management system through easy connection using BACnet or Modbus adaptor.

"The new Johnson Controls-Hitachi line of airCore heat pump systems is changing the game for PACs," said Manuel DeLaFuente, vice president and general manager of Johnson Controls-Hitachi North America. "With low-GWP refrigerant, high energy efficiency and longer piping lengths, airCore units can help more buildings reduce their environmental impact and keep occupants comfortable in a more sustainable way."

The line of airCore heat pump systems can operate in temperatures as low as -13 F, reaching up



to 45,000 British thermal units (BTUs). Units features compressor core heating technology with advanced, multipulse control that improves efficiency in low-ambient conditions and improves startup time as well as a smart defrost control. This control monitors the amount of ice accumulated on the outdoor unit, then clears it to ensure maximum operational efficiency. Conventional units run defrost on a timed cycle, which means defrost mode can run unnecessarily and affect unit efficiency and occupant comfort. The airCore smart defrost control only runs defrost mode when it senses that ice has collected on the outdoor unit and can learn from previous defrost conditions to optimize defrost cycle frequency and minimize heating disruption.

The airCore line comes standard with FrostWash, a self-cleaning technology that can improve indoor air quality. As dust, dirt and condensate collect on the heat exchanger, FrostWash freezes the moisture. It then melts and flushes the moisture and trapped contaminants away. Optional accessories, such as human sensor, Wi-Fi adaptor for airCloud Home, H-Link adaptor for airCloud Pro, third-party thermostat adaptor and low-ambient cooling kit for temperatures as low as -40 F.

More information:

www.jci-hitachi.com/



Allied Air Enterprises MagicPak



Allied Air Enterprises is pleased to announce the MagicPak All-in-One® V-Series™ 13 SEER unit has been selected as a winner by the prestigious Architectural Products 13th annual Product Innovation Awards (PIAs). The magazine's panel of judges, who represent the full spectrum of the architecture and design community, chose the MagicPak V-Series for providing a through-the-wall HVAC solution for multifamily dwellings that has exceptional performance and reliability, while opening up space for value-added amenities.

"We are thankful for all the companies that entered prod-

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ucts for consideration,” said Architectural Products’ Editor in Chief Jeanette Pitts. “We are grateful for our esteemed panel of judges who took the time to review these products and explain what they found to be innovative or interesting. Their insights are such a critical piece of what makes the Product Innovation Awards unique and informative for our readers.”

Architectural Products’ recognition emphasizes the MagicPak V-Series’ innovative space-saving design and energy efficiency. The units provide an all-in-one heating and cooling solution that enhances comfort and allows more space for rooftop amenities such as pools, lounges and greenspaces. With integrated heating and cooling and built-in features for cold environments, the V-Series units’ self-contained package eliminates the need for an outdoor unit or additional power supply, refrigerant lines, and accompanying installation items.

“Earning a PIA award from Architectural Products, a key publication in the building and design industry, underscores Allied Air’s reputation as a preferred source of commercial and residential HVAC solutions,” said Angela Chapoy, General Manager at Allied Air. “We extend our gratitude to the entire team for their dedication and hard work, contributing to this remarkable achievement.”

More information:
www.magicpak.com.

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NAVAC A2L Refrigerants Tools

NAVAC, one of the world’s largest supplier of vacuum pumps in addition to a wide array of tools, gauges, charging machines, recovery units and industry-specific items, has further expanded its line of tools compatible with A2L refrigerants. The series extension comes amid news that the EPA will require technology transitions to equipment utilizing greener refrigerants beginning January 1, 2025.

Since legacy HFC refrigerants such as R-410A will still be used on a scaled-down basis, NAVAC’s portfolio of HVAC/R tools are designed to handle both newer and older



refrigerants. Industry groups as well as manufacturers like NAVAC have been spreading the word about the pending phasedown, and developing solutions to ensure a seamless transition to more eco-friendly refrigerants.

A2L refrigerants have higher flammability than their predecessors. Refrigerants in this class include R-32 and R-454B, which

offer a lower global warming potential (GWP) than legacy products like R-410A. NAVAC is among the first HVAC/R manufacturers to offer a comprehensive line of A2L-compatible solutions, whose features include sparkless design, DC brushless motors, soft contact power switches, fans, and covered connections for all electrical terminations. Highlighted solutions include:

- NAVAC’s Pro Series NP7DP2 Vacuum Pump features a dual-stage pump and a ¾ horsepower motor, and delivers a 7cfm flowrate and an ultimate vacuum down to 15 microns. The unit’s integrated cylinder structure, coupled with forced oil

circulation, assures high performance and reliability.

- To differentiate newer, slightly flammable A2L refrigerants from A1 non-flammable ones, refrigerant tanks containing R-32 and R-454B have adopted left-handed connections. To accommodate this change, NAVAC’s NH5L Left-Handed Thread Hose helps ensure tight, leak-free connections to A2L refrigerant tanks. The new thread hose is easily discerned from traditional thread hoses by its orange color and two rings on the reverse threaded side (versus one ring on a conventional thread).

- Compatible with both R-32 and R-454B refrigerants, NAVAC’s N2A4B Manifold Gauge effectively measures the pressure of various gases and liquids, helping technicians reduce leaks and system failures. Featuring a durable aluminum body and ball valves, the gauge can diagnose and determine the status of four refrigerants in total, surpassing the versatility of similar models. The N2A4B Manifold Gauge’s impact-resistant design includes a molded protective shell and rubber covering for shock absorption,

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- Enhanced Coils and Air Handler Designs
- Factory ready A2L Coils and Air Handlers with R-454B and R-32 detection and mitigation systems
- A2L Field-Installed Kits for Air Handlers, Cased and Uncased Coils
- A2L Field-Installed Kits for Aspen R-410A Coils and Air Handlers
- Full Line of Coils and Air Handlers Convertible from R-410A to R-545B or R-32
- Higher Efficiency Coils Ready to Outperform with All Refrigerants



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and an integrated folding hook design offers ease of transport.

For NAVAC, other A2L-compatible vacuum pumps include the NP4DLM & NP2DLM Cordless Vacuum Pumps, part of the company's BreakFree Series® of cordless HVAC/R solutions. The NP4DLM features a high-performance lithium battery capable of up to one hour of continuous running time, while the NP2DLM is a compact, lightweight unit suitable for residential HVAC systems up to 5 tons with high-speed evacuation hoses. The company's popular NRP8Di and NRP6Di units – the market's first DC-driven vacuum pumps – also are A2L-compatible. Featuring a digital control interface, the units offer unsurpassed intuitiveness with features such as task reminder, extended evacuation for improved vacuum, and precision vacuum measurement technology with digital display.

NAVAC's A2L-compatible recovery units include the NRDD Recovery Unit, recently substantiated as the market's fastest twin-cylinder recovery unit per UL certification data. The unit features a brushless DC motor that allows it to provide substantial power in a compact size and weight of just 25 pounds. This DC technology also provides better starting performance under low voltage conditions. The NRDC4M Recovery Unit – which, as the world's first DC inverter 4-cylinder recovery unit, is the fastest and most powerful machine of its kind on the market – also is A2L-compatible. Operating up to 40% faster than 2-cylinder units, the NRDC4M utilizes an efficient brushless DC motor and ultra-effective condenser with an oversized microchannel coil and three cooling fans.

More information:
www.navacglobal.com.

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Noritz EZ Series

The newly upgraded EZ Series of Residential Condensing Tankless Water Heaters from **Noritz** America now offers an improved and industry-leading Uniform Energy Factor of 0.96, while maintaining a 25-year warranty – also an industry-best – on its redesigned, dual stainless-steel heat exchangers. The higher UEF



should deliver substantial energy savings and lower monthly fuel bills to the home or business owner over the extended life of these highly durable water heaters.

The key to both the warranty and the efficiency gain – up from 0.95 UEF for the previous EZ Series – is the unique blending of two types of high-grade stainless steel in the heat exchangers, using the material that best supports each component's function. The primary heat exchanger is made of a higher tensile strength stainless material to resist heat shock and cracking under the high temperatures it routinely handles. The secondary exchanger extracts latent heat from the combustion process, producing an acidic condensate. As a result, it features a stainless material that is especially adept at resisting corrosion and scale buildup, even after years of demanding usage.

The upgraded EZ Series also offers an industry-first: A Steady BTU (SBTU) Mode that eliminates concerns over high incoming water temperatures, particularly in warmer regions of the country. Both EZ models, the EZ98DV and the EZ111DV, have minimum BTU per hour outputs of 18,000. But the series' breakthrough, burner-control technology reduces the effective minimum input by more than two thirds – to under 5,000 BTU per hour – whenever incoming water temperatures approach 90°F.

"The SBTU Mode resolves what many have considered a drawback in tankless water heater technology: how to handle minimal demands for heat in the warmer summer months," says Noritz Executive Vice President-Sales and Marketing Jason Fleming. "The new and highly precise control of the combustion process should effectively eliminate this problem."

Other key enhancements to the upgraded EZ Series, delivering greater installation flexibility, include:

- **Faster common venting:** Each EZ unit now has a fully integrated non-return valve (NRV) to streamline common venting for up to two heaters with no need for additional accessories. Because the NRV is not an add-on, but built right into the tankless water heater, operational safety is assured, preventing the harmful exhaust of one water heater from back-flowing into the other, non-operating unit. Installation time and cost are significantly reduced by eliminating the need to install the NRV externally between the water heater and the common-vent header.

- **Longer vent lengths:** The new EZ Series models can also direct-vent, using either 2-inch or 3-inch PVC or CPVC or rigid polypropylene materials. In addition, vent lengths have been extended: 65 feet for 2-inch pipe, up from the previous 60 feet; and 150 feet for three-inch pipe, up from the previous 100 feet.

As with their predecessor models, the new EZ98DV and the EZ111DV share three critical design features. Unique to the EZ Series, these features help reduce a homeowner's upfront investment by sharply curtailing the installation time and cost for the plumbing or HVAC contractor:

- top-mount, hot-water and cold-water connections that reduce the amount of new-plumbing work normally required by a tankless-for-tank replacement;
- maximum venting flexibility by repurposing the existing flex vent used by the tank water heater being replaced as a chase for the new venting – again cutting installation time;
- the possibility of reusing the tank unit's half-inch gas line, avoiding the substantial expense of running a new gas line.

Both models are available in their own "EZTR Bundle" packages (EZTR50 and EZTR75) that include materials and accessories for direct indoor replacement of 50- and 75-gallon, tank-type water heaters.

The EZ98DV has a maximum input of 180,000 BTU/h; a capacity range of 0.5 to 9.8 gallons per minute (GPM); and water temperatures from 100°F to 140°F (in 5°F intervals). The EZ111DV has a maximum input of 199,900 BTU/h, a capacity range of 0.5 - 11.1 GPM, and the same water temperatures.

Both units weigh 70 pounds

and can be installed indoors or outdoors. (Accessories required for single-vent or outdoor installations). Additional accessories include a remote controller and cord, anchoring screws and wall-mounting brackets.

More information:
www.ezseries.noritz.com.

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Reznor Model EUH



Reznor, an industry-leading unit heater manufacturer, introduces the electric unit heater (Model EUH). One hundred percent heating energy efficient, Model EUH electric unit heaters utilize naturally generated electricity from sources like solar, wind, hydroelectric: rather than fossil fuels, thereby reducing a building's carbon footprint. These versatile heaters improve sustainability and reduce environmental impact for all types of industrial and commercial buildings, like warehouses and factories, to residential garages and workshops.

In addition, these new electric unit heaters offer a wide range of heating capacities (3, 5, 7, 10, 15, 20, 25, 30 kW) and voltages (208 or 240 volt, single or three phase). Installation and operation are simplified due to the heater's 24-volt control circuit that enables common low voltage thermostat use, eliminating the need for added transformers or fan controls. Other control options include simple ON/OFF control to multi-unit control via a single thermostat to simultaneous control with other heaters or fans. Like all Reznor equipment, the EUH electric unit heater has a modern design, appliance-grade finish and robust construction to withstand tough environments.

More information:
www.reznorhvac.com

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Uponor Xpress Trak

Uponor is continuing to innovate in the residential radiant market with the launch of its newest radiant panel — Xpress Trak™. Designed for residential

new construction and remodels, Xpress Trak is a single-panel system with lightweight XPS foam at its core and laminated aluminum around the entire surface to provide exceptional heat-transfer capability.

The XPS foam in Xpress Trak provides numerous benefits for both the installing contractor and the homeowner, including:

- Natural moisture resistance to eliminate caulking edges or panel grooves for increased installation efficiencies
- No insulation needed in joist space below the subfloor, saving labor time and materials costs
- Compressive strength of 49 psi (pounds per square inch) to eliminate floor deflection
- Lower mass for faster response times to improve system performance
- An R-value of 3.13 that allows energy use to heat the space rather than charging and storing energy into the panel

Xpress Trak is designed for use with 5/16" Wirbo hePEX™ oxygen-barrier PEX-a pipe and includes a low, 5/8" profile to minimize construction in remodel projects, as well as 6" on-center pipe spacing to accurately meet residential radiant application needs.

The panels work well under most floor coverings, including hardwood, carpet, tile, linoleum, and luxury vinyl tile or plank. Additionally, the product features straight runs and return bends integrated into one panel for faster, easier ordering and installation.

"With more than 40 years in the radiant market, we are passionate about innovations that advance the industry," says Aaron Stotko, director, Segment Marketing, at Uponor.

"By launching Xpress Trak, which provides an ideal complement to our new Smatrix Pulse wireless radiant and air-side control system, installers will now have a comprehensive solution that can help increase efficiencies, productivity, and profitability in their residential projects."

More information:
www.uponor.com.



Midea Survey

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- Just 4% of homeowners are aware of a modern heat pump's ability to maintain 100% heat output at temperatures as low as -4°F.
- Nearly half of homeowners (49%) indicate that the main reason they would be hesitant to switch to a heat pump is because they don't know anything about it.
- 70% of contractors indicate they do not know that today's advanced heat pumps are able to generate 100% heat output to a minimum temperature of -4°F.
- 87% of contractors even say they would be more likely to consider switching to a heat pump in their own homes after learning more about the performance and cost-saving benefits of modern heat pumps.

"As the next generation of ultra-efficient heat pumps become widely available next year, it's crucial that consumers understand the performance, benefits and incentives available to them," said David Rames, Senior Product Manager, Midea America.

PHCC/Delta Names Plumber Apprentice of the Year

Anthony Graham of BION, Inc., in Prince William County, Virginia, has been named the Plumbing-Heating-Cooling Contractors – National Association (PHCC) 2023 Plumbing Apprentice of the Year. Sponsored by Delta Faucet, the award recognizes the outstanding skill and achievements of those enrolled in a plumbing training program. It was presented at PHCCCONNECT2023 last fall in Cleveland, Ohio.

As announced during the awards ceremony, Graham's path into the plumbing field was inspired by his cousin's apprenticeship in electrical work. Witnessing the fulfillment, growth, and earning potential that came with the trade resonated deeply with him. This led him to choose an apprenticeship over a college education, aligning with his desire to support his family. He completed

Continued on Page 31

"We are at a key juncture in this technology when both contractors and consumers can access a more sustainable future."

The Department of Energy (DOE) realizes the under-tapped potential of heat pumps in decarbonizing our living spaces, promoting engineering advancements through the Cold Climate Heat Pump Technology Challenge and incentivizing heat pump adoption through tax credit programs within the Inflation Reduction Act (IRA). In response to these initiatives, major manufacturers like Midea have accelerated the development of advanced heat pump solutions.

Additional survey data demonstrates the gap in awareness of incentives for installing modern heat pump technology:

- 53% of homeowners aren't aware that installing an advanced heat pump system may qualify them for federal tax credits.

- However, two-thirds of homeowners (68%) say they are more likely to consider having a heat pump installed in their home after learning about federal and regional tax incentive programs.

The survey also reflects a growing readiness among homeowners and contractors to embrace heat pump technology as the HVAC product of the future:

- More than a quarter (28%) of millennial homeowners say they would be willing to invest more than \$15,000 if it meant saving money on future energy bills.

- After learning about performance and cost-saving benefits of today's advanced heat pumps, 82%

of millennial homeowners indicate they would be more likely to consider getting one.

- 76% of homeowners agree that they are more focused on energy efficiency now than they were five years ago, and 62% are looking into energy-saving solutions around the house.

- Although 84% of contractors report experience installing/working on heat pumps, 81% express the need for better training to install next-generation heat pumps.

- 92% of contractors are open to learning more about today's more efficient heat pump systems to improve installation time and customer satisfaction.

"The survey results tell an exciting story: homeowners are not just ready, but eager to invest in energy saving technologies,

especially the younger demographic," continued Rames. "As education regarding this technology continues, both homeowners and contractors will drive further adoption."

Midea is at the forefront of meeting this emerging demand with innovative solutions. Recent lab tests of Midea's forthcoming 3-ton cold-climate heat pump system achieved 118% of rated capacity heating output at -15°F. The Midea system also delivered tremendous efficiency at -15°F with a Coefficient of Performance (COP) of 1.92 – surpassing the ENERGY STAR cold climate benchmark of 1.7 COP at 5°F – despite operating at a temperature 20°F below the testing standard.

For more information, please visit midea.com/us.

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DEVIN COLTEN (LEFT) AND MALAINE RODRIGUEZ OF PACIFIC RIM MECHANICAL.



JASON CLAUSON (LEFT) AND KEN SAMMONS OF LG AIR CONDITIONING TECHNOLOGIES.



DAN SHIN (LEFT) AND MIKE KONRAD OF APPION TOOLS.



BOB JOHNSON (LEFT) AND BRUCE EDGAR OF CHEERS.



CORY HICKEN (LEFT) AND AMY FERGUSON OF MOBILE AIR AND POWER.



BRIAN DYER (LEFT) AND MARK HALL OF GLOBAL HVAC MASTER DISTRIBUTOR.



CHRIS AVRAM OF APRILAIRE.



JOSHUA ERAZO (LEFT) AND MARGARITA ERAZO OF VITAL UTILITY, LLC.



RUSS KING (LEFT) AND CONNOR KING OF KWIK MODEL 3D.



RYAN O'NEAL OF SOUTHERN CALIFORNIA GAS COMPANY.



MANUEL LOPEZ (LEFT) AND EDDIE D. PAULDING OF M.L. FILTERS.



CHRIS SEARS (LEFT) AND NICOLE MARTINEZ OF WE GREEN ENERGY SOLUTIONS.

LOOK FOR MORE PHOTOS IN UPCOMING ISSUES!



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Technical Training

Growing Green Technicians Part 172: Combustion Analysis Fundamentals

By Jim Johnson
Contributing Editor

Editor's Note: Illustrations courtesy of ESCO Group

When considering the fundamentals of combustion, there are three T's to consider... Time Temperature and Turbulence.... that exist in concert to allow fuel burning equipment to operate efficiently and safely. These three factors represent the concept that, when all is well, a burner is allowed enough time for fuel and air to mix properly, the burner temperature is sufficient, and the mixture is in a properly designed space that allows it to tumble. (Combustion can be described as a "rough" process)

Once these three factors, along with a proper operation of the stack (vent system) of the equipment are understood, the next step for the green technician is to perform an equipment analysis to accurately measure and record the factors related to the combustion process. One example of the test equipment used for combustion analysis is shown in **Figure One**.

Equipment that is capable of a complete analysis measures several factors including carbon monoxide from an ambient perspective, and in the flue, carbon dioxide, and flue temperature, and differential pressure. It also calculates oxygen efficiency, excess air, and carbon monoxide from what is known as

an air free perspective. In this particular example, the equipment is also capable of printing a report directly from the test equipment. Performing a combustion analysis begins with drilling a hole and inserting the equipment probe into the vent system. (See **Figure Two**)

In order to get a proper reading from the probe, the tip should be positioned at a depth that is one-half the diameter of the pipe.

For example, if the equipment being tested employed a 6-inch pipe, the tip would be in a position 3 inches into the pipe. Once the testing process is complete, the probe test opening needs to be sealed. The simplest way to accomplish this is with a high temperature silicone sealant, which can be used on both metal and PVC piping.

When it comes to analyzing test results, the basic philosophy that technicians follow in all troubleshooting and equipment evaluation applies...we need to know what is supposed to be happening with something that is working properly, so we'll recognize improper operation when we see it.

Date:	
Time:	
Fuel: (F1) Natural Gas	
Efficiency	83.6%
Excess Air	77.1%
Stack Temp	420°F
Primary Temp	70.3°F
Delta Temp	--- °F
Oxygen	9.7%
Carbon Dioxide	6.3%
Carbon Monoxide	211 PPM
CO Air Free	393 PPM
Draft	-.03 WC

FIGURE 3

To explain, we'll review the partial print-out shown in Figure Three and consider the factors listed below that should exist if the equipment is working properly. The specific type of equipment is a natural gas furnace, atmospheric burners, fan assist.

...Oxygen should be 7% to 9%

...Stack temperature should be 325 to 500 Degrees F

...Draft should be -.02 to -.04 WC" (Water Column Inch)

...CO should be 400 PPM Air Free Maximum

Troubleshooting

A Follow-Up on a 4-Ton Heat Pump Repair

By Jim Johnson
Contributing Editor

This month's troubleshooting situation involves a seven-year-old, 4-ton heat pump that was originally repaired during the summer in response to a "not cooling" complaint. At that time, a failed reversing valve was replaced. The service record shows that a new filter-drier was installed, the system was evacuated to 500 microns, and the refrigerant charge was added by weight according to the manufacturer's specifications. Shortly after the repair, the building became vacant.

Now, with the system operating the heating mode, the current

tenant is calling for service, and their description of the problem is that the unit is not keeping the building at a comfortable temperature, and that it seems to be running constantly.

Upon your arrival, you accomplish an initial evaluation of the system heating mode by checking the indoor return and supply air temperatures. You determine that while the air volume is correct, the system is unable to achieve an acceptable Delta T.

As your next step you decide to perform a test on the reversing valve (see **Figure One**), checking the temperature of the discharge line at approximately 5 inches from the point where it enters the valve body and the then repeating

the procedure on the connection leading to the indoor coil. Your test shows a differential of 13 degrees.

Your troubleshooting question: *What mistake was made during the original repair of this equipment?*

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

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



FIGURE 1

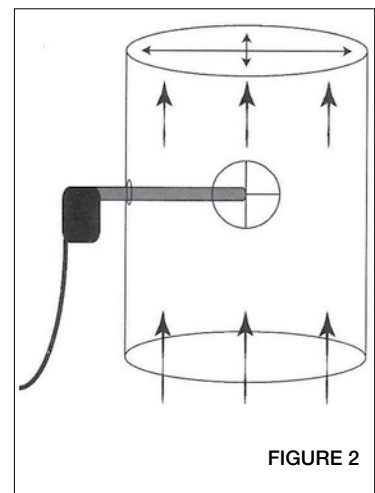


FIGURE 2

...Carbon Dioxide should be 8.5% to 9.5%

Comparing the information above to that shown in our illustration, you'll note that the stack temperature of 420-degrees is within normal range, and that at -.03 inches of water column pressure, our draft pressure is also what we would expect, and our carbon monoxide air free reading of 393 Parts Per Million is also under the recommended maximum.

However, when we consider the oxygen and carbon dioxide readings in this example, we see a problem. The oxygen level is higher than it should be, and the carbon dioxide is lower than it should be, and the fundamental problem that causes these two factors to be improper is that the burner is underfiring.

And, when a burner is underfiring, the underlying cause of that condition is that the fuel pressure being delivered to the burner is lower than it should be, which means that we need to check adjust the fuel pressure up to the required 3 1/2 " WC in order to ensure proper operation of this equipment.

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

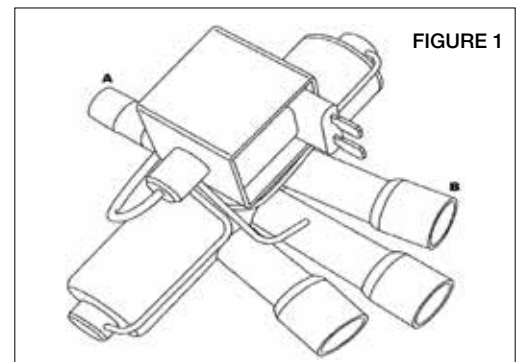


FIGURE 1

Answer to Last Month's Troubleshooting

The specific failure of the compressor is the internal overload protector. We proved this when we read a normal resistance reading between the run and start windings, but got a reading of infinity between the C and T terminals on the compressor. Without continuity between these two terminals, there can be no complete circuit to the coil of the single-pole contactor.

The winner of last month's Troubleshooting is:

David Tenorio



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The Quality Residential HVAC Services Program is funded by California utility customers under the auspices of the California Public Utilities Commission and implemented by Frontier Energy under a contract awarded by San Diego Gas & Electric Company (SDG&E®). Customers who choose to participate in this program are not obligated to purchase any additional services offered by the Implementer. The trademarks used herein are the property of their respective owners.

Services	Tier I	Tier II	Quality Kicker
Quality Bid	\$350	\$700	TBD
Quality Installation	\$500	\$1000	TBD
Quality Maintenance	\$350	\$700	TBD
Quality Maintenance Call	\$150	\$300	TBD

New Products

Shurtape Technologies Duck Pro BR Code Line



Shurtape Technologies, an industry-leading manufacturer and marketer of adhesive tape and consumer home and office products, announces the release of Duck Pro® by Shurtape® BR Code™ Scannable Solutions, powered by the BitRip® app.

Developed in partnership with Nastro Technologies, a tech startup specializing in asset tracking technology, the two companies began developing the product line together after merging their respective expertise in industrial adhesive applications and asset tracking technology. The new line features unique tapes and labels preprinted with dynamic scannable codes that can be used to organize and track critical jobsite information, connecting physical objects to critical digital information.

In conjunction with the free, easy-to-use BitRip mobile app, BR Code is a tool designed to help streamline workflow and communication in construction, remodeling, installation and repairs. Construction pros and project managers can use the scannable tapes or labels to pinpoint precise physical locations of building components and supplies, create installation and repair notes or voice memos, upload files relating to specific components or link the code to already existing job data.

Unlike other scannable codes, such as QR codes, the preprinted codes on BR Code scannable tapes and labels offer a straightforward approach to labeling and tracking. There is no need to spend time generating and printing custom codes for scanning. With BR Code, users can quickly grab a label or roll of preprinted tape, stick a piece to a physical object, then scan and connect the code to an unlimited amount of digital information. Photos, text files, maintenance documentation, PDFs, hyperlinks, video links, voice memos, instructions, GPS location data and more can all be linked to a single, scannable code. All linked content is then sharable and accessible via the free BitRip app.

Products in the new BR Code line include:

- PC 627 BR: Scannable duct tape codes for indoor or outdoor

use

- FL 227 BR: Scannable paper tape codes for multi-surface applications that offer easy removal

- PSL BR: Permanent scannable labels for permanent indoor or outdoor use on flat surfaces

- PXL BR: Heavy duty permanent scannable labels for flat-surface applications that demand extreme durability and performance

The Duck Pro® by Shurtape® BR Code® product line is now available at participating Shurtape distributors. The BitRip® app can be downloaded for free from the Apple App Store for Apple devices or the Google Play store for Android devices.

More information:
www.shurtape.com/brcode/.



RectorSeal Water Sensor



RectorSeal LLC., a leading manufacturer of quality HVAC/R and plumbing accessories and a wholly owned subsidiary of CSW Industrials, Inc. [NASDAQ: CSWI], introduces another innovative product to its Safe-T-Switch product line: The patent-pending SSW Multipurpose Water Sensor.

With no moving parts to break or become clogged, the SSW Water Sensor is placed directly into a metal or plastic secondary drain pan or on a floor. The SSW's logic circuit continuously samples the sensor probes for the accumulation of water and determines if its presence is transient or permanent. When proprietary sensors detect as little as 1/16-inch of permanent water, the SSW Water Sensor automatically shuts off the HVAC system. A red LED on the unit's top cover indicates that the SSW has been activated.

The SSW Water Sensor is designed to automatically reset after the water has cleared.

Installation of the unique, puck-style SSW Water Sensor is easy, and the weight of the unit offsets the need for mounting. The unit is UL 508 recognized and comes complete with all wiring required for installation.

"Since the introduction of the Safe-T-Switch product line over 15 years ago, we now have millions in service around the world," said Allen Chiang, Product Manager at RectorSeal. "These numbers

demonstrate that contractors place their trust in our products to help ensure quality installations. With a strong endorsement from our professional contractor customers, we are excited to introduce the SSW Water Sensor to the Safe-T-Switch legacy product line."

More information:
www.rectorseal.com.



XOi - Discovery Sound Technology

XOi, a leading provider of technician-first smart technology for commercial and residential field service companies, announces a partnership with **Discovery Sound Technology** (DST), a patented, data-driven diagnostic and analytics platform.

The partnership integrates DST's comprehensive ultrasound-based diagnostic reporting capabilities with XOi's first-of-its-kind field service technology, helping contractors drive revenue and growth with powerful, AI-based visual documentation.

"We are excited about the partnership with XOi and the benefits of working together to deliver unprecedented information to the technician and their customers," said Brett Shaw, president and CEO of DST. "The results can help service organizations build lasting end user relationships by eliminating surprise failures, extending equipment life and lowering overall costs."

The integration allows field techs to directly input DST reports into XOi. XOi's powerful artificial intelligence and an industry-leading knowledge base leverage DST's unique diagnostic data to generate visual content driving preventive maintenance revenue and repair and replacement services. Together, XOi and DST empower techs to elevate transparency, trust and customer experience.

"By integrating with DST's ultrasound diagnostic technology, technicians have a seamless single app experience making it easier to share vital service information with their customers," said Aaron Salow, founder and CEO of XOi. "We are thrilled to offer an innovative solution that enables contractors to stand out from the crowd and gain a significant advantage in their market. It's an exciting opportunity to make a meaningful impact and establish lasting connections with their customers."



XOi provides field service contractors and their teams a suite of premium tools for managing and leveraging data from current jobs as well as historical projects, including powerful data collection, virtual support and mentoring, and real, actionable insights. XOi users report, on average, a 20% reduction in the amount of time it takes to complete tasks, an additional \$1.4 million in new replacement and preventive maintenance contract revenue, and a 40% reduction in second truck rolls.

More information:
www.discoverdst.com/ and <https://xoi.io>.



RIDGID K9-12 FlexShaft



RIDGID®, part of Emerson's professional tools portfolio, introduces the K9-12 FlexShaft® Drain Cleaning Machine, the latest in a complete line of RIDGID FlexShafts that provide wall-to-wall pipe cleaning power with astonishing speed. The K9-12 is the smallest of the machines and perfect for residential use, eliminating the need to repeatedly unclog the same household drain lines.

Clearing up to 30 feet of 1¼- to 2-inch pipe, the K9-12 breaks up grease, hair and other soft blockages, making it ideal for kitchen and bath sinks, as well as tubs and shower drains. Powered by an 1800 to 2500 RPM cordless drill, the machine's chain knocker expands inside the pipe to quickly clear the blockage and restore the pipe to full flow. A flexible, protective sheath encapsulates the cable, keeping it fully enclosed for less mess and faster cleanup. The built-in clutch design also extends the cable life.

"Our K9-12 FlexShaft Drain Cleaning Machine is a great tool to start with if you have never experienced the cleaning speed and efficacy of a RIDGID FlexShaft Drain Cleaning machine," said Shelby Gerl, product manager, RIDGID for Emerson. "It will save you time in removing common residential blockages and add value to your work by providing a fully flowing pipe again."

The K9-12 joins three additional RIDGID FlexShaft Drain Clean-

ing Machines – the K9-306, K9-204 and K9-104. Each provides wall-to-wall clean with astonishing speed. Designed for commercial use, the K9-306 clears 3- to 6-inch diameter lines up to 125 feet; the K9-204 clears 2- to 4-inch diameter lines up to 75 feet; and the K9-102 1¼- to 2-inch diameter lines up to 50 feet.

More information:
www.ridgid.com/100.



"Next Level Now" by Heather Ripley

Heather Ripley, founder and CEO of global agency Ripley PR and a leading expert on marketing and public relations within the home services industry, announces that "Next Level Now: PR Secrets to Drive Explosive Growth for your Home Service Business," is now available on all major audiobook platforms including Audible, iTunes and Google Books.

Published by Advantage/Forbes Books, "Next Level Now" was designed to be an actionable, effective tool that will steer ambitious contractors toward successfully implementing and capitalizing on positive public relations strategies as they grow their businesses. In the book, Ripley speaks to a range of owners and operators in plumbing, HVAC, electrical, roofing and more, from those focused on increasing revenue or prepping for an acquisition to those building a legacy business that will go on to provide security and a quality of life for their children.

"Home service business owners, along with other decision makers and leaders in the industry, are some of the hardest working professionals in the world," Ripley said. "Well before I released 'Next Level Now,' I knew I needed to offer an audio option. Like me, many home service pros are on the go each day, and audiobooks can prove to be easy, accessible formats for digesting information and learning powerful business growth strategies."

Ripley supports her book with

Continued on Page 27



Indoor People



CARY REED

Cary Reed is the new COO at Service Experts, which provides HVAC repair, maintenance, new equipment sales, and related services to residential and commercial customers in 31 U.S. states.

Reed joined Service Experts in 2012 and has served in a number of leadership roles, most recently as senior vice president and general manager, a position in which he oversaw all areas of the company's core business strategy and execution.

"Since joining Service Experts in 2012, Cary has been a powerful influence within the business, helping us become the lead provider of HVAC and plumbing repair in the U.S. by nurturing customer relationships and making every home a haven of comfort, well-being, and energy efficiency," said Rob Comstock, the Service Experts CEO.

Cary was recruited to join Service Experts by a former colleague and friend Robert Landry, and harbors a love for the team and their commitment to taking care of each other and the customer every day, a press release from Service Experts said. Prior to joining Service Experts, he held numerous sales leadership roles, including regional vice president at Alamo Rent-A-Car.

In his spare time, Cary serves as a board member for the nationally acclaimed Blue Devils Drum and Bugle Corps, and has been active in drum corps since 1981.

"As we continue in our quest to make the home of the future a reality, I firmly believe that Cary's leadership as COO will be pivotal to ensuring we equip customers' homes with a full suite of home

comfort products and services, and to delivering a level of customer satisfaction unrivaled in the industry," added Comstock.

• • • • •

Malco Products, one of the nation's leading solution developers and manufacturers of a variety of high-quality tools for the HVAC and building construction trades, recently added **Bill Spohn**, president, CEO and majority owner of TruTech Tools, LTD, and **Nataline Lomedico**, president and CEO of Giroux Glass to its board of directors. Both Spohn and Lomedico bring decades of experience in the manufacturing, building construction and HVAC industries. Their appointments mark the completion of Malco's transition to a strategic board.

Spohn is a leading expert in HVAC measurement and building performance, serving as president and CEO of TruTech Tools – the leading online reseller of tools and test instruments for HVACR and Building Performance professionals. He is also the creator and host of the Building HVAC Science podcast, which covers an array of topics in building science and HVAC diagnostics, as well as hu-



BILL SPOHN



NATALINE LOMEDICO

man comfort, health and safety. Spohn will use his expertise and insights to help guide Malco's strategies within the HVAC vertical and e-commerce business.

Lomedico has held several leadership positions at Giroux Glass including treasurer, controller and CFO, and currently serves as president and CEO of the employee-owned commercial glazing and glass company. Lomedico has worked in the construction industry for over 24 years, mostly within executive management roles within the construction industry. Lomedico also successfully ran her own business assisting small- to medium- sized construction companies streamline processes to optimize their financial and growth strategies – an area in which she will provide insights and strategic guidance for Malco.

"Both Bill and Nataline bring deep experience in their respected fields that will be invaluable to Malco as we focus on growth into new markets and channels," said Malco president and CEO Rich Benninghoff. "Both are leaders within their respected fields and have played pivotal roles in their respective industries, and we are proud to have them join our board."

• • • • •

ICM Controls announces the appointment of **Janie Goddard** as Chief Executive Officer. She will also serve on the board of directors of ICM.

Goddard is a global business leader with a track record of delivering strong growth and profitability while building world-class teams and high-performance cultures. She brings more than 25 years of experience in leading medical device, industrial, and technology companies.

Goddard most recently served as Divisional CEO of Halma plc, a global group of technology companies, where she was responsible for overseeing six companies within the environmental and analysis sector. Prior to that, she was the President, JADAK (A No-



JANIE GODDARD

vanta Company) – a market leader in providing customized RFID, barcoding scanning, and machine vision solutions for the medical device OEMs. She has held leadership roles at Welch Allyn, Covidien, and Johnson & Johnson. Currently, she serves on the board of directors for two public companies, Methode Electronics and Ultralife.

She earned a bachelor's degree in business administration from Washington University in St. Louis and a master's in business administration from Harvard University.

"I am excited to join the ICM Controls team which has a strong history of designing and manufacturing electronic control solutions for industrial markets. At ICM, we will continue our focus on our people who are passionate about serving our customers, our innovative engineered solutions which are at the core of our growth, and our Mission which is to deliver valuable solutions to our customers' toughest challenges."

• • • • •

Morgan Silvey has been promoted to Vice President of Sales & Marketing, HVAC, at Nidec Motor Corporation. The U.S. MOTORS® brand products for HVAC systems include high-efficiency syn-

chronous and variable-speed ECM motors with integrated controls for superior performance and energy savings.

In his new role, Silvey is responsible for driving sales growth and implementing marketing programs and strategies for both the OEM and Aftermarket HVAC business units under the U.S. MOTORS platform.

"Morgan has been instrumental in building and developing an Aftermarket motors team that serves a strong customer base, and we are pleased to announce his promotion," said Tim Schamel, President of the U.S. MOTORS division of Nidec. "He's been a dedicated leader at Nidec for more than 10 years and came to us with a background in HVAC motors, so his

Continued on Page 30



MORGAN SILVEY



DENNIS CAMPBELL

New Products

Continued from Page 26

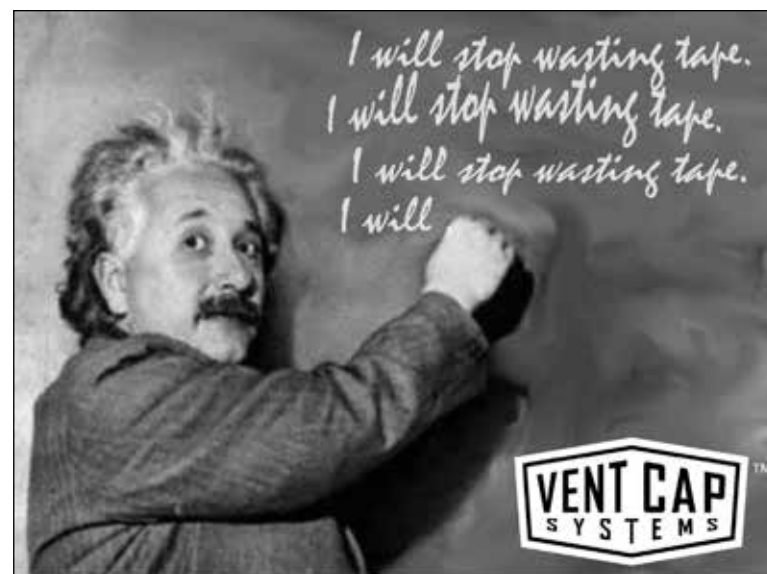
a wealth of home service PR and marketing experience that she gained under the mentorship of Clockwork Home Services founder Jim Abrams, PRAXIS S-10® President Terry Nicholson and The Surfin' Plumbers President Tab Hunter. Prior to launching Ripley PR in 2013, she

served as a marketing and public relations manager and director for companies like Clockwork Home Services and CAP Brand Marketing. Using her PR expertise, she earned Clockwork Home Services top-tier media exposure on The Celebrity Apprentice in 2009.

Ripley continuously shares her knowledge in public relations as a contributing author for Entrepreneur Magazine and PHC

News. She has also been a guest on dozens of industry podcasts such as Home Service Success, Power Women of the Trades and PHCPros: Off the Cuff. In addition, she was named to the 2021 PHC News' Top Women in PHCP.

More information: www.audible.com/pd/Next-Level-Now-Audiobook.



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SOCALGAS, DOWNEY

FEBRUARY

Electrical Module (Webinar)

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

Mon., Feb. 5 – Part 1

Tues., Feb. 6 – Part 2

Mon., Feb. 12 – Part 3

Tues., Feb. 13 – Part 4

MARCH / APRIL

AC/HP Refrigeration Module

(Four-Night Class) Instructor: John Dalton

Mon., March 11 – Part 1

Tues., March 12 – Part 2

Mon., April 15 – Part 3

Tues., April 16 – Part 4

MAY

Air Distribution Module

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

Wed., May 22 – Part 1

Thurs., May 23 – Part 2

Wed., May 29 – Part 3

Thurs., May 30 – Part 4

JUNE

System Diagnostics Module (Webinar)

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

Mon., June 3 – Part 1

Tues., June 4 – Part 2

Mon., June 10 – Part 3

Tues., June 11 – Part 4

JULY / AUGUST

System Performance Module

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

Wed., July 10 – Part 1

Thurs., July 11 – Part 2

Wed., Aug. 7 – Part 3

Thurs., Aug. 8 – Part 4

SEPTEMBER

NATE CORE & Gas Heating Training (Webinar)

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

Mon., Sept. 16 – Part 1

Tues., Sept. 17 – Part 2

Mon., Sept. 23 – Part 3

Tues., Sept. 24 – Part 4

OCTOBER

NATE AC/HP Refrigeration & Air Distribution Training (Webinar)

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

Mon., Oct. 21 – Part 1

Tues., Oct. 22 – Part 2

Mon., Oct. 28 – Part 3

Tues., Oct. 29 – Part 4

Sat., Nov. 2 - NATE Exam, 7:30 a.m. In-Person/Onsite

SOUTHERN CALIFORNIA EDISON, IRWINDALE

FEBRUARY

Electrical Module

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

Wed., Feb. 14 – Part 1

Thurs., Feb. 15 – Part 2

Wed., Feb. 21 – Part 3

Thurs., Feb. 22 – Part 4

MARCH

Air Distribution Module

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

Wed., March 13 – Part 1

Thurs., March 14 – Part 2

Wed., March 20 – Part 3

Thurs., March 21 – Part 4

APRIL

AC/HP Refrigeration Module

(Four-Night Class) Instructor: John Dalton

Wed., April 10 – Part 1

Thurs., April 11 – Part 2

Wed., April 17 – Part 3

Thurs., April 18 – Part 4

MAY

NATE CORE & Gas Heating Training

(Four-Night Class) Instructor: Mike Griffin

Wed., May 8 – Part 1

Thurs., May 9 – Part 2

Wed., May 15 – Part 3

Thurs., May 16 – Part 4

JUNE

NATE AC/HP Refrigeration & Air Distribution Training

(Four-Night Class) Instructor: Mike Griffin

Wed., June 5 – Part 1

Thurs., June 6 – Part 2

Wed., June 12 – Part 3

Thurs., June 13 – Part 4

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

SEPTEMBER

System Diagnostics Module

(Four-Night Class) Instructor: John Dalton

Wed., Sept. 11 – Part 1

Thurs., Sept. 12 – Part 2

Wed., Sept. 18 – Part 3

Thurs., Sept. 19 – Part 4

OCTOBER

Commercial Chillers Module

(Two-Night Class) Instructor: John Dalton

Wed., Oct. 2 – Part 1

Thurs., Oct. 3 – Part 2

Commercial Cooling Towers Module

(Two-Night Class) Instructor: John Dalton

Wed., Oct. 9 – Part 1

Thurs., Oct. 10 – Part 2

NOVEMBER

System Performance Module

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

Wed., Nov. 6 – Part 1

Thurs., Nov. 7 – Part 2

Tues., Nov. 12 – Part 3

Thurs., Nov. 14 – Part 4

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.

All Classes are scheduled for In-Person
All In-Person classes subject to change based on
In-Person Classes: 6:00 pm to 9:00 pm; Webinars: 6:00 pm to
Register at www.ihaci.org

CLASS SCHEDULE

SERVICE (CAQI/QM/QS) & NORTH AMERICAN TECHNICIAN EXCELLENCE (NATE)

SOUTHERN CALIFORNIA EDISON, TULARE

FEBRUARY

Gas Heating Module

(Two-Night Class) Instructor: Mitch Bailey

Tues., Feb. 6 – Part 1

Wed., Feb. 7 – Part 2

2022 Title 24 Standards Training

(Two-Night Class) Instructors: Mike Griffin / Andrew Smith

Wed., Feb. 21 – Part 1

Thurs., Feb. 22 – Part 2

MARCH

Commercial Chillers Module

(Two-Night Class) Instructor: John Dalton

Wed., March 6 – Part 1

Thurs., March 7 – Part 2

Commercial Cooling Towers Module

(Two-Night Class) Instructor: John Dalton

Wed., March 20 – Part 1

Thurs., March 21 – Part 2

APRIL

Air Distribution Module

(Four-Night Class) Instructors: Mike Griffin / Mitch Bailey

Wed., April 10 – Part 1

Thurs., April 11 – Part 2

Wed., April 17 – Part 3

Thurs., April 18 – Part 4

MAY

System Performance Module

(Four-Night Class) Instructors: Mitch Bailey / Bob Gunn

Wed., May 8 – Part 1

Thurs., May 9 – Part 2

Wed., May 15 – Part 3

Thurs., May 16 – Part 4

JUNE

AC/HP Refrigeration Module

(Four-Night Class) Instructor: Mitch Bailey

Tues., June 18 – Part 1

Wed., June 19 – Part 2

Tues., June 25 – Part 3

Wed., June 26 – Part 4

SEPTEMBER

System Diagnostics Module

(Four-Night Class) Instructor: Mitch Bailey

Wed., Sept. 18 – Part 1

Thurs., Sept. 19 – Part 2

Wed., Sept. 25 – Part 3

Thurs., Sept. 26 – Part 4

OCTOBER

NATE CORE & Gas Heating Training

(Four-Night Class) Instructor: Mitch Bailey

Wed., Oct. 9 – Part 1

Thurs., Oct. 10 – Part 2

Wed., Oct. 16 – Part 3

Thurs., Oct. 17 – Part 4

OCTOBER / NOVEMBER

NATE AC/HP Refrigeration & Air Distribution Training

(Four-Night Class) Instructor: Mitch Bailey

Tues., Oct. 29 – Part 1

Wed., Oct. 30 – Part 2

Wed., Nov. 6 – Part 3

Thurs., Nov. 7 – Part 4

Sat., Nov. 9 - NATE Exam, 7:30 a.m.

PACIFIC GAS AND ELECTRIC COMPANY, STOCKTON

FEBRUARY

Electrical Module (Webinar)

(Four-Night Class) Instructor: Mitch Bailey

Wed., Feb. 14 – Part 1

Thurs., Feb. 15 – Part 2

Wed., Feb. 21 – Part 3

Thurs., Feb. 22 – Part 4

FEBRUARY / MARCH

NATE HVAC/R New Hire (Webinar)

(Four-Night Class) Instructor: Mitch Bailey

Wed., Feb. 28 – Part 1

Thurs., Feb. 29 – Part 2

Wed., Mar. 6 – Part 3

Thurs., Mar. 7 – Part 4

MARCH

NATE HVAC/R Support Training (Webinar)

(Four-Night Class) Instructor: Mitch Bailey

Wed., Mar. 13 – Part 1

Thurs., Mar. 14 – Part 2

Wed., Mar. 20 – Part 3

Thurs., Mar. 21 – Part 4

MARCH / APRIL

Air Distribution Module (In-Person/Simulcast)

(Four-Night Class) Instructor: Mitch Bailey

Wed., Mar. 27 – Part 1

Thurs., Mar. 28 – Part 2

Wed., April 3 – Part 3

Thurs., April 4 – Part 4

APRIL / MAY

System Performance Module (In-Person/Simulcast)

(Four-Night Class) Instructor: Mitch Bailey

Wed., April 24 – Part 1

Thurs., April 25 – Part 2

Wed., May 1 – Part 3

Thurs., May 2 – Part 4

MAY

AC/HP Refrigeration Module (Webinar)

(Four-Night Class) Instructor: Mitch Bailey

Wed., May 22 – Part 1

Thurs., May 23 – Part 2

Wed., May 29 – Part 3

Thurs., May 30 – Part 4

SEPTEMBER

System Diagnostics Module (Webinar)

(Four-Night Class) Instructor: Mitch Bailey

Wed., Sept. 4 – Part 1

Thurs., Sept. 5 – Part 2

Wed., Sept. 11 – Part 3

Thurs., Sept. 12 – Part 4

on EXCEPT Where Noted.

IOUs/CA COVID requirements.

8:00 pm - Classes are subject to change

rg (Training)

This program is funded by California utility customers under the auspices of the California Public Utilities Commission.



Indoor People

Continued from Page 27

experience has been an important factor in our success.”

Silvey started with Nidec in 2013 as a Market Manager on the HVACR Aftermarket team. He was promoted in 2016 to Director of Marketing for the Aftermarket business. Before joining Nidec, Silvey held positions in operations and OEM and distribution sales/marketing with Regal.

Silvey earned a Black Belt in Lean Six Sigma, and holds a BA in Communications and English from Truman State University and a MAE from Lindenwood University.

“I have really enjoyed our team at Nidec and look forward to expanding my knowledge and experience within the HVAC business unit,” Silvey said.

Replacing Silvey in his previous role is **Dennis Campbell**, who has been promoted to Senior Market Manager, HVAC. He is responsible for driving sales growth and implementing marketing strategies and programs for the Aftermarket Motors business group.

Campbell has more than 18 years of experience in HVAC motors. He started with Nidec in 2011 as Training Manager for the Aftermarket team, then was promoted to Regional Manager for the company’s western U.S. sales. Prior to Nidec, Campbell held positions with Emerson Electric in the motor division.

Campbell holds a Bachelor of Business Administration from the University of Illinois.

• • • • •

The Seal Company, a background verification company helping service companies provide a security promise to their customers since 2008, has hired veteran



LISA WHITE

home service industry advisor and operations manager **Lisa White** as its new vice president of business development.

White comes to The Seal with more than 25 years of experience in the trades. Not only did she work in business development for Nexstar Network for more than 21 years, she grew up in the industry as the daughter of a plumber. She wants to help service companies simplify their business.

“My purpose in joining The Seal is to find easy solutions for contractors to get things done and lessen their work and stress load,” she said. “One of my missions is to help contractors provide home and business owners with an easy-to-use verification system that verifies that the service tech they are letting into their home has passed a thorough background check. Homeowners want to know if their families will be safe, and The Seal of Security and Confidence™ helps home service companies provide them with that information.”

White said she came to The Seal because she firmly believes in its philosophy. The company’s solution helps service businesses develop their reputation management program by giving customers a chance to confirm the credentials of their service technician, and it provides them with a quick option to leave a review after the service is complete.

“I truly believe in the saying, ‘trust but verify,’ and this product helps consumers do that,” she said. “Our platform is easy to use and works to benefit service companies in building their reputation management program. The Seal’s platform will gather more reviews for your company. Period.”

The Seal founder and CEO Ed Marchiselli said White’s experience in the trades will be instrumental to the growth of the company.

“Lisa has played a pivotal role in her previous positions offering support and acting as an advisor and mentor to contractors who are trying to scale their businesses and foster sustainable growth,” Marchiselli said. “Her deep expertise and hands-on experience will help The Seal expand our business development. We expect her to help us retain and develop valuable customer relationships that will last for years to come.”

Cool Today President Jaime DiDomenico, who worked with White when he presided over the Nexstar board of directors during her tenure there, is not only a fan of hers, but he is also a Seal Company customer.

“With Lisa’s experience and proficient network, I have no doubt that she will prove to be crucial to The Seal’s continued growth,” DiDomenico said. “The Seal has been integral to the expansion of Cool Today’s reputation management program. The company will no doubt see its fortunes rise with Lisa on board.”

• • • • •

Goodway Technologies, a global leader in industrial maintenance and cleaning solutions, announces the promotion of **Tim Robb** to Executive Vice President of Revenue.

For nearly 15 years, Robb has led Goodway Technologies’



TIM ROBB

integrated marketing efforts, playing a critical role in its growth, expansion, and new business developments. Under his leadership, Goodway built a robust and highly efficient marketing team, developed new processes for strategic planning and execution, and improved multiple business operations.

In this newly created role, Robb will lead consolidated global sales and marketing strategy and execution, guiding Goodway Technologies toward continued growth in strategic markets like HVAC, manufacturing, food and beverage production, power and utilities, and more.

“Tim’s promotion is a testament to his contributions to Goodway and how important his expertise was in developing successful marketing endeavors,” said Tim Kane, President and CEO of Goodway Technologies. “Tim will continue to be a valuable asset to help navigate the path as we extend our sales network into new markets.”

Robb began his career at Goodway Technologies in 2009 as a Marketing Specialist, quickly working his way up to Director of Marketing and then Vice President, Marketing and Strategic Business Development. His most recent role was Senior Vice President, Marketing and Growth.

• • • • •

Superior Boiler has established a new regional sales office in Houston, Texas, and **DeNise Landeis** is joining its team there as regional sales manager for the southern central United States. Landeis will have business development and sales management oversight for Texas, Louisiana, Mississippi, Alabama, and New Mexico.

The Houston sales office is Superior Boiler’s third regional office; the others are in Richmond, Virginia, and Minneapolis, Minnesota.

Landeis brings a wealth of industry knowledge and expertise to Superior Boiler, with more than 10 years of experience in the boiler industry, a press release from Superior said. As regional sales manager, she will support

Superior’s business development efforts, collaborating closely with the company’s network of representatives and serving the needs of customers in Texas and nearby states, the company said.

“We are thrilled to welcome DeNise Landeis to the Superior Boiler family,” said Matt Steele, Superior Boiler’s vice president of sales and marketing. “Her extensive background and proven track record in sales and customer support make her an excellent addition to our team. DeNise’s presence in Houston will help us provide even better service to our customers in the southern central U.S.”



DENISE LANDEIS

• • • • •

Madison Air appointed **Joe Patterson**, Vice President, and General Manager of the newly formed Heat Group, a partnership between top heating companies: unit heating manufacturer Reznor and infrared heating manufacturer Roberts-Gordon.

Patterson has been with Madison and Nortek Global HVAC (NGH) for eight years as Reznor’s General Manager and Vice President of Operations for NGH. As leader of the Heat Group, he is responsible for driving transformational change and operational excellence across both heating companies.

According to Patterson, “As allies in comfort, Reznor and Roberts-Gordon provide energy efficient, year-round comfort for complex industrial environments. Together, we are committed to helping customers move their businesses forward with increased comfort, productivity, and savings.”

Prior to joining Madison Industries, Patterson led the



JOE PATTERSON

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Indoor People

manufacturing teams at ITW Building Components Group and operational excellence for Emerson Electric. He holds a Bachelor of Science Degree in Mechanical Engineering and a Master of Science Degree in Engineering Management, both from Washington University.

Noritz America, a leader in tankless water heating systems for over seven decades, has announced that **Eric Ashley** will take over the newly created position of Senior Product Manager.

According to Executive Vice President-Sales and Marketing, Jason Fleming, Ashley's core mission will be to identify and develop future tankless water heating and boiler products and accessories for Noritz Group companies in North America. "Eric will be looking to



ERIC ASHLEY

maintain our brand's technologi-

cal leadership position in a rapidly changing landscape, as the industry responds to the upcoming regulatory changes in product efficiency."

Ashley has worked in the boiler and water heater field his entire 16-year professional career. He comes to Noritz from IBC Technologies Inc. USA, where he served the past four years in product development. Before that, Ashley worked in marketing and product development at Takagi, A.O. Smith Corporation, and Navien, Inc.

PHCC Apprentice

Continued from Page 21

his apprenticeship – via the PHCC Academy online program – this past May.

A valued member of BION, Inc., he approaches every challenge with a can-do attitude, and his meticulous attention to detail ensures that tasks are executed accurately. As one of his co-workers describes, "Working with Tony is like working with your best friend," reflecting his ability to foster strong professional relationships.

As a member of BION's service department – working on both new and existing facilities – Graham takes great pride in being a plumber and an HVAC techni-

cian, especially within the hospital setting. He says this unique environment adds an extra layer of fulfillment to his work, knowing that he's contributing directly to the well-being and comfort of patients and their families.

While an apprentice, Graham participated in PHCC of Virginia's 2022 Plumbing Apprentice Competition and represented Virginia at the PHCC Educational Foundation's National Plumbing Apprentice Contest that same year. In 2019, he participated as a fourth-year HVAC apprentice in the Foundation's HVAC Contest; he now holds credentials in both fields.

Looking ahead, Tony is dedicated to further honing his skills

and staying abreast of industry advancements. He recognizes the importance of ongoing learning and growth. His motivation to provide a good living for his family serves as a driving force in his pursuit of excellence.

Says PHCC of Virginia Executive Director Susan Milhoan: "Anthony is an exceptionally talented and mature tradesman and will likely be successful in his career. He is also a role model for others. He is personable, poised, and passionate about his career."

Founded by Masco Corporation in 1954 with the introduction of the single-handle faucet, Delta Faucet Company is proud to be America's faucet innovation leader, featuring Delta®, Brizo® and Peerless® products. A WaterSense® partner of the U.S. Environmental Protection Agency, Delta Faucet is a global organization that offers kitchen faucets, bath faucets, shower heads, shower systems, toilets and related accessories, selling products in more than 53 countries. For more information, visit deltafaucet.com.

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